

# Hrvatski zavod za norme

## Oglasnik za normativne dokumente

5/2011 listopad, 2011.

Oglasnik za normativne dokumente Hrvatskog zavoda za norme sadrži popise hrvatskih norma, nacrtu hrvatskih norma, prijedloga za prihvaćanje stranih norma u izvorniku, povučene hrvatske norme, povučene nacrtu hrvatskih norma te ispravke, rezultate europske i međunarodne normizacije razvrstane po predmetnom ustroju i obavijesti HZN-a.

Tko u popisima normativnih dokumenata koji su objavljeni u ovom Oglasniku otkrije koju grešku, koja može voditi do krive primjene, moli se da o tome neodložno obavijesti Hrvatski zavod za norme, kako bi se mogli otkloniti uočeni propusti.

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- 4.1 Cjenik hrvatskih norma

# Rezultati hrvatske normizacije

## 1.1 Hrvatske norme

Temeljem Zakona o normizaciji (Narodne novine 163/03) hrvatske norme priprema, izdaje i objavljuje Hrvatski zavod za norme, na prijedlog tehničkih odbora.

Hrvatske norme mogu nastati na ova četiri načina:

- prihvaćanjem stranih (međunarodnih/europskih/nacionalnih) norma uz prevođenje na hrvatski jezik (pp)
- prihvaćanjem stranih norma u izvorniku s hrvatskim ovitkom (po)
- prihvaćanjem stranih norma u izvorniku objavom obavijesti o prihvaćanju (pr)
- izradbom izvorne hrvatske norme (izv).

Oznaka načina prihvaćanja navedena je uz referencijsku oznaku hrvatske norme.

Hrvatske su norme zainteresiranima na raspolaganju u Normoteci Hrvatskoga zavoda za norme, Ulica grada Vukovara 78, Zagreb.

## HZN/TO 5, *Metalne cijevi i priključci*

- HRN EN 1591-1:2009/Ispr.1:2011 en pr  
Prirubnice i njihovi spojevi – Pravila za projektiranje prirubničkih spojeva s kružnim brtvama – 1. dio: Postupak proračuna (EN 1591-1:2001+A1:2009/AC:2011)  
Flanges and their joints – Design rules for gasketed circular flange connections – Part 1: Calculation method (EN 1591-1:2001+A1:2009/AC:2011)

## HZN/TO 6, *Papir, karton i pulpe*

- HRN EN ISO 15320:2011 en pr  
Pulpa, papir i karton – Određivanje pentaklorofenola (PCP) u vodenoj ekstraktu (ISO 15320:2011; EN ISO 15320:2011)  
Pulp, paper and board – Determination of pentachlorophenol in an aqueous extract (ISO 15320:2011; EN ISO 15320:2011)

## HZN/TO 8, *Brodogradnja*

- HRN EN ISO 9875:2004/Ispr.1:2011 en pr  
Brodovi i pomorska tehnologija – Oprema za mjerenje dubina u pomorstvu (ISO 9875:2000/Cor 1:2006; EN ISO 9875:2001/AC:2011)  
Ships and marine technology – Marine echo-sounding equipment (ISO 9875:2000/Cor 1:2006; EN ISO 9875:2001/AC:2011)

## HZN/TO 21, *Protupožarna i vatrogasna oprema*

- HRN EN 12101-7:2011 en pr  
Sustavi za upravljanje dimom i toplinom – 7. dio: Sekcije dimnih kanala (EN 12101-7:2011)  
Smoke and heat control systems – Part 7: Smoke duct sections (EN 12101-7:2011)
- HRN EN 12101-8:2011 en pr  
Sustavi za upravljanje dimom i toplinom – 8. dio: Zaklopke za upravljanje dimom (EN 12101-8:2011)  
Smoke and heat control systems – Part 8: Smoke control dampers (EN 12101-8:2011)

## HZN/TO 25, *Ljevarstvo*

- HRN EN 1559-3:2011 en pr  
Ljevarstvo – Tehnički uvjeti isporuke – 3. dio: Dodatni zahtjevi za odljeve od željeznog lijeva (EN 1559-3:2011)  
Founding – Technical conditions of delivery – Part 3: Additional requirements for iron castings (EN 1559-3:2011)
- HRN EN 1561:2011 en pr  
Ljevarstvo – Sivi željezni lijevovi (EN 1561:2011)  
Founding – Grey cast iron (EN 1561:2011)

## HZN/TO 28, *Naftni proizvodi i maziva*

- HRN ISO 3987:2011 en pr  
Naftni proizvodi – Određivanje sulfatnog pepela u mazivim uljima i aditivima (ISO 3987:2010+Cor 1:2011)  
Petroleum products – Determination of sulfated ash in lubricating oils and additives (ISO 3987:2010+Cor 1:2011)
- HRN ISO 7507-4:2011 en pr  
Nafta i tekući naftni proizvodi – Umjeravanje vertikalnih cilindričnih spremnika – 4. dio: Elektro-optička metoda mjerenja unutarnjeg razmaka (ISO 7507-4:2010)  
Petroleum and liquid petroleum products – Calibration of vertical cylindrical tanks – Part 4: Internal electro-optical distance-ranging method (ISO 7507-4:2010)
- HRN ISO 10307-1:2011 en pr  
Naftni proizvodi – Ukupna količina sedimenta u ostatnim loživim uljima – 1. dio: Određivanje vrućom filtracijom (ISO 10307-1:2009)  
Petroleum products – Total sediment in residual fuel oils – Part 1: Determination by hot filtration (ISO 10307-1:2009)
- HRN ISO 10307-2:2011 en pr  
Naftni proizvodi – Ukupna količina sedimenta u ostatnim loživim uljima – 2. dio: Određivanje starenja standardnim postupcima (ISO 10307-2:2009+Cor 1:2010)  
Petroleum products – Total sediment in residual fuel oils – Part 2: Determination using standard procedures for ageing (ISO 10307-2:2009+Cor 1:2010)
- HRN ISO 11158:2011 en pr  
Maziva, industrijska ulja i srodni proizvodi (razred L) – Podrazred H (hidraulički sustavi) – Specifikacije za kategorije HH, HL, HM, HV i HG (ISO 11158:2009)  
Lubricants, industrial oils and related products (class L) – Family H (hydraulic systems) – Specifications for categories HH, HL, HM, HV and HG (ISO 11158:2009)
- HRN ISO 13739:2011 en pr  
Naftni proizvodi – Postupci pretakanja brodskih goriva u plovila (ISO 13739:2010)  
Petroleum products – Procedures for transfer of bunkers to vessels (ISO 13739:2010)
- HRI CEN/TR 16227:2011 en pr  
Tekući naftni proizvodi – Biomaziva – Preporuka za nazivlje i karakterizaciju biomaziva i maziva na biljnoj osnovi (CEN/TR 16227:2011)  
Liquid petroleum products – Bio-lubricants – Recommendation for terminology and characterisation of bio-lubricants and bio-based lubricants (CEN/TR 16227:2011)

## HZN/TO 34/PO 12, *Poljoprivredni i prehrambeni proizvodi; Aditivi, kontaminanti, ambalaža za prehrambene proizvode i predmeti u dodiru s hranom*

- HRN EN 13834:2011 en pr  
Posuđe za kuhanje hrane – Posuđe za pećnice u kućanstvu (EN 13834:2007+A1:2009)  
Cookware – Ovenware for use in traditional domestic ovens (EN 13834:2007+A1:2009)

## HZN/TO 35, *Boje i lakovi*

- HRN EN ISO 1513:2011 en pr  
Boje i lakovi – Ispitivanje i priprema ispitnih uzoraka (ISO 1513:2010; EN ISO 1513:2010)  
Paints and varnishes – Examination and preparation of test samples (ISO 1513:2010; EN ISO 1513:2010)

- HRN EN ISO 4628-6:2011 en pr  
Paints and varnishes – Evaluation of degradation of coatings – Designation of quantity and size of defects, and of intensity of uniform changes in appearance – Part 6: Assessment of degree of chalking by tape method (ISO 4628-6:2011; EN ISO 4628-6:2011)
- HRN EN ISO 9117-2:2011 en pr  
Paints and varnishes – Drying tests – Part 2: Pressure test for stackability (ISO 9117-2:2010; EN ISO 9117-2:2010)
- HRN EN ISO 9117-3:2011 en pr  
Paints and varnishes – Drying tests – Part 3: Surface-drying test using ballotini (ISO 9117-3:2010; EN ISO 9117-3:2010)
- HRN EN 13523-1:2011 en pr  
Metali zaštićeni trakom – Metode ispitivanja – 1. dio: Debljina sloja (EN 13523-1:2009)  
Coil coated metals – Test methods – Part 1: Film thickness (EN 13523-1:2009)
- HRN EN 13523-8:2011 en pr  
Metali zaštićeni trakom – Metode ispitivanja – 8. dio: Otpornost na slanu maglu (EN 13523-8:2010)  
Coil coated metals – Test methods – Part 8: Resistance to salt spray (fog) (EN 13523-8:2010)
- HRN EN 13523-10:2011 en pr  
Metali zaštićeni trakom – Metode ispitivanja – 10. dio: Otpornost na fluorescentno UV zračenje i kondenzaciju vode (EN 13523-10:2010)  
Coil coated metals – Test methods – Part 10: Resistance to fluorescent UV radiation and water condensation (EN 13523-10:2010)
- HRN EN 13523-21:2011 en pr  
Metali zaštićeni trakom – Metode ispitivanja – 21. dio: Ocjena ploča izloženih vanjskim utjecajima (EN 13523-21:2010)  
Coil coated metals – Test methods – Part 21: Evaluation of outdoor exposed panels (EN 13523-21:2010)
- HRN EN 13523-22:2011 en pr  
Metali zaštićeni trakom – Metode ispitivanja – 22. dio: Razlike u boji – Vizualna usporedba (EN 13523-22:2010)  
Coil coated metals – Test methods – Part 22: Colour difference – Visual comparison (EN 13523-22:2010)
- HRN EN 13523-27:2011 en pr  
Zaštićeni limovi u kolotovima – Metode ispitivanja – 27. dio: Otpornost na vlažne obloge (Cataplasma test) (EN 13523-27:2009)  
Coil coated metals – Test methods – Part 27: Resistance to humid poultice (Cataplasma test) (EN 13523-27:2009)
- HRN EN 13523-29:2011 en pr  
Coil coated metals – Test methods – Part 29: Resistance to environmental soiling (Dirt pick-up and striping) (EN 13523-29:2010)
- HRN EN ISO 16773-3:2011 en pr  
Boje i lakovi – Elektrokemijska impedancijska spektroskopija (EIS) na visokootpornim prevučenim uzorcima – 3. dio: Obradivanje i analiza podataka iz slijepih ćelija (ISO 16773-3:2009; EN ISO 16773-3:2009)  
Paints and varnishes – Electrochemical impedance spectroscopy (EIS) on high-impedance coated specimens – Part 3: Processing and analysis of data from dummy cells (ISO 16773-3:2009; EN ISO 16773-3:2009)
- HRN EN ISO 16773-4:2011 en pr  
Boje i lakovi – Elektrokemijska impedancijska spektroskopija (EIS) na visokootpornim prevučenim uzorcima – 4. dio: Primjeri spektra polimerom prevučenih uzoraka (ISO 16773-4:2009; EN ISO 16773-4:2009)

Paints and varnishes – Electrochemical impedance spectroscopy (EIS) on high-impedance coated specimens – Part 4: Examples of spectra of polymer-coated specimens (ISO 16773-4:2009; EN ISO 16773-4:2009)

#### **HZN/TO 44, Zavarivanje i srodni postupci**

- HRN EN ISO 15609-5:2011 en pr  
Specifikacija i kvalifikacija postupaka zavarivanja za metalne materijale – Specifikacija postupka zavarivanja – 5. dio: Elektrootporno zavarivanje (ISO 15609-5:2011; EN ISO 15609-5:2011)  
Specification and qualification of welding procedures for metallic materials – Welding procedure specification – Part 5: Resistance welding (ISO 15609-5:2011; EN ISO 15609-5:2011)
- HRN EN ISO 15792-1:2008/A1:2011 en pr  
Dodatni i potrošni materijali za zavarivanje – Metode ispitivanja – 1. dio: Metode ispitivanja ispitivnih uzoraka čistog metala zavara za čelik, niki i legure nikla (ISO 15792-1:2000/Amd 1:2011; EN ISO 15792-1:2008/A1:2011)  
Welding consumables – Test methods – Part 1: Test methods for all-weld metal test specimens in steel, nickel and nickel alloys (ISO 15792-1:2000/Amd 1:2011; EN ISO 15792-1:2008/A1:2011)
- HRN EN ISO 17654:2011 en pr  
Elektrootporno zavarivanje – Razorna ispitivanja zavara – Tlačno ispitivanje elektrootporno zavarenih šavnih spojeva (ISO 17654:2011; EN ISO 17654:2011)  
Resistance welding – Destructive tests of welds – Pressure test of resistance seam welds (ISO 17654:2011; EN ISO 17654:2011)

#### **HZN/TO 54, Eterična ulja**

- HRN ISO 8897:2011 en pr  
Oil of juniper berry (*Juniperus communis* L.) (ISO 8897:2010)
- HRN ISO 10869:2011 en pr  
Oil of fir needle, Siberian (*Abies sibirica* Ledeb.) (ISO 10869:2010)
- HRN ISO 14715:2011 en pr  
Oil of thyme containing thymol, Spanish type [*Thymus zygis* (Loefl.) L.] (ISO 14715:2010)
- HRN ISO 22769:2011 en pr  
Oil of Australian sandalwood (*Santalum spicatum* (R.Br.) A.D.C.) (ISO 22769:2009)
- HRN ISO 23954:2011 en pr  
Oil of lime expressed, Persian type (*Citrus latifolia* Tanaka) (ISO 23954:2009)

#### **HZN/TO 82, Rudarstvo**

- HRN EN 1889-1:2011 en pr  
Strojevi za podzemne rudnike – Pokretni strojevi u podzemnim rudnicima – Sigurnost – 1. dio: Vozila na gumenim kotačima (EN 1889-1:2011)  
Machines for underground mines – Mobile machines working underground – Safety – Part 1: Rubber tyred vehicles (EN 1889-1:2011)

#### **HZN/TO 86, Uređaji za hlađenje, klimatizaciju i dizalice topline**

- HRN EN 14276-1:2011 en pr  
Tlačna oprema za rashladne sustave i dizalice topline – 1. dio: Posude – Opći zahtjevi (EN 14276-1:2006+A1:2011)  
Pressure equipment for refrigerating systems and heat pumps – Part 1: Vessels – General requirements (EN 14276-1:2006+A1:2011)

HRN EN 14276-2:2011 en pr  
Tlačna oprema za rashladne sustave i dizalice topline – 2. dio: Cjevovodi – Opći zahtjevi (EN 14276-2:2007+A1:2011)  
Pressure equipment for refrigerating systems and heat pumps – Part 2: Piping – General requirements (EN 14276-2:2007+A1:2011)

### **HZN/TO 89, *Furniri i drvne ploče***

HRN EN 12369-2:2011 en pr  
Ploče na osnovi drva – Svojevrsne vrijednosti za projektiranje konstrukcija – 2. dio: Uslojeno drvo (EN 12369-2:2011)  
Wood-based panels – Characteristic values for structural design – Part 2: Plywood (EN 12369-2:2011)

### **HZN/TO 108, *Mehaničke vibracije i udari***

HRN ISO 7919-2:2011 en pr  
Mehaničke vibracije – Vrednovanje vibracija strojeva mjerenjem na rotirajućim osovima – 2. dio: Stacionarne parne turbine i generatori veći od 50 MW s nazivnim brzinama vrtnje 1500 o/min, 1800 o/min, 3000 o/min i 3600 o/min (ISO 7919-2:2009)  
Mechanical vibration – Evaluation of machine vibration by measurements on rotating shafts – Part 2: Land-based steam turbines and generators in excess of 50 MW with normal operating speeds of 1500 r/min, 1800 r/min, 3000 r/min and 3600 r/min (ISO 7919-2:2009)

HRN ISO 10816-2:2011 en pr  
Mehaničke vibracije – Vrednovanje vibracija strojeva mjerenjem na nerotirajućim dijelovima – 2. dio: Stacionarne parne turbine i generatori veći od 50 MW s nazivnim brzinama vrtnje 1500 o/min, 1800 o/min, 3000 o/min i 3600 o/min (ISO 10816-2:2009)  
Mechanical vibration – Evaluation of machine vibration by measurements on non-rotating parts – Part 2: Land-based steam turbines and generators in excess of 50 MW with normal operating speeds of 1500 r/min, 1800 r/min, 3000 r/min and 3600 r/min (ISO 10816-2:2009)

HRN ISO 14839-1:2011 en pr  
Mehaničke vibracije – Vibracije rotacijskih strojeva s aktivnim magnetskim ležajevima – 1. dio: Rječnik (ISO 14839-1:2002+Amd 1:2010)  
Mechanical vibration – Vibration of rotating machinery equipped with active magnetic bearings – Part 1: Vocabulary (ISO 14839-1:2002+Amd 1:2010)

### **HZN/TO 120, *Koža i obuća***

HRS CEN ISO/TS 16181:2011 en pr  
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Footwear – Critical substances potentially present in footwear and footwear components – Determination of phthalates in footwear materials (ISO/TS 16181:2011; CEN ISO/TS 16181:2011)

HRN EN ISO 17076-2:2011 en pr  
Koža – Određivanje otpornosti na habanje – 2. dio: Martindale uređaj, metoda ploče s kuglicama (ISO 17076-2:2011; EN ISO 17076-2:2011)  
Leather – Determination of abrasion resistance – Part 2: Martindale ball plate method (ISO 17076-2:2011; EN ISO 17076-2:2011)

HRN EN ISO 17226-3:2011 en pr  
Koža – Kemijsko određivanje sadržaja formaldehida – 3. dio: Određivanje otpuštanja formaldehida iz kože (ISO 17226-3:2011; EN ISO 17226-3:2011)  
Leather – Chemical determination of formaldehyde content – Part 3: Determination of formaldehyde emissions from leather (ISO 17226-3:2011; EN ISO 17226-3:2011)

### **HZN/TO 126, *Duhan i duhanski proizvodi***

HRN EN ISO 12863:2011 en pr  
Standardna ispitna metoda za ocjenjivanje svojstva zapaljivosti cigareta (ISO 12863:2010+Cor 1:2011; EN ISO 12863:2010+AC:2011)  
Standard test method for assessing the ignition propensity of cigarettes (ISO 12863:2010+Cor 1:2011; EN ISO 12863:2010+AC:2011)

### **HZN/TO 134, *Gnojiva i poboljšivači tla***

HRN EN 1235:2001/A1:2011 en pr  
Kruta gnojiva – Kontrolno sisanje (EN 1235:1995/A1:2003)  
Solid fertilizers – Test sieving (EN 1235:1995/A1:2003)

HRN EN 15704:2011 en pr  
Tvari za kalcifikaciju – Određivanje raspada granuliranog kalcija i kalcijevih/magnezijevih karbonata pod utjecajem vode (EN 15704:2008)  
Liming materials – Determination of the breakdown of granulated calcium and calcium/magnesium carbonates under the influence of water (EN 15704:2008)

HRN EN 15919:2011 en pr  
Gnojiva – Ekstrakcija fosfora topivog u 2 %-tnoj mravljnoj kiselini (EN 15919:2011)  
Fertilizers – Extraction of phosphorus soluble in 2 % formic acid (EN 15919:2011)

HRN EN 15920:2011 en pr  
Gnojiva – Ekstrakcija fosfora topivog u 2 %-tnoj limunskoj kiselini (EN 15920:2011)  
Fertilizers – Extraction of phosphorus soluble in 2 % citric acid (EN 15920:2011)

HRN EN 15921:2011 en pr  
Gnojiva – Ekstrakcija topivog fosfora prema Petermannu pri 65 °C (EN 15921:2011)  
Fertilizers – Extraction of soluble phosphorus according to Petermann at 65 °C (EN 15921:2011)

HRN EN 15922:2011 en pr  
Gnojiva – Ekstrakcija topivog fosfora prema Petermannu pri sobnoj temperaturi (EN 15922:2011)  
Fertilizers – Extraction of soluble phosphorus according to Petermann at ambient temperature (EN 15922:2011)

HRN EN 15923:2011 en pr  
Gnojiva – Ekstrakcija fosfora topivog u Joulievom alkalnom amonijevom citratu (EN 15923:2011)  
Fertilizers – Extraction of phosphorus soluble in Joulie's alkaline ammonium citrate (EN 15923:2011)

HRN EN 15924:2011 en pr  
Gnojiva – Određivanje finoće mljevenja mekih prirodnih fosfata (EN 15924:2011)  
Fertilizers – Determination of the fineness of grinding of soft natural phosphates (EN 15924:2011)

HRN EN 15925:2011 en pr  
Gnojiva – Ekstrakcija ukupnog sumpora prisutnog u različitim oblicima (EN 15925:2011)  
Fertilizers – Extraction of total sulfur present in various forms (EN 15925:2011)

HRN EN 15926:2011 en pr  
Gnojiva – Ekstrakcija vodotopivog sumpora prisutnog u različitim oblicima (EN 15926:2011)  
Fertilizers – Extraction of water soluble sulfur where the sulfur is in various forms (EN 15926:2011)

HRN EN 15956:2011 en pr  
Gnojiva – Ekstrakcija fosfora topivog u mineralnim kiselinama (EN 15956:2011)  
Fertilizers – Extraction of phosphorus soluble in mineral acids (EN 15956:2011)

- HRN EN 15957:2011 en pr  
Gnojiva – Ekstrakcija fosfora topivog u neutralnom amonijevom citratu (EN 15957:2011)  
Fertilizers – Extraction of phosphorus which is soluble in neutral ammonium citrate (EN 15957:2011)
- HRS CEN/TS 16195:2011 en pr  
Gnojiva – Određivanje klorida u odsutnosti organskog materijala (CEN/TS 16195:2011)  
Fertilizers – Determination of chlorides in the absence of organic material (CEN/TS 16195:2011)
- HRS CEN/TS 16196:2011 en pr  
Gnojiva – Manganometrijsko određivanje ekstrahiranog kalcija nakon taloženja u obliku oksalata (CEN/TS 16196:2011)  
Fertilizers – Manganometric determination of extracted calcium following precipitation in the form of oxalate (CEN/TS 16196:2011)
- HRS CEN/TS 16197:2011 en pr  
Gnojiva – Određivanje magnezija atomskom apsorpcijskom spektrometrijom (CEN/TS 16197:2011)  
Fertilizers – Determination of magnesium by atomic absorption spectrometry (CEN/TS 16197:2011)
- HRS CEN/TS 16198:2011 en pr  
Gnojiva – Određivanje magnezija kompleksometrijski (CEN/TS 16198:2011)  
Fertilizers – Determination of magnesium by complexometry (CEN/TS 16198:2011)
- HRS CEN/TS 16199:2011 en pr  
Gnojiva – Određivanje ekstrahiranog natrija spektrometrijom emisije plamena (CEN/TS 16199:2011)  
Fertilizers – Determination of the sodium extracted by flame-emission spectrometry (CEN/TS 16199:2011)

#### **HZN/TO 138, *Plastične cijevi, spojnice i ventili za prijenos tekućina***

- HRN ISO 12176-3:2011 en pr  
Plastične cijevi i spojnice – Oprema za spajanje polietilenskih sustava zavarivanjem – 3. dio: Identifikacija izvođača (ISO 12176-3:2011)  
Plastics pipes and fittings – Equipment for fusion jointing polyethylene systems – Part 3: Operator's badge (ISO 12176-3:2011)
- HRN EN 12666-1:2011 en pr  
Plastični cijevni sustavi za netlačnu podzemnu odvodnju i kanalizaciju – Polietilen (PE) – 1. dio: Specifikacije za cijevi, spojnice i sustav (EN 12666-1:2005+A1:2011)  
Plastics piping systems for non-pressure underground drainage and sewerage – Polyethylene (PE) – Part 1: Specifications for pipes, fittings and the system (EN 12666-1:2005+A1:2011)

#### **HZN/TO 146, *Kvaliteta zraka***

- HRI CEN/TR 15983:2011 en pr  
Emisije iz stacionarnih izvora – Upute za primjenu norme EN 14181:2004 (CEN/TR 15983:2010)  
Stationary source emissions – Guidance on the application of EN 14181:2004 (CEN/TR 15983:2010)
- HRI CEN/TR 16013-1:2011 en pr  
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Workplace exposure – Guide for the use of direct-reading instruments for aerosol monitoring – Part 1: Choice of monitor for specific applications (CEN/TR 16013-1:2010)

- HRI CEN/TR 16013-2:2011 en pr  
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Workplace exposure – Guide for the use of direct-reading instruments for aerosol monitoring – Part 2: Evaluation of airborne particle concentrations using Optical Particle Counters (CEN/TR 16013-2:2010)
- HRN EN ISO 28439:2011 en pr  
Atmosfera radnih prostora – Karakterizacija ultrafinih aerosola/nanoaerosola – Određivanje veličine distribucije i brojne koncentracije upotrebom diferencijalnoga električnog sustava za ispitivanje pokretljivosti (ISO 28439:2011; EN ISO 28439:2011)  
Workplace atmospheres – Characterization of ultrafine aerosols/nanoaerosols – Determination of the size distribution and number concentration using differential electrical mobility analysing systems (ISO 28439:2011; EN ISO 28439:2011)

#### **HZN/TO 147/PO 7, *Kvaliteta vode; Mikrobiološka i biološka ispitivanja***

- HRN EN 15972:2011 en pr  
Kvaliteta vode – Smjernice za kvantitativno i kvalitativno istraživanje morskog fitoplanktona (EN 15972:2011)  
Water quality – Guidance on quantitative and qualitative investigations of marine phytoplankton (EN 15972:2011)
- HRN ISO 19250:2011 en pr  
Kvaliteta vode – Detekcija vrsta roda Salmonella (ISO 19250:2010)  
Water quality – Detection of Salmonella species (ISO 19250:2010)

#### **HZN/TO 159, *Ergonomija***

- HRN EN 13861:2011 en pr  
Sigurnost strojeva – Smjernice za primjenu ergonomske norma u dizajniranju strojeva (EN 13861:2011)  
Safety of machinery – Guidance for the application of ergonomics standards in the design of machinery (EN 13861:2011)
- HRN EN ISO 26800:2011 en pr  
Ergonomija – Opći pristup, načela i pojmovi (ISO 26800:2011; EN ISO 26800:2011)  
Ergonomics – General approach, principles and concepts (ISO 26800:2011; EN ISO 26800:2011)

#### **HZN/TO 172, *Optika i optički instrumenti***

- HRN EN ISO 8624:2011 en pr  
Oftalmološka optika – Okviri za naočale – Mjerni sustav i nazivlje (ISO 8624:2011; EN ISO 8624:2011)  
Ophthalmic optics – Spectacle frames – Measuring system and terminology (ISO 8624:2011; EN ISO 8624:2011)
- HRN ISO 9211-1:2011 en pr  
Optika i fotonika – Optički slojevi – 1. dio: Definicije (ISO 9211-1:2010)  
Optics and photonics – Optical coatings – Part 1: Definitions (ISO 9211-1:2010)
- HRN ISO 9211-2:2011 en pr  
Optika i fotonika – Optički slojevi – 2. dio: Optička svojstva (ISO 9211-2:2010)  
Optics and photonics – Optical coatings – Part 2: Optical properties (ISO 9211-2:2010)
- HRN ISO 9211-3:2011 en pr  
Optika i fotonika – Optički slojevi – 3. dio: Otpornost na utjecaje okoliša (ISO 9211-3:2008)  
Optics and photonics – Optical coatings – Part 3: Environmental durability (ISO 9211-3:2008)

- HRN ISO 9211-4:2011 en pr  
Optika i optički instrumenti – Optički slojevi – 4. dio: Specifične metode ispitivanja (ISO 9211-4:2006)  
Optics and optical instruments – Optical coatings – Part 4: Specific test methods (ISO 9211-4:2006)
- HRN EN ISO 10943:2011 en pr  
Oftalmološki instrumenti – Indirektni oftalmoskopi (ISO 10943:2011; EN ISO 10943:2011)  
Ophthalmic instruments – Indirect ophthalmoscopes (ISO 10943:2011; EN ISO 10943:2011)
- HRN EN ISO 11990-1:2011 en pr  
Laseri i oprema povezana s laserima – Utvrđivanje otpornosti trahealnih intubacijskih cijevi na lasersko zračenje – 1. dio: Tijelo trahealne intubacijske cijevi (ISO 11990-1:2011; EN ISO 11990-1:2011)  
Lasers and laser-related equipment – Determination of laser resistance of tracheal tubes – Part 1: Tracheal tube shaft (ISO 11990-1:2011; EN ISO 11990-1:2011)
- HRN EN ISO 14534:2011 en pr  
Oftalmološka optika – Kontaktne leće i proizvodi za njegu kontaktnih leća – Osnovni zahtjevi (ISO 14534:2011; EN ISO 14534:2011)  
Ophthalmic optics – Contact lenses and contact lens care products – Fundamental requirements (ISO 14534:2011; EN ISO 14534:2011)
- HRN ISO 17123-1:2011 en pr  
Optika i optički instrumenti – Terenski postupci za ispitivanje geodetskih instrumenata i instrumenata za izmjere – 1. dio: Teorija (ISO 17123-1:2010)  
Optics and optical instruments – Field procedures for testing geodetic and surveying instruments – Part 1: Theory (ISO 17123-1:2010)

### **HZN/TO 178, Dizala, pokretne stube i pokretne trake za osobe**

- HRS CEN/TS 81-11:2011 en pr  
Sigurnosna pravila za konstrukciju i ugradnju dizala – Osnove i tumačenja – 11. dio: Tumačenja u odnosu na EN 81 porodicu norma (CEN/TS 81-11:2011)  
Safety rules for the construction and installation of lifts – Basics and interpretations – Part 11: Interpretations related to EN 81 family of standards (CEN/TS 81-11:2011)
- HRN ISO 4190-1:2011 en pr  
Ugradnja dizala – 1. dio: Dizala I., II., III. i VI. klase (ISO 4190-1:2010)  
Lift (Elevator) installation – Part 1: Class I, II, III and VI lifts (ISO 4190-1:2010)

### **HZN/TO 179, Zidane konstrukcije**

- HRN EN 771-1:2011 en pr  
Specifikacije za zidne elemente – 1. dio: Opečni zidni elementi (EN 771-1:2011)  
Specification for masonry units – Part 1: Clay masonry units (EN 771-1:2011)
- HRN EN 771-2:2011 en pr  
Specifikacije za zidne elemente – 2. dio: Vapnenosilikatni zidni elementi (EN 771-2:2011)  
Specification for masonry units – Part 2: Calcium silicate masonry units (EN 771-2:2011)
- HRN EN 771-3:2011 en pr  
Specifikacije za zidne elemente – 3. dio: Betonski zidni elementi (gusti i lagani agregat) (EN 771-3:2011)  
Specification for masonry units – Part 3: Aggregate concrete masonry units (Dense and light weight aggregates) (EN 771-3:2011)
- HRN EN 771-4:2011 en pr  
Specifikacije za zidne elemente – 4. dio: Zidni elementi od porastoga betona (EN 771-4:2011)  
Specification for masonry units – Part 4: Autoclaved aerated concrete masonry units (EN 771-4:2011)

- HRN EN 771-5:2011 en pr  
Specifikacije za zidne elemente – 5. dio: Zidni elementi od umjelnoga kamena (EN 771-5:2011)  
Specification for masonry units – Part 5: Manufactured stone masonry units (EN 771-5:2011)
- HRN EN 771-6:2011 en pr  
Specifikacije za zidne elemente – 6. dio: Zidni elementi od prirodnog kamena (EN 771-6:2011)  
Specification for masonry units – Part 6: Natural stone masonry units (EN 771-6:2011)
- HRN EN 772-1:2011 en pr  
Metode ispitivanja zidnih elemenata – 1. dio: Određivanje tlačne čvrstoće (EN 772-1:2011)  
Methods of test for masonry units – Part 1: Determination of compressive strength (EN 772-1:2011)
- HRN EN 772-11:2011 en pr  
Metode ispitivanja zidnih elemenata – 11. dio: Određivanje kapilarne vodoupojnosti zidnih elemenata od betona, porastoga betona, umjelnog i prirodnog kamena i početne vodoupojnosti opečnih zidnih elemenata (EN 772-11:2011)  
Methods of test for masonry units – Part 11: Determination of water absorption of aggregate concrete, autoclaved aerated concrete, manufactured stone and natural stone masonry units due to capillary action and the initial rate of water absorption of clay masonry units (EN 772-11:2011)
- HRN EN 772-16:2011 en pr  
Metode ispitivanja zidnih elemenata – 16. dio: Određivanje izmjera (EN 772-16:2011)  
Methods of test for masonry units – Part 16: Determination of dimensions (EN 772-16:2011)
- HRN EN 772-18:2011 en pr  
Metode ispitivanja zidnih elemenata – 18. dio: Određivanje otpornosti na zamrzavanje i odmrzavanje vapnenosilikatnih zidnih elemenata (EN 772-18:2011)  
Methods of test for masonry units – Part 18: Determination of freeze-thaw resistance of calcium silicate masonry units (EN 772-18:2011)
- HRN EN 772-21:2011 en pr  
Metode ispitivanja zidnih elemenata – 21. dio: Određivanje vodoupojnosti opečnih i vapnenosilikatnih zidnih elemenata upijanjem hladne vode (EN 772-21:2011)  
Methods of test for masonry units – Part 21: Determination of water absorption of clay and calcium silicate masonry units by cold water absorption (EN 772-21:2011)

### **HZN/TO 190, Kvaliteta tla**

- HRN EN ISO 15175:2011 en pr  
Kvaliteta tla – Karakterizacija tla koja se odnosi na zaštitu podzemnih voda (ISO 15175:2004; EN ISO 15175:2011)  
Soil quality – Characterization of soil related to groundwater protection (ISO 15175:2004; EN ISO 15175:2011)
- HRN EN ISO 15952:2011 en pr  
Kvaliteta tla – Učinci onečišćivača na mlade zemljišne puževe (Helicidae) – Određivanje učinaka onečišćenosti tla na razvoj (ISO 15952:2006; EN ISO 15952:2011)  
Soil quality – Effects of pollutants on juvenile land snails (Helicidae) – Determination of the effects on growth by soil contamination (ISO 15952:2006; EN ISO 15952:2011)

- HRN EN ISO 17402:2011 en pr  
Kvaliteta tla – Zahtjevi i upute za odabir i primjenu metoda za ocjenjivanje bioraspoloživosti onečišćivača u tlu i materijalima tla (ISO 17402:2008; EN ISO 17402:2011)  
Soil quality – Requirements and guidance for the selection and application of methods for the assessment of bioavailability of contaminants in soil and soil materials (ISO 17402:2008; EN ISO 17402:2011)
- HRN EN ISO 20963:2011 en pr  
Kvaliteta tla – Učinci onečišćivača na ličinke kukaca (*Oxythyrea funesta*) – Određivanje akutne toksičnosti (ISO 20963:2005; EN ISO 20963:2011)  
Soil quality – Effects of pollutants on insect larvae (*Oxythyrea funesta*) – Determination of acute toxicity (ISO 20963:2005; EN ISO 20963:2011)
- HRN EN ISO 22892:2011 en pr  
Kvaliteta tla – Smjernice za identifikaciju ciljanih spojeva plinskom kromatografijom i masenom spektrometrijom (ISO 22892:2006; EN ISO 22892:2011)  
Soil quality – Guidelines for the identification of target compounds by gas chromatography and mass spectrometry (ISO 22892:2006; EN ISO 22892:2011)
- HRN EN ISO 23611-1:2011 en pr  
Kvaliteta tla – Uzorkovanje zemljišnih beskralježnjaka – 1. dio: Ručno razvrstavanje i ekstrakcija gujavica formalinom (ISO 23611-1:2006; EN ISO 23611-1:2011)  
Soil quality – Sampling of soil invertebrates – Part 1: Hand-sorting and formalin extraction of earthworms (ISO 23611-1:2006; EN ISO 23611-1:2011)
- HRN EN ISO 23611-2:2011 en pr  
Kvaliteta tla – Uzorkovanje zemljišnih beskralježnjaka – 2. dio: Uzorkovanje i izdvajanje mikročlankonožaca (*Collembola* i *Acarina*) (ISO 23611-2:2006; EN ISO 23611-2:2011)  
Soil quality – Sampling of soil invertebrates – Part 2: Sampling and extraction of micro-arthropods (*Collembola* and *Acarina*) (ISO 23611-2:2006; EN ISO 23611-2:2011)
- HRN EN ISO 23611-3:2011 en pr  
Kvaliteta tla – Uzorkovanje zemljišnih beskralježnjaka – 3. dio: Uzorkovanje i izdvajanje vrsta iz porodice *Enchytraeidae* (ISO 23611-3:2007; EN ISO 23611-3:2011)  
Soil quality – Sampling of soil invertebrates – Part 3: Sampling and soil extraction of enchytraeids (ISO 23611-3:2007; EN ISO 23611-3:2011)
- HRN EN ISO 23611-4:2011 en pr  
Kvaliteta tla – Uzorkovanje zemljišnih beskralježnjaka – 4. dio: Uzorkovanje, izdvajanje i identifikacija slobodno živućih nematoda (ISO 23611-4:2007; EN ISO 23611-4:2011)  
Soil quality – Sampling of soil invertebrates – Part 4: Sampling, extraction and identification of soil-inhabiting nematodes (ISO 23611-4:2007; EN ISO 23611-4:2011)
- HRN EN ISO 23753-1:2011 en pr  
Kvaliteta tla – Određivanje dehidrogenazne aktivnosti u tlu – 1. dio: Metoda s trifeniltetrazol kloridom (TTC) (ISO 23753-1:2005; EN ISO 23753-1:2011)  
Soil Quality – Determination of dehydrogenase activity in soil – Part 1: Method using triphenyltetrazolium chloride (TTC) (ISO 23753-1:2005; EN ISO 23753-1:2011)
- HRN EN ISO 23753-2:2011 en pr  
Kvaliteta tla – Određivanje dehidrogenazne aktivnosti u tlu – 2. dio: Metoda sa jodtetrazol kloridom (INT) (ISO 23753-2:2005; EN ISO 23753-2:2011)  
Soil Quality – Determination of dehydrogenase activity in soils – Part 2: Method using iodotetrazolium chloride (INT) (ISO 23753-2:2005; EN ISO 23753-2:2011)

## HZN/TO 211, *Geoinformacije/Geomatika*

- HRI CEN/TR 15449:2011 en pr  
Geoinformacije – Norme, specifikacije, tehnička izvješća i smjernice, potrebne za implementaciju infrastrukture prostornih podataka (CEN/TR 15449:2011)  
Geographic information – Standards, specifications, technical reports and guidelines, required to implement Spatial Data Infrastructure (CEN/TR 15449:2011)

## HZN/TO 503, *Metalni materijali*

- HRN EN 10305-4:2011 en pr  
Precizne čelične cijevi – Tehnički uvjeti isporuke – 4. dio: Bešavne hladno vučene cijevi za hidraulične i pneumatske energetske sustave (EN 10305-4:2011)  
Steel tubes for precision applications – Technical delivery conditions – Part 4: Seamless cold drawn tubes for hydraulic and pneumatic power systems (EN 10305-4:2011)
- HRN EN 16117-1:2011 en pr  
Bakar i legure bakra – Određivanje udjela bakra – 1. dio: Elektrolitičko određivanje bakra u materijalima sa udjelom bakra manjim od 99,85 % (EN 16117-1:2011)  
Copper and copper alloys – Determination of copper content – Part 1: Electrolytic determination of copper in materials with copper content less than 99,85 % (EN 16117-1:2011)

## HZN/TO 509, *Cestovna oprema*

- HRN EN 1824:2011 en pr  
Materijali za oznake na kolniku – Ispitna kola (EN 1824:2011)  
Road marking materials – Road trials (EN 1824:2011)
- HRN EN 12802:2011 en pr  
Materijali za oznake na kolniku – Laboratorijske metode za utvrđivanje svojstava (EN 12802:2011)  
Road marking materials – Laboratory methods for identification (EN 12802:2011)
- HRN EN 13197:2011 en pr  
Materijali za oznake na kolniku – Rotacijski simulator trošenja (EN 13197:2011)  
Road marking materials – Wear simulator Turntable (EN 13197:2011)
- HRN EN 13212:2011 en pr  
Materijali za oznake na kolniku – Zahtjevi za tvorničkom kontrolom proizvodnje (EN 13212:2011)  
Road marking materials – Requirements for factory production control (EN 13212:2011)
- HRN EN 13459:2011 en pr  
Materijali za oznake na cesti – Uzimanje uzoraka iz skladišta i ispitivanje (EN 13459:2011)  
Road marking materials – Sampling from storage and testing (EN 13459:2011)

## HZN/TO 522, *Karakterizacija i zbrinjavanje otpada*

- HRN EN 1501-1:2011 en pr  
Vozila za skupljanje otpada – Opći i sigurnosni zahtjevi – 1. dio: Vozila za skupljanje otpada sa stražnjim punjenjem (EN 1501-1:2011)  
Refuse collection vehicles – General requirements and safety requirements – Part 1: Rear loaded refuse collection vehicles (EN 1501-1:2011)
- HRN EN 1501-5:2011 en pr  
Vozila za skupljanje otpada – Opći i sigurnosni zahtjevi – 5. dio: Vozila za skupljanje otpada s podiznim uređajima (EN 1501-5:2011)  
Refuse collection vehicles – General requirements and safety requirements – Part 5: Lifting devices for refuse collection vehicles (EN 1501-5:2011)

- HRN EN 13071-3:2011 en pr  
Stalni spremnici za otpad do 5000 l koji se podižu i prazne kroz dno – 3. dio: Preporučena spojna oprema za podizanje (EN 13071-3:2011)  
Stationary waste containers up to 5000 l, top lifted and bottom emptied – Part 3: Recommended lifting connections (EN 13071-3:2011)
- HRN EN ISO 23161:2011 en pr  
Kvaliteta tla – Određivanje odabranih organokositrenih spojeva – Plinskokromatografska metoda (ISO 23161:2009; EN ISO 23161:2011)  
Soil quality – Determination of selected organotin compounds – Gas-chromatographic method (ISO 23161:2009; EN ISO 23161:2011)

### **HZN/TO 523, Humanitarno razminiranje**

- HRN 1129:2011 hr izv  
Humanitarno razminiranje – Terminološki rječnik  
Humanitarian demining – Vocabulary

### **HZN/TO 524, Cestovni prijevoz i prometna telematika**

- HRS CEN/TS 15531-5:2011 en pr  
Javni prijevoz – Sučelje servisa za informiranje u realnom vremenu o statusu javnog prijevoza – 5. dio: Funkcionalno sučelje servisa – Razmjena situacija (CEN/TS 15531-5:2011)  
Public transport – Service interface for real-time information relating to public transport operations – Part 5: Functional service interfaces – Situation Exchange (CEN/TS 15531-5:2011)
- HRN EN 15722:2011 en pr  
Cestovni prijevoz i prometna telematika – Elektronička sigurnost – Najmanji skup podataka za elektroničke hitne pozive iz vozila (MSD) (EN 15722:2011)  
Intelligent transport systems – eSafety – eCall minimum set of data (MSD) (EN 15722:2011)

### **HZN/TO 525, Hidroizolacijski materijali i proizvodi za pokrivanje krovova**

- HRN EN 544:2011 en pr  
Bitumenske šindre s mineralnim i/ili sintetičkim ulošcima – Specifikacija proizvoda i metode ispitivanja (EN 544:2011)  
Bitumen shingles with mineral and/or synthetic reinforcements – Product specification and test methods (EN 544:2011)

### **HZN/TO 528, Oprema za željeznice**

- HRN EN 12561-1:2011 en pr  
Oprema za željeznice – Vagoni cisterne – 1. dio: Označivanje vagona cisterni za prijevoz opasnih tvari (EN 12561-1:2011)  
Railway applications – Tank wagons – Part 1: Identification plates for tank wagons for the carriage of dangerous goods (EN 12561-1:2011)
- HRN EN 12561-2:2011 en pr  
Oprema za željeznice – Vagoni cisterne – 2. dio: Uređaji za donje pražnjenje tekućina uključivši povrat pare (EN 12561-2:2011)  
Railway applications – Tank wagons – Part 2: Bottom emptying devices for liquid products including vapour return (EN 12561-2:2011)
- HRN EN 12561-3:2011 en pr  
Oprema za željeznice – Vagoni cisterne – 3. dio: Uređaji za donje punjenje i pražnjenje za ukapljene plinove pod tlakom (EN 12561-3:2011)  
Railway applications – Tank wagons – Part 3: Bottom filling and emptying devices for gases liquefied under pressure (EN 12561-3:2011)

- HRN EN 12561-4:2011 en pr  
Oprema za željeznice – Vagoni cisterne – 4. dio: Uređaji za gornje pražnjenje i punjenje tekućina (EN 12561-4:2011)  
Railway applications – Tank wagons – Part 4: Devices for top filling and emptying of liquid products (EN 12561-4:2011)

- HRN EN 12561-5:2011 en pr  
Oprema za željeznice – Vagoni cisterne – 5. dio: Uređaji za povrat pare prilikom punjenja ili pražnjenja tekućina (EN 12561-5:2011)  
Railway applications – Tank wagons – Part 5: Devices for vapour return while filling or emptying of liquid products (EN 12561-5:2011)

- HRN EN 12561-6:2011 en pr  
Oprema za željeznice – Vagoni cisterne – 6. dio: Provlake (EN 12561-6:2011)  
Railway applications – Tank wagons – Part 6: Manholes (EN 12561-6:2011)

- HRN EN 12561-7:2011 en pr  
Oprema za željeznice – Vagoni cisterne – 7. dio: Platforme i ljestve (EN 12561-7:2011)  
Railway applications – Tank wagons – Part 7: Platforms and ladders (EN 12561-7:2011)

- HRN EN 12561-8:2011 en pr  
Oprema za željeznice – Vagoni cisterne – 8. dio: Priključci grijanja (EN 12561-8:2011)  
Railway applications – Tank wagons – Part 8: Heating connections (EN 12561-8:2011)

### **HZN/TO 531, Plastika i guma**

- HRN ISO 4649:2011 en pr  
Guma i elastoplastomeri – Određivanje abrazijske otpornosti uređajem s rotirajućim cilindričnim bubnjem (ISO 4649:2010)  
Rubber, vulcanized or thermoplastic – Determination of abrasion resistance using a rotating cylindrical drum device (ISO 4649:2010)

- HRN ISO 23529:2011 en pr  
Guma – Opći postupci pripreme i kondicioniranja ispitnih uzoraka za fizikalne ispitne metode (ISO 23529:2010)  
Rubber – General procedures for preparing and conditioning test pieces for physical test methods (ISO 23529:2010)

- HRN ISO 23794:2011 en pr  
Guma i elastoplastomeri – Abrazijska ispitivanja – Upute (ISO 23794:2010)  
Rubber, vulcanized or thermoplastic – Abrasion testing – Guidance (ISO 23794:2010)

### **HZN/TO 532, Dimnjaci**

- HRN EN 1858:2011 en pr  
Dimnjaci – Dijelovi – Betonski blokovi dimnjaka (EN 1858:2008+A1:2011)  
Chimneys – Components – Concrete flue blocks (EN 1858:2008+A1:2011)
- HRN EN 12446:2011 en pr  
Dimnjaci – Dijelovi – Elementi vanjskog betonskog plašta (EN 12446:2011)  
Chimneys – Components – Concrete outer wall elements (EN 12446:2011)

### **HZN/TO 534, Spremnici za teret**

- HRN EN 13121-3:2010/Ispr.1:2011 en pr  
Nadzemni GRP spremnici i posude – 3. dio: Konstrukcija i izrada (EN 13121-3:2008+A1:2010/AC:2011)  
GRP tanks and vessels for use above ground – Part 3: Design and workmanship (EN 13121-3:2008+A1:2010/AC:2011)

### **HZN/TO 541, Sustavi grijanja, ventilacije i klimatizacije u građevinama**

HRN EN ISO 16484-1:2011 en pr  
Upravljanje u zgradarstvu i upravljački sustavi (BACS) – 1. dio: Specifikacije projekta i primjena (ISO 16484-1:2010; EN ISO 16484-1:2010)  
Building automation and control systems (BACS) – Part 1: Project specification and implementation (ISO 16484-1:2010; EN ISO 16484-1:2010)

### **HZN/TO 543, Poštanske usluge**

HRN EN 14142-1:2011 en pr  
Poštanske usluge – Adresne baze podataka – 1. dio: Sastavni dijelovi poštanske adrese (EN 14142-1:2011)  
Postal services – Address databases – Part 1: Components of postal addresses (EN 14142-1:2011)

### **HZN/TO 550, Opskrba vodom**

HRN EN 13618:2011 en pr  
Sklopivi od fleksibilnih crijeva u instalacijama za pitku vodu – Funkcionalni zahtjevi i metode ispitivanja (EN 13618:2011)  
Flexible hose assemblies in drinking water installations – Functional requirements and test methods (EN 13618:2011)

### **HZN/TO 551, Gradnja**

HRN EN ISO 11600:2008/A1:2011 en pr  
Gradnja zgrada – Proizvodi za spajanje – Razredba i zahtjevi za brtvila (ISO 11600:2002/Amd 1:2011; EN ISO 11600:2003/A1:2011)  
Building construction – Jointing products – Classification and requirements for sealants (ISO 11600:2002/Amd 1:2011; EN ISO 11600:2003/A1:2011)

### **HZN/TO 554, Obrada otpadnih voda**

HRN EN 13508-2:2011 en pr  
Investigation and assessment of drain and sewer systems outside building – Part 2: Visual inspection coding system (EN 13508-2:2003+A1:2011)

### **HZN/TO 559, Zaporni, regulacijski i sigurnosni uređaji**

HRN EN 593:2011 en pr  
Industrijski zaporni uređaji – Metalne leptiraste zaklopke (EN 593:2009+A1:2011)  
Industrial valves – Metallic butterfly valves (EN 593:2009+A1:2011)

### **HZN/TO 560, Tekstilni proizvodi**

HRN ISO 2076:2011 en pr  
Tekstil – Umjetna vlakna – Generički nazivi (ISO 2076:2010)  
Textiles – Man-made fibres – Generic names (ISO 2076:2010)

HRN ISO 7768:2011 en pr  
Tekstil – Metoda ispitivanja za procjenu glatkoće tkanine nakon čišćenja (ISO 7768:2009)  
Textiles – Test method for assessing the smoothness appearance of fabrics after cleansing (ISO 7768:2009)

HRN ISO 7769:2011 en pr  
Tekstil – Metoda ispitivanja za procjenu nabora tkanine nakon čišćenja (ISO 7769:2009)  
Textiles – Test method for assessing the appearance of creases in fabrics after cleansing (ISO 7769:2009)

HRN ISO 7770:2011 en pr  
Tekstil – Metoda ispitivanja za procjenu glatkoće šavova na tkaninama nakon čišćenja (ISO 7770:2009)  
Textiles – Test method for assessing the smoothness appearance of seams in fabrics after cleansing (ISO 7770:2009)

HRN ISO 9867:2011 en pr  
Tekstil – Vrednovanje oporavka tkanine nakon gužvanja – Metoda procjene izgleda (ISO 9867:2009)  
Textiles – Evaluation of the wrinkle recovery of fabrics – Appearance method (ISO 9867:2009)

HRN EN ISO 14184-2:2011 en pr  
Tekstil – Određivanje formaldehida – 2. dio: Slobodni formaldehid (metoda apsorpcije parom) (ISO 14184-2:2011; EN ISO 14184-2:2011)  
Textiles – Determination of formaldehyde – Part 2: Released formaldehyde (vapour absorption method) (ISO 14184-2:2011; EN ISO 14184-2:2011)

HRN ISO 22198:2011 en pr  
Tekstil – Tkanine – Određivanje širine i dužine (ISO 22198:2006)  
Textiles – Fabrics – Determination of width and length (ISO 22198:2006)

### **HZN/TO 561, Kotlovi, posude pod tlakom, cjevovodi i plinske boce**

HRN EN 12953-6:2011 en pr  
Dimnocijevni kotlovi – 6. dio: Zahtjevi za opremu kotla (EN 12953-6:2011)  
Shell boilers – Part 6: Requirements for equipment for the boiler (EN 12953-6:2011)

HRN EN 13480-2:2008/A1:2011 en pr  
Metalni industrijski cjevovodi – 2. dio: Materijali (EN 13480-2:2002/A1:2010)  
Metallic industrial piping – Part 2: Materials (EN 13480-2:2002/A1:2010)

HRN EN 13480-2:2008/A2:2011 en pr  
Metalni industrijski cjevovodi – 2. dio: Materijali (EN 13480-2:2002/A2:2010)  
Metallic industrial piping – Part 2: Materials (EN 13480-2:2002/A2:2010)

HRN EN 13480-5:2008/A1:2011 en pr  
Metalni industrijski cjevovodi – 5. dio: Pregled i ispitivanje (EN 13480-5:2002/A1:2011)  
Metallic industrial piping – Part 5: Inspection and testing (EN 13480-5:2002/A1:2011)

HRN EN 15776:2011 en pr  
Neložene tlačne posude – Zahtjevi za projektiranje i proizvodnju tlačnih posuda i tlačnih dijelova posuda izrađenih od željeznog lijeva s elongacijom (istezljivošću) 15 % ili manjom (EN 15776:2011)  
Unfired pressure vessels – Requirements for the design and fabrication of pressure vessels and pressure parts constructed from cast iron with an elongation after fracture equal or less than 15 % (EN 15776:2011)

### **HZN/TO 563, Sigurnost strojeva**

HRN EN 1010-1:2011 en pr  
Safety of machinery – Safety requirements for the design and construction of printing and paper converting machines – Part 1: Common requirements (EN 1010-1:2004+A1:2010)

### **HZN/TO 564, Uljarice, biljna i životinjska ulja i masti**

HRN EN ISO 3656:2011 en pr  
Životinjske i biljne masti i ulja – Određivanje apsorbancija u ultraljubičastom spektru izraženih kao specifična UV ekstinkcija (ISO 3656:2011; EN ISO 3656:2011)  
Animal and vegetable fats and oils – Determination of ultraviolet absorbance expressed as specific UV extinction (ISO 3656:2011; EN ISO 3656:2011)

HRN EN ISO 3961:2011 en pr  
Životinjske i biljne masti i ulja – Određivanje jednog broja (ISO 3961:2009; EN ISO 3961:2011)  
Animal and vegetable fats and oils – Determination of iodine value (ISO 3961:2009; EN ISO 3961:2011)

HRN EN ISO 9167-1:2011 en pr  
Repičino sjeme – Određivanje udjela glukozinolata – 1. dio:  
Metoda tekućinske kromatografije visokog učinka  
(ISO 9167-1:1992; EN ISO 9167-1:1995)  
Rapeseed – Determination of glucosinolates content –  
Part 1: Method using high-performance liquid  
chromatography (ISO 9167-1:1992;  
EN ISO 9167-1:1995)

HRN EN ISO 9936:2007/A1:2011 en pr  
Životinjske i biljne masti i ulja – Određivanje sadržaja  
tokoferola i tokotrienola tekućinskom kromatografijom  
visokog učinka – Amandman 1: Obnavljanje reagensa i  
potvrda valjanosti statističkih podataka (ISO 9936:2006/  
Amd 1:2011; EN ISO 9936:2006/A1:2011)  
Animal and vegetable fats and oils – Determination  
of tocopherol and tocotrienol contents by high-  
performance liquid chromatography – Amendment 1:  
Updating of reagents and confirmation of statistical  
data validity (ISO 9936:2006/Amd 1:2011;  
EN ISO 9936:2006/A1:2011)

HRN EN ISO 12966-2:2011 en pr  
Životinjske i biljne masti i ulja – Određivanje metilnih  
estera masnih kiselina plinskom kromatografijom –  
2. dio: Priprava metilnih estera masnih kiselina  
(ISO 12966-2:2011; EN ISO 12966-2:2011)  
Animal and vegetable fats and oils – Gas  
chromatography of fatty acid methyl esters – Part 2:  
Preparation of methyl esters of fatty acids  
(ISO 12966-2:2011; EN ISO 12966-2:2011)

HRN EN ISO 15753:2007/A1:2011 en pr  
Životinjske i biljne masti i ulja – Određivanje policikličkih  
aromatskih ugljikovodika – Amandman 1: Isključivanje  
ulja komine maslina iz područja  
(ISO 15753:2006/Amd 1:2011;  
EN ISO 15753:2006/A1:2011)  
Animal and vegetable fats and oils – Determination of  
polycyclic aromatic hydrocarbons – Amendment 1:  
Exclusion of olive pomace oil from the scope  
(ISO 15753:2006/Amd 1:2011;  
EN ISO 15753:2006/A1:2011)

HRN EN ISO 17932:2011 en pr  
Palmino ulje – Određivanje vrijednosti indeksa  
bijeljenja (DOBI) i količine karotena (ISO 17932:2011;  
EN ISO 17932:2011)  
Palm oil – Determination of the deterioration of  
bleachability index (DOBI) and carotene content  
(ISO 17932:2011; EN ISO 17932:2011)

### **HZN/TO 569, Hrana za životinje**

HRN EN ISO 5983-1:2008/Ispr.1:2011 en pr  
Hrana za životinje – Određivanje količine dušika i  
izračunavanje količine sirovih proteina – 1. dio:  
Kjeldahlova metoda (ISO 5983-1:2005/Cor 1:2008;  
EN ISO 5983-1:2005/AC:2009)  
Animal feeding stuffs – Determination of nitrogen  
content and calculation of crude protein content –  
Part 1: Kjeldahl method (ISO 5983-1:2005/Cor 1:2008;  
EN ISO 5983-1:2005/AC:2009)

HRN EN ISO 12099:2011 en pr  
Animal feeding stuffs, cereals and milled cereal  
products – Guidelines for the application of near  
infrared spectrometry (ISO 12099:2010;  
EN ISO 12099:2010)

HRN EN ISO 30024:2011 en pr  
Animal feeding stuffs – Determination of phytase  
activity (ISO 30024:2009; EN ISO 30024:2009)

### **HZN/TO E14, Energetski transformatori**

HRN EN 50216-12:2011 en pr  
Oprema za energetske transformatore i prigušnice –  
12. dio: Ventilatori (EN 50216-12:2011)  
Power transformer and reactor fittings – Part 12: Fans  
(EN 50216-12:2011)

HRN EN 50541-1:2011 en pr  
Trofazni suhi distributivni transformatori 50 Hz, od  
100 kVA do 3150 kVA za najviši napon opreme koji  
ne prelazi 36 kV – 1. dio: Opći zahtjevi  
(EN 50541-1:2011)  
Three phase dry-type distribution transformers 50 Hz,  
from 100 kVA to 3150 kVA, with highest voltage for  
equipment not exceeding 36 kV – Part 1: General  
requirements (EN 50541-1:2011)

HRN EN 60076-2:2011 en pr  
Energetski transformatori – 2. dio: Zagrijanje  
transformatora napunjenih tekućim dielektrikom  
(IEC 60076-2:2011; EN 60076-2:2011)  
Power transformers – Part 2: Temperature rise for  
liquid-immersed transformers  
(IEC 60076-2:2011; EN 60076-2:2011)

### **HZN/TO E76, Sigurnost optičkoga zračenja i laserska oprema**

HRN EN 60601-2-57:2011 en pr  
Medicinska električna oprema – Dio 2-57: Posebni  
zahtjevi za temeljnu sigurnost i bitne značajke opreme  
sa svjetlosnim izvorima koji nisu laseri, a koja je  
namijenjena za uporabu u terapijske, dijagnostičke,  
promatračke i kozmetičko/estetske svrhe  
(IEC 60601-2-57:2011; EN 60601-2-57:2011)  
Medical electrical equipment – Part 2-57: Particular  
requirements for basic safety and essential performance  
of non-laser light source equipment intended for  
therapeutic, diagnostic, monitoring and cosmetic/  
aesthetic use (IEC 60601-2-57:2011;  
EN 60601-2-57:2011)

HRN EN 60825-4:2008/A2:2011 en pr  
Sigurnost laserskih proizvoda – 4. dio: Zaštita od  
lasera (IEC 60825-4:2006/am2:2011;  
EN 60825-4:2006/A2:2011)  
Safety of laser products – Part 4: Laser guards  
(IEC 60825-4:2006/am2:2011;  
EN 60825-4:2006/A2:2011)

### **HZN/TO E500, Elektromagnetska kompatibilnost u elektrotehnici i telekomunikacijama**

HRI CLC/TR 50485:2011 en pr  
Elektromagnetska kompatibilnost – Mjerenje emisije u  
potpuno gluhim komorama (CLC/TR 50485:2010)  
Electromagnetic compatibility – Emission  
measurements in fully anechoic chambers  
(CLC/TR 50485:2010)

HRI CLC/TR 50538:2011 en pr  
Direktiva sukladnosti opreme namijenjene za vojnu  
primjenu (CLC/TR 50538:2010)  
Guide to EMC Directive conformity of equipment  
designed for military purposes (CLC/TR 50538:2010)

HRN EN 55016-2-1:2009/A1:2011 en pr  
Specifikacija uređaja i metoda za mjerenja radiosmetnja  
i otpornosti – Dio 2-1: Metode mjerenja smetnja i  
otpornosti – Mjerenja vođenih smetnja  
(CISPR 16-2-1:2008/am1:2010;  
EN 55016-2-1:2009/A1:2011)  
Specification for radio disturbance and immunity  
measuring apparatus and methods – Part 2-1:  
Methods of measurement of disturbances and  
immunity – Conducted disturbance measurements  
(CISPR 16-2-1:2008/am1:2010;  
EN 55016-2-1:2009/A1:2011)

HRN EN 55016-2-2:2011 en pr  
Specifikacija uređaja i metoda za mjerenja radiosmetnja  
i otpornosti – Dio 2-2: Metode mjerenja smetnja i  
otpornosti – Mjerenje snage smetnje  
(CISPR 16-2-2:2010; EN 55016-2-2:2011)  
Specification for radio disturbance and immunity  
measuring apparatus and methods – Part 2-2:  
Methods of measurement of disturbances and  
immunity – Measurement of disturbance power  
(CISPR 16-2-2:2010; EN 55016-2-2:2011)

HRN EN 55022:2008/A2:2011 en pr  
Uređaji informatičke tehnike – Značajke radiosmetnja –  
Granice i metode mjerenja (CISPR 22:2005/am2:2006,  
MOD; EN 55022:2006/A2:2010)

Information technology equipment – Radio disturbance  
characteristics – Limits and methods of measurement  
(CISPR 22:2005/am2:2006, MOD;  
EN 55022:2006/A2:2010)

HRN EN 55022:2011 en pr  
Uređaji informatičke tehnike – Značajke radiosmetnja  
– Granice i metode mjerenja (CISPR 22:2008, MOD;  
EN 55022:2010)

Information technology equipment – Radio disturbance  
characteristics – Limits and methods of measurement  
(CISPR 22:2008, MOD; EN 55022:2010)

HRN EN 61000-4-16:2001/A2:2011 en pr  
Elektromagnetska kompatibilnost (EMC) – Dio 4-16:  
Ispitne i mjerne tehnike – Ispitivanje otpornosti na  
vodljive asimetrične smetnje u frekvencijskome  
opsegu od 0 Hz do 150 kHz  
(IEC 61000-4-16:1998/am2:2009;  
EN 61000-4-16:1998/A2:2011)

Electromagnetic compatibility (EMC) – Part 4-16:  
Testing and measurement techniques – Test for  
immunity to conducted, common mode disturbances  
in the frequency range 0 Hz to 150 kHz  
(IEC 61000-4-16:1998/am2:2009;  
EN 61000-4-16:1998/A2:2011)

HRN EN 61000-4-21:2011 en pr  
Elektromagnetska kompatibilnost (EMC) – Dio 4-21:  
Ispitne i mjerne tehnike – Metode ispitivanja u  
odbijajućim komorama (IEC 61000-4-21:2011;  
EN 61000-4-21:2011)

Electromagnetic compatibility (EMC) – Part 4-21:  
Testing and measurement techniques – Reverberation  
chamber test methods (IEC 61000-4-21:2011;  
EN 61000-4-21:2011)

HRN EN 61000-4-22:2011 en pr  
Elektromagnetska kompatibilnost (EMC) – Dio 4-22:  
Ispitne i mjerne tehnike – Mjerenje emisije i otpornosti  
u potpuno gluhim komorama  
(IEC 61000-4-22:2010; EN 61000-4-22:2011)

Electromagnetic compatibility (EMC) – Part 4-22:  
Testing and measurement techniques – Radiated  
emission and immunity measurements in fully  
anechoic rooms (FARs) (IEC 61000-4-22:2010;  
EN 61000-4-22:2011)

HRN EN 61000-4-3:2008/A2:2011 en pr  
Elektromagnetska kompatibilnost (EMC) – Dio 4-3:  
Ispitne i mjerne tehnike – Ispitivanje otpornosti na  
zračena radiofrekvencijska elektromagnetska polja  
(IEC 61000-4-3:2006/am2:2010;  
EN 61000-4-3:2006/A2:2010)

Electromagnetic compatibility (EMC) – Part 4-3:  
Testing and measurement techniques – Radiated,  
radio-frequency, electromagnetic field immunity test  
(IEC 61000-4-3:2006/am2:2010;  
EN 61000-4-3:2006/A2:2010)

HRN EN 61000-6-3:2008/A1:2011 en pr  
Elektromagnetska kompatibilnost (EMC) – Dio 6-3:  
Norme srodnih područja – Norma emisije za stambenu,  
poslovnu i lakoiindustrijsku okolinu  
(IEC 61000-6-3:2006/am1:2010;  
EN 61000-6-3:2007/A1:2011)

Electromagnetic compatibility (EMC) – Part 6-3:  
Generic standards – Emission standard for residential,  
commercial and light-industrial environments  
(IEC 61000-6-3:2006/am1:2010;  
EN 61000-6-3:2007/A1:2011)

HRN EN 61000-6-4:2008/A1:2011 en pr  
Elektromagnetska kompatibilnost (EMC) – Dio 6-4:  
Norme srodnih područja – Norma emisije za industrijsku  
okolinu (IEC 61000-6-4:2006/am1:2010;  
EN 61000-6-4:2007/A1:2011)

Electromagnetic compatibility (EMC) – Part 6-4:  
Generic standards – Emission standard for industrial  
environments (IEC 61000-6-4:2006/am1:2010;  
EN 61000-6-4:2007/A1:2011)

## HZN/TO E502, *Elektrotehnički aspekti telekomunikacijske opreme*

HRN ISO/IEC 14763-3:2011 en pr  
Informacijska tehnologija – Izvedba i pogon kabliranja  
korisničkih prostora – 3. dio: Ispitivanje svjetlovodnog  
kabliranja (ISO/IEC 14763-3:2011)

Information technology – Implementation and  
operation of customer premises cabling – Part 3:  
Testing of optical fibre cabling  
(ISO/IEC 14763-3:2011)

HRI ISO/IEC/TR 29125:2011 en pr  
Informacijska tehnologija – Zahtjevi na  
telekomunikacijsko kabliranje za daljinsko napajanje  
terminalne opreme (ISO/IEC/TR 29125:2010)

Information technology – Telecommunications  
cabling requirements for remote powering of terminal  
equipment (ISO/IEC/TR 29125:2010)

HRN EN 50173-2:2008/A1:2011 en pr  
Informacijska tehnologija – Generički sustavi kabliranja  
– 2. dio: Uredski prostori (EN 50173-2:2007/A1:2010)  
Information technology – Generic cabling systems –  
Part 2: Office premises (EN 50173-2:2007/A1:2010)

HRN EN 50173-2:2008/A1:2011/Ispr.1:2011 en pr  
Informacijska tehnologija – Generički sustavi kabliranja  
– 2. dio: Uredski prostori  
(EN 50173-2:2007/A1:2010/AC:2011)  
Information technology – Generic cabling systems –  
Part 2: Office premises  
(EN 50173-2:2007/A1:2010/AC:2011)

HRN EN 50173-3:2008/A1:2011 en pr  
Informacijska tehnologija – Generički sustavi kabliranja  
– 3. dio: Industrijski prostori  
(EN 50173-3:2007/A1:2010)  
Information technology – Generic cabling systems –  
Part 3: Industrial premises  
(EN 50173-3:2007/A1:2010)

HRN EN 50173-3:2008/A1:2011/Ispr.1:2011 en pr  
Informacijska tehnologija – Generički sustavi kabliranja  
– 3. dio: Industrijski prostori  
(EN 50173-3:2007/A1:2010/AC:2011)  
Information technology – Generic cabling systems –  
Part 3: Industrial premises  
(EN 50173-3:2007/A1:2010/AC:2011)

HRN EN 50173-4:2008/A1:2011 en pr  
Informacijska tehnologija – Generički sustavi kabliranja  
– 3. dio: Stambeni prostori  
(EN 50173-4:2007/A1:2010)  
Information technology – Generic cabling systems –  
Part 3: Homes (EN 50173-4:2007/A1:2010)

HRN EN 50173-4:2008/A1:2011/Ispr.1:2011 en pr  
Informacijska tehnologija – Generički sustavi kabliranja  
– 3. dio: Stambeni prostori  
(EN 50173-4:2007/A1:2010/AC:2011)  
Information technology – Generic cabling systems –  
Part 3: Homes (EN 50173-4:2007/A1:2010/AC:2011)

HRN EN 50173-5:2008/A1:2011 en pr  
Informacijska tehnologija – Generički sustavi kabliranja  
– 3. dio: Podatkovni centri  
(EN 50173-5:2007/A1:2010)  
Information technology – Generic cabling systems –  
Part 3: Data centres (EN 50173-5:2007/A1:2010)

HRN EN 50173-5:2008/A1:2011/Ispr.1:2011 en pr  
Informacijska tehnologija – Generički sustavi kabliranja  
– 3. dio: Podatkovni centri  
(EN 50173-5:2007/A1:2010/AC:2011)  
Information technology – Generic cabling systems –  
Part 3: Data centres  
(EN 50173-5:2007/A1:2010/AC:2011)

- HRN EN 50174-1:2010/A1:2011 en pr  
 Informacijska tehnologija – Instalacija kabliranja –  
 1. dio: Specifikacija instalacije i osiguranje kvalitete  
 (EN 50174-1:2009/A1:2011)  
 Information technology – Cabling installation – Part 1:  
 Installation specification and quality assurance  
 (EN 50174-1:2009/A1:2011)
- HRN EN 50174-2:2010/A1:2011 en pr  
 Informacijska tehnologija – Instalacija kabliranja –  
 2. dio: Planiranje instalacije i instalacijska praksa  
 unutar zgrada (EN 50174-2:2009/A1:2011)  
 Information technology – Cabling installation – Part 2:  
 Installation planning and practices inside buildings  
 (EN 50174-2:2009/A1:2011)
- HRN EN 50174-2:2010/A1:2011/Ispr.1:2011 en pr  
 Informacijska tehnologija – Instalacija kabliranja –  
 2. dio: Planiranje instalacije i instalacijska praksa  
 unutar zgrada (EN 50174-2:2009/A1:2011/AC:2011)  
 Information technology – Cabling installation – Part 2:  
 Installation planning and practices inside buildings  
 (EN 50174-2:2009/A1:2011/AC:2011)
- HRN EN 50310:2011 en pr  
 Primjena izjednačenja potencijala i uzemljenja u  
 zgradama s opremom informacijske tehnologije  
 (EN 50310:2010)  
 Application of equipotential bonding and earthing in  
 buildings with information technology equipment  
 (EN 50310:2010)

#### **HZN/TU A1, Usluge, proizvodi za kućanstvo i slobodno vrijeme 1**

- HRN EN 131-1:2011 en pr  
 Ljestve – 1. dio: Nazivi, tipovi, funkcionalne veličine  
 (EN 131-1:2007+A1:2011)  
 Ladders – Part 1: Terms, types, functional sizes  
 (EN 131-1:2007+A1:2011)

#### **HZN/TU N1, Nemetalni materijali 1**

- HRN EN 14778:2011 en pr  
 Solid biofuels – Sampling (EN 14778:2011)
- HRN EN 14780:2011 en pr  
 Solid biofuels – Sample preparation (EN 14780:2011)
- HRN EN 14961-2:2011 en pr  
 Solid biofuels – Fuel specifications and classes –  
 Part 2: Wood pellets for non-industrial use  
 (EN 14961-2:2011)
- HRN EN 14961-3:2011 en pr  
 Solid biofuels – Fuel specifications and classes –  
 Part 3: Wood briquettes for non-industrial use  
 (EN 14961-3:2011)
- HRN EN 14961-4:2011 en pr  
 Solid biofuels – Fuel specifications and classes –  
 Part 4: Wood chips for non-industrial use  
 (EN 14961-4:2011)

#### **HZN/TU S1, Zdravlje, okoliš i medicinska oprema 1**

- HRN EN 455-2:2011 en pr  
 Medical gloves for single use – Part 2: Requirements  
 and testing for physical properties  
 (EN 455-2:2009+A1:2011)
- HRN EN ISO 1797-1:2011 en pr  
 Dentistry – Shanks for rotary instruments – Part 1:  
 Shanks made of metals (ISO 1797-1:2011;  
 EN ISO 1797-1:2011)
- HRN EN ISO 3630-5:2011 en pr  
 Dentistry – Endodontic instruments – Part 5: Shaping  
 and cleaning instruments (ISO 3630-5:2011;  
 EN ISO 3630-5:2011)
- HRN EN ISO 7494-1:2011 en pr  
 Dentistry – Dental units – Part 1: General requirements  
 and test methods (ISO 7494-1:2011;  
 EN ISO 7494-1:2011)

- HRN EN ISO 9999:2011 en pr  
 Assistive products for persons with disability –  
 Classification and terminology (ISO 9999:2011;  
 EN ISO 9999:2011)
- HRN EN ISO 10271:2011 en pr  
 Dentistry – Corrosion test methods for metallic  
 materials (ISO 10271:2011; EN ISO 10271:2011)
- HRN EN ISO 15912:2008/A1:2011 en pr  
 Dentistry – Casting investments and refractory die  
 materials – Amendment 1: Requirement and test  
 method for adequacy of expansion of Type 1 and Type  
 2 materials (ISO 15912:2006/Amd 1:2011;  
 EN ISO 15912:2006/A1:2011)
- HRN EN 16081:2011 en pr  
 Hyperbaric chambers – Specific requirements for fire  
 extinguishing systems – Performance, installation and  
 testing (EN 16081:2011)
- HRN EN ISO 24234:2008/A1:2011 en pr  
 Dentistry – Mercury and alloys for dental amalgam  
 – Amendment 1: Requirements for marking and  
 manufacturer's instructions concerning mercury  
 (ISO 24234:2004/A1:2011;  
 EN ISO 24234:2004/A1:2011)

#### **HZN/TU T1, Prijevoz, rukovanje materijalima i pakiranje 1**

- HRN EN 2240-051:2011 en pr  
 Aerospace series – Lamps, incandescent – Part 051:  
 Lamp, code 1163 – Product standard  
 (EN 2240-051:2011)
- HRN EN 2240-052:2011 en pr  
 Aerospace series – Lamps, incandescent – Part 052:  
 Lamp, code 1222 – Product standard  
 (EN 2240-052:2011)
- HRN EN 2240-053:2011 en pr  
 Aerospace series – Lamps, incandescent – Part 053:  
 Lamp, code 1308 – Product standard  
 (EN 2240-053:2011)
- HRN EN 2240-054:2011 en pr  
 Aerospace series – Lamps, incandescent – Part 054:  
 Lamp, code 1317 – Product standard  
 (EN 2240-054:2011)
- HRN EN 2240-055:2011 en pr  
 Aerospace series – Lamps, incandescent – Part 055:  
 Lamp, code 1495 – Product standard  
 (EN 2240-055:2011)
- HRN EN 2240-056:2011 en pr  
 Aerospace series – Lamps, incandescent – Part 056:  
 Lamp, code 1506 – Product standard  
 (EN 2240-056:2011)
- HRN EN 2240-057:2011 en pr  
 Aerospace series – Lamps, incandescent – Part 057:  
 Lamp, code 1512 – Product standard  
 (EN 2240-057:2011)
- HRN EN 2240-058:2011 en pr  
 Aerospace series – Lamps, incandescent – Part 058:  
 Lamp, code 1524 – Product standard  
 (EN 2240-058:2011)
- HRN EN 2240-059:2011 en pr  
 Aerospace series – Lamps, incandescent – Part 059:  
 Lamp, code 1591 – Product standard  
 (EN 2240-059:2011)
- HRN EN 2240-060:2011 en pr  
 Aerospace series – Lamps, incandescent – Part 060:  
 Lamp, code 1619 – Product standard  
 (EN 2240-060:2011)
- HRN EN 2481:2011 en pr  
 Aerospace series – Steel FE-PL2108 (36NiCrMo16) –  
 1250 MPa ≤ R<sub>m</sub> ≤ 1400 MPa – Forgings – D<sub>e</sub> ≤ 75 mm  
 (EN 2481:2010)

HRN EN 2482:2011 en pr  
Aerospace series – Steel FE-PL2108 (36NiCrMo16) – 1100 MPa  $\leq R_m \leq$  1300 MPa – Bars –  $D_e \leq$  100 mm (EN 2482:2010)

HRN EN 2483:2011 en pr  
Aerospace series – Steel FE-PL2108 (36NiCrMo16) – 1100 MPa  $\leq R_m \leq$  1300 MPa – Forgings –  $D_e \leq$  100 mm (EN 2483:2010)

HRN EN 2826:2011 en pr  
Aerospace series – Burning behaviour of non metallic materials under the influence of radiating heat and flames – Determination of gas components in the smoke (EN 2826:2011)

HRN EN 3155-033:2011 en pr  
Aerospace series – Electrical contacts used in elements of connection – Part 033: Contacts, electrical, coaxial, 50 ohms, size 5, female, type D, crimp, class R – Product standard (EN 3155-033:2009)

HRN EN 3155-064:2011 en pr  
Aerospace series – Electrical contacts used in elements of connection – Part 064: Contacts, electrical, coaxial, 50 ohms, size 1, female, type D, solder, class R – Product standard (EN 3155-064:2009)

HRN EN 3155-074:2011 en pr  
Aerospace series – Electrical contacts used in elements of connection – Part 074: Contacts, electrical, quadrax, size 8, male, type E, crimp, class R – Product standard (EN 3155-074:2009)

HRN EN 3155-075:2011 en pr  
Aerospace series – Electrical contacts used in elements of connection – Part 075: Contacts, electrical, quadrax, size 8, female, type E, crimp, class R – Product standard (EN 3155-075:2009)

HRN EN 3687:2011 en pr  
Aerospace series – Bolts, normal hexagon head, relieved shank, long thread, in heat resisting steel FE-PA92HT (A286), silver plated – Classification: 1100 MPa/650 °C (EN 3687:2010)

HRN EN 4604-001:2011 en pr  
Aerospace series – Cable, electrical, for signal transmission – Part 001: Technical specification (EN 4604-001:2009)

HRN EN 4641-001:2011 en pr  
Aerospace series – Cables, optical, 125  $\mu$ m diameter cladding – Part 001: Technical specification (EN 4641-001:2009)

HRN EN 4655:2011 en pr  
Aerospace series – Steel FE-PM1506 (X1CrNiMoAlTi12-10-2) – Vacuum induction melted and consumable electrode remelted – Solution treated and precipitation treated – Bars – a or  $D \leq$  200 mm –  $R_m \geq$  1400 MPa (EN 4655:2010)

HRN EN 4656:2011 en pr  
Aerospace series – Steel FE-PM1507 (X1CrNiMoAlTi12-11-2) – Vacuum induction melted and consumable electrode remelted – Solution treated and precipitation treated – Bars – a or  $D \leq$  200 mm –  $R_m \geq$  1520 MPa (EN 4656:2010)

HRN EN 4657:2011 en pr  
Aerospace series – Steel FE-PM1507 (X1CrNiMoAlTi12-11-2) – Vacuum induction melted and consumable electrode remelted – Solution treated and precipitation treated – Bars – a or  $D <$  200 mm –  $R_m >$  1650 MPa (EN 4657:2010)

HRN EN 4658:2011 en pr  
Aerospace series – Steel FE-PM1507 (X1CrNiMoAlTi12-11-2) – Vacuum induction melted and consumable electrode remelted – Solution treated and precipitation treated – Forgings – a or  $D \leq$  200 mm –  $R_m \geq$  1520 MPa (EN 4658:2010)

HRN EN 4660-001:2011 en pr  
Aerospace series – Modular and Open Avionics Architectures – Part 001: Architecture (EN 4660-001:2011)

HRN EN 4660-002:2011 en pr  
Aerospace series – Modular and Open Avionics Architectures – Part 002: Common Functional Modules (EN 4660-002:2011)

HRN EN 4660-003:2011 en pr  
Aerospace series – Modular and Open Avionics Architectures – Part 003: Communications/Network (EN 4660-003:2011)

HRN EN 4660-004:2011 en pr  
Aerospace series – Modular and Open Avionics Architectures – Part 004: Packaging (EN 4660-004:2011)

HRN EN 4670:2011 en pr  
Aerospace series – Steel FE-PM1507 (X1CrNiMoAlTi12-11-2) – Vacuum induction melted and consumable electrode remelted – Softened – Forging stock – a or  $D \leq$  300 mm (EN 4670:2010)

HRN EN 4671:2011 en pr  
Aerospace series – Steel FE-PM1506 (X1CrNiMoAlTi12-10-2) – Vacuum induction melted and consumable electrode remelted – Solution treated and precipitation treated – Forgings – a or  $D \leq$  200 mm –  $R_m \geq$  1400 MPa (EN 4671:2010)

## 1.2 Nacrti hrvatskih norma

Temeljem Zakona o normizaciji (Narodne novine 163/03) Hrvatski zavod za norme na prijedlog tehničkih odbora objavljuje raspravu o nacrtima hrvatskih norma (oznaka nHRN). Pisane primjedbe na nacrt hrvatskih norma dostavljaju se Hrvatskom zavodu za norme (uz naznaku tehničkog odbora i referencijsku oznaku nacrt hrvatske norme) u roku od 30 dana od dana objave rasprave u službenom glasilu Hrvatskoga zavoda za norme (HZN e-glasilo).

Nacrti su hrvatskih norma zainteresiranima na raspolaganju u Normoteci Hrvatskoga zavoda za norme, Ulica grada Vukovara 78, Zagreb.

### HZN/TO 548/PO 8, *Konstrukcijski eurokodovi; Eurokod 8: Projektiranje konstrukcija otpornih na potresno djelovanje*

nHRN EN 1998-1 hr pp  
Eurokod 8: Projektiranje potresne otpornosti konstrukcija – 1. dio: Opća pravila, potresna djelovanja i pravila za zgrade (EN 1998-1:2004+AC:2009)  
Eurocode 8: Design of structures for earthquake resistance – Part 1: General rules, seismic actions and rules for buildings (EN 1998-1:2004+AC:2009)

nHRN EN 1998-1/NA hr izv  
Eurokod 8: Projektiranje potresne otpornosti konstrukcija – 1. dio: Opća pravila, potresna djelovanja i pravila za zgrade – Nacionalni dodatak  
Eurocode 8: Design of structures for earthquake resistance – Part 1: General rules, seismic actions and rules for buildings – National Annex

nHRN EN 1998-2 hr pp  
Eurokod 8: Projektiranje potresne otpornosti konstrukcija – 2. dio: Mostovi (EN 1998-2:2005+AC:2010+A1:2009+A2:2011)  
Eurocode 8: Design of structures for earthquake resistance – Part 2: Bridges (EN 1998-2:2005+AC:2010+A1:2009+A2:2011)

nHRN EN 1998-2/NA hr izv  
Eurokod 8: Projektiranje potresne otpornosti konstrukcija – 2. dio: Mostovi – Nacionalni dodatak  
Eurocode 8: Design of structures for earthquake resistance – Part 2: Bridges – National Annex

nHRN EN 1998-3 hr pp  
Eurokod 8: Projektiranje potresne otpornosti konstrukcija – 3. dio: Ocjenjivanje i obnova zgrada (EN 1998-3:2005+AC:2010)  
Eurocode 8: Design of structures for earthquake resistance – Part 3: Assessment and retrofitting of buildings (EN 1998-3:2005+AC:2010)

nHRN EN 1998-3/NA hr izv  
Eurokod 8: Projektiranje potresne otpornosti konstrukcija – 3. dio: Ocjenjivanje i obnova zgrada – Nacionalni dodatak  
Eurocode 8: Design of structures for earthquake resistance – Part 3: Assessment and retrofitting of buildings – National Annex

nHRN EN 1998-4 hr pp  
Eurokod 8: Projektiranje potresne otpornosti konstrukcija – 4. dio: Silosi, spremnici i cjevovodi (EN 1998-4:2006)  
Eurocode 8: Design of structures for earthquake resistance – Part 4: Silos, tanks and pipelines (EN 1998-4:2006)

nHRN EN 1998-4/NA hr izv  
Eurokod 8: Projektiranje potresne otpornosti konstrukcija – 4. dio: Silosi, spremnici i cjevovodi – Nacionalni dodatak  
Eurocode 8: Design of structures for earthquake resistance – Part 4: Silos, tanks and pipelines – National Annex

nHRN EN 1998-5 hr pp  
Eurokod 8: Projektiranje potresne otpornosti konstrukcija – 5. dio: Temelji, potporne konstrukcije i geotehnička pitanja (EN 1998-5:2004)  
Eurocode 8: Design of structures for earthquake resistance – Part 5: Foundations, retaining structures and geotechnical aspects (EN 1998-5:2004)

nHRN EN 1998-5/NA hr izv  
Eurokod 8: Projektiranje potresne otpornosti konstrukcija – 5. dio: Temelji, potporne konstrukcije i geotehnička pitanja – Nacionalni dodatak  
Eurocode 8: Design of structures for earthquake resistance – Part 5: Foundations, retaining structures and geotechnical aspects – National Annex

nHRN EN 1998-6 hr pp  
Eurokod 8: Projektiranje potresne otpornosti konstrukcija – 6. dio: Tornjevi, jarboli i dimnjaci (EN 1998-6:2005)  
Eurocode 8: Design of structures for earthquake resistance – Part 6: Towers, masts and chimneys (EN 1998-6:2005)

nHRN EN 1998-6/NA hr izv  
Eurokod 8: Projektiranje potresne otpornosti konstrukcija – 6. dio: Tornjevi, jarboli i dimnjaci – Nacionalni dodatak  
Eurocode 8: Design of structures for earthquake resistance – Part 6: Towers, masts and chimneys – National Annex

### **HZN/TO E20, Električni kabeli**

nHRN IEC 60050-461 hr pp  
Međunarodni elektrotehnički rječnik – 461. dio: Električni kabeli (IEC 60050-461:2008)  
International Electrotechnical Vocabulary – Part 461: Electric cables (IEC 60050-461:2008)

### **HZN/TO E23, Električni instalacijski pribor**

nHRN 1145 hr izv  
Utikači i utičnice za kućanstvo i slične svrhe – Dvopolne utičnice s bočnim zaštitnim kontaktom, 2P+PE, 16A 250V izmjenične struje – Glavne dimenzije  
Plugs and socket-outlets for household and similar purposes – Two pole socket-outlets with side earthing contact, 2P + PE, 16A 250V a.c. – Main dimensions

nHRN 1146 hr izv  
Utikači i utičnice za kućanstvo i slične svrhe – Dvopolni utikači sa zaštitnim kontaktom, 2P+PE, 16A 250V izmjenične struje – Glavne dimenzije  
Plugs and socket-outlets for household and similar purposes – Two pole plugs with earthing contact, 2P+PE, 16A 250V a.c. – Main dimensions

nHRN 1147 hr izv  
Utikači i utičnice za kućanstvo i slične svrhe – Dvopolni utikači 2P, 16A 250V izmjenične struje za opremu razreda II – Glavne dimenzije  
Plugs and socket-outlets for household and similar purposes – Two pole plugs for class II appliances – Main dimensions

### **HZN/TO E64, Električne instalacije i zaštita od električnog udara**

nHRN IEC 60050-826 hr pp  
Međunarodni elektrotehnički rječnik – 826. dio: Električne instalacije (IEC 60050-826:2004)  
International Electrotechnical Vocabulary – Part 826: Electrical installations (IEC 60050-826:2004)

### **HZN/TU A1, Usluge, proizvodi za kućanstvo i slobodno vrijeme 1**

nHRN EN 131-1 hr pp  
Ljestve – 1. dio: Nazivi, tipovi, funkcionalne veličine (EN 131-1:2007+A1:2011)  
Ladders – Part 1: Terms, types, functional sizes (EN 131-1:2007+A1:2011)

nHRN EN 131-2 hr pp  
Ljestve – 2. dio: Zahtjevi, ispitivanje, označavanje (EN 131-2:2010)  
Ladders – Part 2: Requirements, testing, marking (EN 131-2:2010)

nHRN EN 131-3 hr pp  
Ljestve – 3. dio: Upute za korisnike (EN 131-3:2007)  
Ladders – Part 3: User Instructions (EN 131-3:2007)

nHRN EN 131-4 hr pp  
Ljestve – 4. dio: Zglobove ljestve s jednim ili više zglobova (EN 131-4:2007)  
Ladders – Part 4: Single or multiple hinge-joint ladders (EN 131-4:2007)

### **1.3 Prijedlozi za prihvaćanje stranih norma u izvorniku**

Temeljem Zakona o normizaciji (Narodne novine 163/03) Hrvatski zavod za norme na prijedlog tehničkih odbora objavljuje raspravu o prijedlogu za prihvaćanje stranih norma (međunarodnih, europskih i njemačkih norma) kao hrvatskih norma.

Pisane primjedbe na prijedloge za prihvaćanje norma dostavljaju se Hrvatskome zavodu za norme (uz naznaku tehničkog odbora i referencijsku oznaku norme) u roku od 30 dana od dana objave rasprave u službenom glasilu Hrvatskoga zavoda za norme (HZN e-glasilo).

### **HZN/TO 6, Papir, karton i pulpe**

EN ISO 12625-1:2011 en  
Tissue paper and tissue products – Part 1: General guidance on terms (ISO 12625-1:2011)  
Tanki upijajući papir (tissue) i proizvodi od tankoga upijajućeg papira – 1. dio: Opće smjernice o nazivlju (ISO 12625-1:2011)

### **HZN/TO 8, Brodogradnja**

prEN ISO 10133 en  
Small craft – Electrical systems – Extra-low-voltage d.c. installations (ISO/DIS 10133:2011)

prEN ISO 13297 en  
Small craft – Electrical systems – Alternating current installations (ISO/DIS 13297:2011)

### **HZN/TO 21/PO 3, Protupožarna i vatrogasna oprema; Vatrodojavni i alarmni sustavi**

prEN 1846-3 en  
Firefighting and rescue service vehicles – Part 3: Permanently installed equipment – Safety and performance  
Vozila za gašenje požara i spašavanje – 3. dio: Trajno ugrađena oprema – Sigurnost i svojstva

### **HZN/TO 22, Cestovna vozila**

prEN ISO 18542-1 en  
Road vehicles – Standardized repair and maintenance information (RMI) terminology – Part 1: General information and use case definition (ISO/DIS 18542-1:2011)  
Cestovna vozila – Normirano nazivlje u informacijama za popravak i održavanje vozila (RMI) – 1. dio: Opće informacije i definicija slučaja uporabe (use case) (ISO/DIS 18542-1:2011)

### **HZN/TO 25, Ljevarstvo**

FprEN 1564 en  
Founding – Ausferritic spheroidal graphite cast iron  
Ljevarstvo – Izotermički poboljšani nodularni lijev

### **HZN/TO 28, Naftni proizvodi i maziva**

prEN ISO 13736 rev en  
Determination of flash point – Abel closed-cup method (ISO/DIS 13736:2011)  
Određivanje točke paljenja – Metoda zatvorene posude po Abelu (ISO/DIS 13736:2011)

prEN 14214 en  
Liquid petroleum products – Fatty acid methyl esters (FAME) for diesel engines – Requirements and test methods  
Tekući naftni proizvodi – Metilni esteri masnih kiselina (FAME) za dizelske motore – Zahtjevi i metode ispitivanja

prEN 16294 en  
Petroleum products and fat and oil derivatives – Determination of phosphorus content in fatty acid methyl esters (FAME) – Optical emission spectral analysis with inductively coupled plasma (ICP OES)  
Naftni proizvodi i derivati masti i ulja – Određivanje količine fosfora u metilnim esterima masnih kiselina (FAME) – Optička emisijska spektralna analiza induktivno spregnutom plazmom (ICP OES)

prEN 16300 en  
Automotive fuels – Determination of iodine value – Calculation method from gas chromatographic data  
Goriva za motorna vozila – Određivanje jednoga broja – Metoda izračunavanja iz plinskrokromatografskih podataka

EN ISO 20846:2011 en  
Petroleum products – Determination of sulfur content of automotive fuels – Ultraviolet fluorescence method (ISO 20846:2011)  
Naftni proizvodi – Određivanje količine sumpora u gorivima za motorna vozila – Metoda ultraljubičaste fluorescencije (ISO 20846:2011)

DIN 51603-1:2011 de  
Flüssige Brennstoffe – Heizöle – Teil 1: Heizöl EL, Mindestanforderungen  
Tekuća goriva – Loživa ulja – 1. dio: Loživo ulje EL (ekstra lako), specifikacije

### **HZN/TO 34/PO 7, Poljoprivredni i prehrambeni proizvodi; Kava, čaj, mirodije i začini**

ISO 8455:2011 en  
Green coffee – Guidelines for storage and transport  
Sirova kava – Smjernice za skladištenje i transport

ISO 24114:2011 en  
Instant coffee – Criteria for authenticity  
Instant kava – Kriteriji autentičnosti

### **HZN/TO 44, Zavarivanje i srodni postupci**

EN ISO 10863:2011 en  
Non-destructive testing of welds – Ultrasonic testing – Use of time-of-flight diffraction technique (TOFD) (ISO 10863:2011)  
Nerazorno ispitivanje zavarenih spojeva – Ultrazvučno ispitivanje – Upotreba tehnike difrakcije (TOFD) (ISO 10863:2011)

EN ISO 14271:2011 en  
Resistance welding – Vickers hardness testing (low-force and microhardness) of resistance spot, projection, and seam welds (ISO 14271:2011)  
Elektrootporno zavarivanje – Ispitivanje tvrdoće prema Vickersu (malo opterećenje i mikrotvrdoća) elektrootporno zavarenih točkastih, bradavičastih i šavnih spojeva (ISO 14271:2011)

EN ISO 14372:2011 en  
Welding consumables – Determination of moisture resistance of manual metal arc welding electrodes by measurement of diffusible hydrogen (ISO 14372:2011)  
Dodatni i potrošni materijali za zavarivanje – Određivanje otpornosti na vlagu elektroda za ručno elektrolučno zavarivanje mjerenjem difundiranog vodika (ISO 14372:2011)

### **HZN/TO 89, Furniri i drvene ploče**

FprEN 14272 en  
Plywood – Calculation method for some mechanical properties  
Uslojeno drvo – Metode proračuna za pojedina mehanička svojstva

### **HZN/TO 108, Mehaničke vibracije i udari**

ISO 1940-1:2003+Cor 1:2005 en  
Mechanical vibration – Balance quality requirements for rotors in a constant (rigid) state – Part 1: Specification and verification of balance tolerances  
Mehaničke vibracije – Zahtjevi za kakvoću uravnoteživanja rotora u postojanom (krutom) stanju – 1. dio: Specifikacija i verifikacija dopuštenih odstupanja uravnoteženosti

### **HZN/TO 120, Koža i obuća**

FprCEN ISO/TS 16179 en  
Footwear – Critical substances potentially present in footwear and footwear components – Determination of organotin compounds in footwear materials (ISO/DTS 16179:2011)

Obuća – Kritične tvari potencijalno prisutne u obući i dijelovima obuće – Određivanje organokositrenih spojeva u materijalima za obuću (ISO/DTS 16179:2011)

prEN ISO 17131 en  
Leather – Identification of leather with microscopy (ISO/DIS 17131:2011)  
Koža – Identifikacija kože pomoću mikroskopije (ISO/DIS 17131:2011)

prEN ISO 20433 en  
Leather – Tests for colour fastness – Colour fastness to crocking (ISO/DIS 20433:2011)  
Koža – Ispitivanje postojanosti obojenja – Postojanost obojenja na trenje (ISO/DIS 20433:2011)

### **HZN/TO 134, Gnojiva i poboljšivači tla**

EN 15962:2011 en  
Fertilizers – Determination of the complexed micro-nutrient content and of the complexed fraction of micro-nutrients  
Gnojiva – Određivanje udjela kompleksiranih mikro hranjiva

EN 16024:2011 en  
Fertilizers – Determination of 1H-1,2,4-triazole in urea and in fertilizers containing urea – Method using high-performance liquid chromatography (HPLC)  
Gnojiva – Određivanje 1H-1,2,4-triazola u urei i u gnojivima koja sadrže ureu – Metoda tekućinske kromatografije visokog učinka (HPLC)

### **HZN/TO 135, Nerazorna ispitivanja**

prEN 14584 en  
Non-destructive testing – Acoustic emission – Examination of metallic pressure equipment during proof testing  
Nerazorno ispitivanje – Akustička emisija – Ispitivanje metalne tlačne opreme tijekom njezina potvrđivanja

EN 16016-1:2011 en  
Non-destructive testing – Radiation methods – Computed tomography – Part 1: Terminology  
Nerazorno ispitivanje – Metode zračenja – Računalna tomografija – 1. dio: Nazivlje

EN 16016-2:2011 en  
Non-destructive testing – Radiation methods – Computed tomography – Part 2: Principle, equipment and samples  
Nerazorno ispitivanje – Metode zračenja – Računalna tomografija – 2. dio: Načelo, oprema i uzorci

EN 16016-3:2011 en  
Non-destructive testing – Radiation methods – Computed Tomography – Part 3: Operation and interpretation  
Nerazorno ispitivanje – Metode zračenja – Računalna tomografija – 3. dio: Provedba i tumačenje

EN 16016-4:2011 en  
Non-destructive testing – Radiation methods – Computed tomography – Part 4: Qualification  
Nerazorno ispitivanje – Metode zračenja – Računalna tomografija – 4. dio: Kvalifikacija

prEN ISO 19232-1 en  
Non-destructive testing – Image quality of radiographs – Part 1: Image quality indicators (wire type) – Determination of image quality value (ISO/DIS 19232-1:2011)  
Nerazorno ispitivanje – Kvaliteta radiograma – 1. dio: Indikatori kvalitete radiograma (žičani) – Određivanje stupnja kvalitete radiograma (ISO/DIS 19232-1:2011)

prEN ISO 19232-2 en  
Non-destructive testing – Image quality of radiographs – Part 2: Image quality indicators (step/hole type) – Determination of image quality value (ISO/DIS 19232-2:2011)  
Nerazorno ispitivanje – Kvaliteta radiograma – 2. dio: Indikatori kvalitete radiograma (stepeničasti s provrtima) – Određivanje stupnja kvalitete radiograma (ISO/DIS 19232-2:2011)

prEN ISO 19232-3 en  
Non-destructive testing – Image quality of radiographs – Part 3: Image quality classes for ferrous metals (ISO/DIS 19232-3:2011)  
Nerazorno ispitivanje – Kvaliteta radiograma – 3. dio: Razredi kvalitete radiograma za željezne materijale (ISO/DIS 19232-3:2011)

prEN ISO 19232-4 en  
Non-destructive testing – Image quality of radiographs – Part 4: Experimental evaluation of image quality values and image quality tables (ISO/DIS 19232-4:2011)  
Nerazorno ispitivanje – Kvaliteta radiograma – 4. dio: Eksperimentalno vrednovanje stupnja kvalitete radiograma i tablice kvalitete radiograma (ISO/DIS 19232-4:2011)

prEN ISO 19232-5 en  
Non-destructive testing – Image quality of radiographs – Part 5: Image quality indicators (duplex wire type) – Determination of image unsharpness value (ISO/DIS 19232-5:2011)  
Nerazorno ispitivanje – Kvaliteta radiograma – 5. dio: Indikatori kvalitete radiograma (dvostruki žičani) – Određivanje vrijednosti ukupne neoštine radiograma (ISO/DIS 19232-4:2011)

### **HZN/TO 136, Namještaj**

EN 16014:2011 en  
Hardware for furniture – Strength and durability of locking mechanisms  
Okov za namještaj – Čvrstoća i izdržljivost mehanizma za zaključavanje

### **HZN/TO 138, Plastične cijevi, spojnice i ventili za prijenos tekućina**

FprCEN/TS 1451-2 en  
Plastic piping systems for soil and waste discharge (low and high temperature) within the building structure – Polypropylene (PP) – Part 2: Guidance for the assessment of conformity  
Plastični cijevni sustavi za odvodnju onečišćenih i otpadnih voda (niske i visoke temperature) unutar građevinskih konstrukcija – Polipropilen (PP) – 2. dio: Upute za ocjenjivanje sukladnosti

FprCEN/TS 1519-2 en  
Plastic piping systems for soil and waste discharge (low and high temperature) within the building structure – Polyethylene (PE) – Part 2: Guidance for the assessment of conformity  
Plastični cijevni sustavi za odvodnju onečišćenih i otpadnih voda (niske i visoke temperature) unutar građevinskih konstrukcija – Polietilen (PE) – 2. dio: Upute za ocjenjivanje sukladnosti

prEN 1796 rev en  
Plastics piping systems for water supply with or without pressure – Glass-reinforced thermosetting plastics (GRP) based on unsaturated polyester resin (UP)  
Plastični cijevni sustavi za tlačnu i netlačnu opskrbu vodom – Staklom ojačani duromeri (GRP) na osnovi nezasićenih poliesterskih smola (UP)

prEN 14364 rev en  
Plastics piping systems for drainage and sewerage with or without pressure – Glass-reinforced thermosetting plastics (GRP) based on unsaturated polyester resin (UP) – Specifications for pipes, fittings and joints  
Plastični cijevni sustavi za tlačnu i netlačnu odvodnju i kanalizaciju – Staklom ojačani duromeri (GRP) na osnovi nezasićenih poliesterskih smola (UP) – Specifikacije za cijevi, spojnice i brtve

FprCEN/TS 14632 en  
Plastics piping systems for drainage, sewerage and water supply, pressure and non-pressure – Glass-reinforced thermosetting plastics (GRP) based on unsaturated polyester resin (UP) – Guidance for the assessment of conformity  
Plastični cijevni sustavi za tlačnu i netlačnu odvodnju, kanalizaciju i opskrbu vodom – Staklom ojačani duromeri (GRP) na osnovi nezasićenih poliestera (UP) – Upute za ocjenjivanje sukladnosti

FprCEN ISO/TS 22391-7 en  
Plastics piping systems for hot and cold water installations – Polyethylene of raised temperature resistance (PE-RT) – Part 7: Guidance for the assessment of conformity (ISO/PRF TS 22391-7:2011)  
Plastični cijevni sustavi za instalacije s toplom i hladnom vodom – Polietileni postojani pri povišenoj temperaturi (PE-RT) – 7. dio: Upute za ocjenjivanje sukladnosti (ISO/PRF TS 22391-7:2011)

## **HZN/TO 147/PO 6, *Kvaliteta vode; Uzorkovanje (opće metode)***

- ISO 5667-5:2006 en  
Water quality – Sampling – Part 5: Guidance on sampling of drinking water from treatment works and piped distribution systems  
Kvaliteta vode – Uzorkovanje – 5. dio: Upute za uzorkovanje vode za piće iz uređaja za pročišćavanje i cjevovodnih opskrbnih sustava
- ISO 5667-6:2005 en  
Water quality – Sampling – Part 6: Guidance on sampling of rivers and streams  
Kvaliteta vode – Uzorkovanje – 6. dio: Upute za uzorkovanje vode rijeka i potoka
- ISO 5667-11:2009 en  
Water quality – Sampling – Part 11: Guidance on sampling of groundwaters  
Kvaliteta vode – Uzorkovanje – 11. dio: Upute za uzorkovanje podzemnih voda
- ISO 5667-17:2008 en  
Water quality – Sampling – Part 17: Guidance on sampling of bulk suspended solids  
Kvaliteta vode – Uzorkovanje – 17. dio: Upute za uzorkovanje raspršenih krutina
- ISO 5667-20:2008 en  
Water quality – Sampling – Part 20: Guidance on the use of sampling data for decision making – Compliance with thresholds and classification systems  
Kvaliteta vode – Uzorkovanje – 20. dio: Upute za uporabu podataka uzrokovanja u odlučivanju – Sukladnost s graničnim vrijednostima i klasifikacijskim sustavima
- ISO 5667-21:2010 en  
Water quality – Sampling – Part 21: Guidance on sampling of drinking water distributed by tankers or means other than distribution pipes  
Kvaliteta vode – Uzorkovanje – 21. dio: Upute za uzorkovanje vode za piće distribuirane cisternama ili drugim sredstvima isključujući distribucijske cijevi
- ISO 5667-22:2010 en  
Water quality – Sampling – Part 22: Guidance on the design and installation of groundwater monitoring points  
Kvaliteta vode – Uzorkovanje – 22. dio: Upute za osmišljavanje i postavljanje nadzornih točaka za podzemnu vodu

## **HZN/TO 159, *Ergonomija***

- FprEN ISO 9241-303 en  
Ergonomics of human-system interaction – Part 303: Requirements for electronic visual displays (ISO/FDIS 9241-303:2011)  
Ergonomija međudjelovanja čovjek-sustav – 303 dio: Zahtjevi za zaslone (ISO/FDIS 9241-303:2011)

## **HZN/TO 163/PO 2, *Toplinska izolacija; Toplinski proračun***

- prEN ISO 13788 rev en  
Hygrothermal performance of building components and building elements – Internal surface temperature to avoid critical surface humidity and interstitial condensation – Calculation methods (ISO/DIS 13788:2011)  
Značajke građevnih dijelova i građevnih dijelova zgrada s obzirom na toplinu i vlagu – Temperatura unutarnje površine kojom se izbjegava kritična vlažnost površine i unutarnja kondenzacija – Metode proračuna (ISO/DIS 13788:2011)

## **HZN/TO 167, *Metalne konstrukcije***

- EN 1090-1:2009/FprA1 en  
Execution of steel structures and aluminium structures – Part 1: Requirements for conformity assessment of structural components

Izvedba čeličnih i aluminijskih konstrukcija – 1. dio: Zahtjevi za ocjenjivanje sukladnosti konstrukcijskih komponenata

## **HZN/TO 176, *Upravljanje kvalitetom i osiguravanje kvalitete***

- FprEN ISO 15378 en  
Primary packaging materials for medicinal products – Particular requirements for the application of ISO 9001:2008, with reference to Good Manufacturing Practice (GMP) (ISO/FDIS 15378:2011)

## **HZN/TO 178, *Dizala, pokretne stube i pokretne trake za osobe***

- prEN 81-77 en  
Safety rules for the construction and installations of lifts – Particular applications for passenger and good passengers lifts – Part 77: Lifts subject to seismic conditions

## **HZN/TO 179, *Zidane konstrukcije***

- EN 1520:2011 en  
Prefabricated reinforced components of lightweight aggregate concrete with open structure with structural or non-structural reinforcement  
Predgotovljeni armirani elementi od betona otvorene strukture s laganim agregatom s konstrukcijskim ili nekonstrukcijskim ojačanjem

## **HZN/TO 181, *Sigurnost igračaka i proizvodi za djecu***

- prEN 71-4 rev en  
Safety of toys – Part 4: Experimental sets for chemistry and related activities

## **HZN/TO 196, *Prirodni kamen***

- EN 12059:2008/FprA1 en  
Natural stone products – Dimensional stone work – Requirements  
Proizvodi od prirodnog kamena – Dimenzionirani obrađeni kamen – Zahtjevi
- prEN 14066 rev en  
Natural stone test methods – Determination of resistance to ageing by thermal shock  
Metode ispitivanja prirodnog kamena – Određivanje otpornosti na starenje od toplinskih promjena
- prEN 16301 en  
Natural stone test methods – Determination of sensitivity to accidental staining  
Metode ispitivanja prirodnog kamena – Određivanje osjetljivosti na slučajno bojanje
- prEN 16306 en  
Natural stone test methods – Determination of resistance of marble to thermal and moisture cycles  
Metode ispitivanja prirodnog kamena – Određivanje otpornosti mramora na cikluse topline i vlage

## **HZN/TO 219, *Podne obloge***

- FprEN 994 en  
Textile floor coverings – Determination of the side length, squareness and straightness of tiles
- FprEN ISO 10580 en  
Resilient, textile and laminate floor coverings – Test method for volatile organic compound (VOC) emissions (ISO 10580:2010)
- FprEN ISO 10582 en  
Resilient floor coverings – Heterogeneous poly(vinyl chloride) floor coverings – Specification (ISO 10582:2010)
- FprEN ISO 10595 en  
Resilient floor coverings – Semi-flexible/vinylcomposition (VCT) poly(vinyl chloride) floor tiles – Specification (ISO 10595:2010)

- FprEN ISO 10874 en  
Resilient, textile and laminate floor coverings – Classification (ISO 10874:2009)
- prEN 14041 en  
Resilient, textile and laminate floor coverings – Essential characteristics
- FprEN ISO 23996 en  
Resilient floor coverings – Determination of density (ISO 23996:2007)
- FprEN ISO 23997 en  
Resilient floor coverings – Determination of mass per unit area (ISO 23997:2007)
- FprEN ISO 23999 en  
Resilient floor coverings – Determination of dimensional stability and curling after exposure to heat (ISO 23999:2008)
- FprEN ISO 24011 en  
Resilient floor coverings – Specification for plain and decorative linoleum (ISO 24011:2009)
- FprEN ISO 24340 en  
Resilient floor coverings – Determination of thickness of layers (ISO 24340:2006)
- FprEN ISO 24341 en  
Resilient and textile floor coverings – Determination of length, width and straightness of sheet (ISO 24341:2006)
- FprEN ISO 24342 en  
Resilient and textile floor coverings – Determination of side length, edge, straightness and squareness of tiles (ISO 24342:2007)
- FprEN ISO 24343-1 en  
Resilient and laminate floor coverings – Determination of indentation and residual indentation – Part 1: Residual indentation (ISO 24343-1:2007)
- FprEN ISO 24344 en  
Resilient floor coverings – Determination of flexibility and deflection (ISO 24344:2008)
- FprEN ISO 24345 en  
Resilient floor coverings – Determination of peel resistance (ISO 24345:2006)
- FprEN ISO 24346 en  
Resilient floor coverings – Determination of overall thickness (ISO 24346:2006)
- FprEN ISO 26985 en  
Resilient floor coverings – Identification of linoleum and determination of cement content and ash residue (ISO 26985:2008)
- FprEN ISO 26986 en  
Resilient floor coverings – Expanded (cushioned) poly(vinyl chloride) floor covering – Specification (ISO 26986:2010)
- FprEN ISO 26987 en  
Resilient floor coverings – Determination of staining and resistance to chemicals (ISO 26987:2008)

## **HZN/TO 221, Geosintetici**

- prEN 13249 rev en  
Geotextiles and geotextile-related products – Characteristics required for use in the construction of roads and other trafficked areas (excluding railways and asphalt inclusion)  
Geotekstili i proizvodi srodni s geotekstilom – Zahtijevana svojstva za uporabu pri izgradnji cesta i ostalih prometnih površina (izuzimaju se željeznice i asfaltni sojevi)
- prEN 13250 rev en  
Geotextiles and geotextile-related products – Characteristics required for use in the construction of railways  
Geotekstili i proizvodi srodni s geotekstilom – Zahtijevana svojstva za uporabu pri izgradnji željeznica

- prEN 13251 rev en  
Geotextiles and geotextile-related products – Characteristics required for use in earthworks, foundations and retaining structures  
Geotekstili i proizvodi srodni s geotekstilom – Zahtijevana svojstva za uporabu pri izvođenju zemljanih radova, temelja i potpornih konstrukcija
- prEN 13252 rev en  
Geotextiles and geotextile-related products – Characteristics required for use in drainage systems  
Geotekstili i proizvodi srodni s geotekstilom – Zahtijevana svojstva za uporabu u drenažnim sustavima
- prEN 13253 rev en  
Geotextiles and geotextile-related products – Characteristics required for use in erosion control works (coastal protection, bank revetments)  
Geotekstili i proizvodi srodni s geotekstilom – Zahtijevana svojstva za uporabu u zaštiti od erozije (zaštita obale, obaloutvrde)
- prEN 13254 rev en  
Geotextiles and geotextile-related products – Characteristics required for the use in the construction of reservoirs and dams  
Geotekstili i proizvodi srodni s geotekstilom – Zahtijevana svojstva za uporabu pri izgradnji akumulacijskih jezera i brana
- prEN 13255 rev en  
Geotextiles and geotextile-related products – Characteristics required for use in the construction of canals  
Geotekstili i proizvodi srodni s geotekstilom – Zahtijevana svojstva za uporabu pri izgradnji kanala
- prEN 13256 rev en  
Geotextiles and geotextile-related products – Characteristics required for use in the construction of tunnels and underground structures  
Geotekstili i proizvodi srodni s geotekstilom – Zahtijevana svojstva za uporabu pri izgradnji tunela i podzemnih građevina
- prEN 13257 rev en  
Geotextiles and geotextile-related products – Characteristics required for use in solid waste disposals  
Geotekstili i proizvodi srodni s geotekstilom – Zahtijevana svojstva za uporabu u odlagalištima krutog otpada
- prEN 13265 rev en  
Geotextiles and geotextile-related products – Characteristics required for use in liquid waste containment projects  
Geotekstili i proizvodi srodni s geotekstilom – Zahtijevana svojstva za uporabu u odlagalištima tekućeg otpada

## **HZN/TO 502, Plinski uređaji**

- prEN 16304 en  
Vent Valves

## **HZN/TO 503, Metalni materijali**

- FprEN 10218-1 en  
Steel wire and wire products – General – Part 1: Test methods  
Čelična žica i žičani proizvodi – Općenito – 1. dio: Metode ispitivanja
- FprEN 10218-2 en  
Steel wire and wire products – General – Part 2: Wire dimensions and tolerances  
Čelična žica i žičani proizvodi – Općenito – 2. dio: Mjere i dopuštena odstupanja za žicu

- prEN 10223-3 en  
Steel wire and wire products for fencing and netting – Part 3: Hexagonal steel wire mesh products for engineering purposes  
Čelična žica i proizvodi od žice za ograđivanje i omrežavanje – 3. dio: Mreže od čelične žice sa šesterokutnim otvorima za inženjersku namjenu
- prEN 10223-8 en  
Steel wire and wire products for fencing and netting – Part 8: Welded mesh gabion products  
Čelična žica i proizvodi od žice za ograđivanje i omrežavanje – 8. dio: Zavarene mreže za potporni zid (gabion)
- prEN 15616 en  
Copper and copper alloys – Determination of cadmium content – Flame atomic absorption spectrometric method (FAAS)  
Bakar i legure bakra – Određivanje udjela kadmija – Metoda plamene atomske spektrometrijske apsorpcije (FAAS)
- prEN 16117-2 en  
Copper and copper alloys – Determination of copper content – Part 2: Electrolytic determination of copper in materials with copper content higher than 99,80 %  
Bakar i legure bakra – Određivanje udjela bakra – 2. dio: Elektrolitičko određivanje bakra u materijalima s udjelom bakra višim od 99,80 %

### **HZN/TO 504, Korozija i zaštita metala i legura**

- EN ISO 7539-6:2011 en  
Corrosion of metals and alloys – Stress corrosion testing – Part 6: Preparation and use of precracked specimens for tests under constant load or constant displacement (ISO 7539-6:2011)  
Korozija metala i legura – Ispitivanje korozije uz naprezanje – 6. dio: Priprema i primjena uzoraka s urezom za ispitivanja pod stalnim opterećenjem ili stalnim pomakom (ISO/FDIS 7539-6:2011)
- prEN 16299 en  
Cathodic protection of external surfaces of above ground storage tank bases in contact with soil or foundations  
Katodna zaštita vanjskih površina nadzemnih spremnika čiji su oslonci u kontaktu sa zemljom ili temeljima

### **HZN/TO 506, Materijali, oprema i konstrukcije za naftnu industriju, prirodni plin i geotermalnu vodu**

- FprEN ISO 13678 en  
Petroleum and natural gas industries – Evaluation and testing of thread compounds for use with casing, tubing, line pipe and drill stem elements (ISO 13678:2010)

### **HZN/TO 508, Ambalaža i pakiranje**

- prEN 16283 en  
Packaging – Flexible aluminium tubes – Test method to measure the force to pierce the membrane
- prEN 16284 en  
Packaging – Flexible laminate and plastic tubes – Test method to determine the adhesive strength of the membrane
- prEN 16285 en  
Packaging – Flexible aluminium tubes – Test method to measure the deformation of the aluminium tube body (Guillotine test)
- prEN 16287 en  
Glass packaging – Screw finishes for pressure capsules – MCA 1 finish
- prEN 16288 en  
Glass packaging – Screw finishes for pressure capsules – MCA 3 finish

- prEN 16289 en  
Glass packaging – Screw finishes for pressure capsules – MCA 7,5 RF finish
- prEN 16290 en  
Glass packaging – Screw finishes for pressure capsules – MCA 7,5 R finish
- prEN 16291-1 en  
Glass packaging – Screw finishes for pressure capsules – Part 1: Returnable glass MCA 2 finish
- prEN 16291-2 en  
Glass packaging – Screw finishes for pressure capsules – Part 2: One way glass MCA 2 finish
- prEN 16292 en  
Glass packaging – Screw finishes – Depressed threads
- prEN 16293 en  
Packaging – Glass Packaging – Deep BVS finishes for still wines

### **HZN/TO 509, Cestovna oprema**

- FprEN 1423 en  
Road marking materials – Drop on materials – Glass beads, antiskid aggregates and mixtures of the two

### **HZN/TO 513, Mjerne jedinice i mjerila**

- prEN ISO 4064-1 en  
Water meters intended for the metering of cold potable water and hot water – Part 1: Metrological and technical requirements (ISO/DIS 4064-1:2011)
- prEN ISO 4064-2 en  
Water meters intended for the metering of cold potable water and hot water – Part 2: Test methods (ISO/DIS 4064-2:2011)

### **HZN/TO 519, Adhezivi**

- prEN 302-1 rev en  
Adhesives for load-bearing timber structures – Test methods – Part 1: Determination of longitudinal tensile shear strength
- prEN 302-2 rev en  
Adhesives for load-bearing timber structures – Test methods – Part 2: Determination of resistance to delamination
- prEN 302-3 rev en  
Adhesives for load-bearing timber structures – Test methods – Part 3: Determination of the effect of acid damage to wood fibres by temperature and humidity cycling on the transverse tensile strength
- prEN 302-4 rev en  
Adhesives for load-bearing timber structures – Test methods – Part 4: Determination of the effects of wood shrinkage on the shear strength
- prEN 302-5 en  
Adhesives for load-bearing structures – Test methods – Part 5: Determination of maximum assembly time under referenced conditions
- prEN 302-6 rev en  
Adhesives for load-bearing timber structures – Test methods – Part 6: Determination of the minimum pressing time under referenced conditions
- prEN 302-7 rev en  
Adhesives for load-bearing timber structures – Test methods – Part 7: Determination of the working life under referenced conditions

### **HZN/TO 522, Karakterizacija i zbrinjavanje otpada**

- FprCEN/TR 16176 en  
Characterization of waste – Screening methods for elemental composition by X-ray fluorescence spectrometry for on-site verification

## **HZN/TO 524, Cestovni prijevoz i prometna telematika**

- CEN ISO/TS 13143-2:2011 en  
Electronic fee collection – Evaluation of on-board and roadside equipment for conformity to ISO/TS 12813 – Part 2: Abstract test suite (ISO/TS 13143-2:2011)
- CEN/TS 15213-6:2011 en  
Road transport and traffic telematics – After-theft services for the recovery of stolen vehicles – Part 6: Test procedures
- CEN/TS 15531-4:2011 en  
Public transport – Service interface for real-time information relating to public transport operations – Part 4: Functional service interfaces: Facility Monitoring

## **HZN/TO 526, Bitumenska veziva**

- FprEN 1428 en  
Bitumen and bituminous binders – Determination of water content in bituminous emulsions – Azeotropic distillation method  
Bitumen i bitumenska veziva – Određivanje sadržaja vode u bitumenskim emulzijama – Metoda azeotropne destilacije
- CEN/TR 15352:2006 en  
Bitumen and bituminous binders – Development of performance-related specifications – Status report 2005  
Bitumen i bitumenska veziva – Razvoj specifikacija vezanih uz ponašanje – Izvještaj 2005

## **HZN/TO 528, Oprema za željeznice**

- EN 14535-1:2005+A1:2011 en  
Railway applications – Brake discs for railway rolling stock – Part 1: Brake discs pressed or shrunk onto the axle or drive shaft, dimensions and quality requirements  
Oprema za željeznice – Kočni diskovi za vozni park – 1. dio: Kočni diskovi, naprešani ili toplo navučeni na osovine ili vratila, dimenzije i zahtjevi za kvalitetu
- EN 14535-2:2011 en  
Railway applications – Brake discs for railway rolling stock – Part 2: Brake discs mounted onto the wheel, dimensions and quality requirements  
Oprema za željeznice – Kočni diskovi za vozni park – 2. dio: Kočni diskovi, postavljeni na kotače, dimenzije i zahtjevi za kvalitetu
- EN 15220-1:2008+A1:2011 en  
Railway applications – Brake indicators – Part 1: Pneumatically operated brake indicators  
Oprema za željeznice – Pokazivači kočnice – 1. dio: Pneumatski upravljani pokazivači kočnice
- EN 15595:2009+A1:2011 en  
Railway applications – Braking – Wheel slide protection  
Oprema za željeznice – Kočenje – Protuklizna zaštita

## **HZN/TO 531, Plastika i guma**

- FprEN ISO 1043-1 en  
Plastics – Symbols and abbreviated terms – Part 1: Basic polymers and their special characteristics (ISO/FDIS 1043-1:2011)  
Plastika – Simboli i skraćeni nazivi – 1. dio: Osnovni polimeri i njihova karakteristična svojstva (ISO/FDIS 1043-1:2011)
- FprEN ISO 1043-2 en  
Plastics – Symbols and abbreviated terms – Part 2: Fillers and reinforcing materials (ISO/FDIS 1043-2:2011)  
Plastika – Simboli i skraćeni nazivi – 2. dio: Punila i materijali za ojačavanje (ISO/FDIS 1043-2:2011)

- prEN ISO 3994 rev en  
Plastics hoses – Helical-thermoplastic-reinforced thermoplastics hoses for suction and discharge of aqueous materials – Specification (ISO/DIS 3994:2011)  
Plastična crijeva – Plastomerna crijeva ojačana plastomernom spiralom za usisavanje i istovar vodenih supstanci – Specifikacija (ISO/DIS 3994:2011)
- EN ISO 4671:2007/A1:2011 en  
Rubber and plastics hoses and hose assemblies – Methods of measurement of the dimensions of hoses and the lengths of hose assemblies – Amendment 1: Clarification of position at which outside diameter is measured (ISO 4671:2007/Amd 1:2011)  
Gumena i plastična crijeva i crijevni uređaji – Metode mjerenja dimenzija crijeva i dužina crijevnih uređaja – Amandman 1: Objašnjenje pozicije na kojoj se mjeri vanjski promjer (ISO 4671:2007/Amd 1:2011)
- EN ISO 6224:2011 en  
Thermoplastics hoses, textile-reinforced, for general-purpose water applications – Specification (ISO 6224:2011)  
Plastomerna crijeva opće namjene za vodu ojačana tekstilom – Specifikacija (ISO 6224:2011)
- prEN ISO 7792-1 en  
Plastics – Thermoplastic polyester (TP) moulding and extrusion materials – Part 1: Designation system and basis for specifications (ISO/DIS 7792-1:2011)  
Plastika – Plastomerni poliesterski materijali (TP) za kalupljenje i ekstrudiranje – 1. dio: Sustav označivanja i osnove za specifikacije (ISO/DIS 7792-1:2011)
- prEN ISO 7792-2 en  
Plastics – Thermoplastic polyester (TP) moulding and extrusion materials – Part 2: Preparation of test specimens and determination of properties (ISO/DIS 7792-2:2011)  
Plastika – Plastomerni poliesterski materijali (TP) za kalupljenje i ekstrudiranje – 2. dio: Priprema ispitaka i određivanje svojstava (ISO/DIS 7792-2:2011)
- prEN ISO 8029 en  
Plastics hose – General-purpose collapsible water hose, textile-reinforced – Specification (ISO/DIS 8029:2011)  
Plastično crijevo – Složivo crijevo opće namjene za vodu ojačano tekstilom – Specifikacija (ISO/DIS 8029:2011)
- FprCEN/TS 16295 en  
Plastics – Declaration of the bio-based carbon content  
Plastika – Izjava o sadržaju ugljika biološkog podrijetla
- prEN 16296 en  
Imperfections in thermoplastics welded joints – Quality levels  
Nesavršenosti u termoplastičnim zavarenim spojevima – Razine kvalitete
- FprEN ISO 22007-1 en  
Plastics – Determination of thermal conductivity and thermal diffusivity – Part 1: General principles (ISO 22007-1:2009)  
Plastika – Određivanje toplinske vodljivosti i toplinske difuzivnosti – 1. dio: Opća načela (ISO 22007-1:2009)
- FprEN ISO 22007-2 en  
Plastics – Determination of thermal conductivity and thermal diffusivity – Part 2: Transient plane heat source (hot disc) method (ISO 22007-2:2008)  
Plastika – Određivanje toplinske vodljivosti i toplinske difuzivnosti – 2. dio: Metoda kratkotrajnoga površinskog izvora topline (vruća ploča) (ISO 22007-2:2008)

FprEN ISO 22007-3 en  
Plastics – Determination of thermal conductivity and thermal diffusivity – Part 3: Temperature wave analysis method (ISO 22007-3:2008)  
Plastika – Određivanje toplinske vodljivosti i toplinske difuzivnosti – 3. dio: Metoda analize temperaturnoga vala (ISO 22007-3:2008)

FprEN ISO 22007-4 en  
Plastics – Determination of thermal conductivity and thermal diffusivity – Part 4: Laser flash method (ISO 22007-4:2008)  
Plastika – Određivanje toplinske vodljivosti i toplinske difuzivnosti – 4. dio: Metoda laserskoga bljeska (ISO 22007-4:2008)

FprEN ISO 25762 en  
Plastics – Guidance on the assessment of the fire characteristics and fire performance of fibre-reinforced polymer composites (ISO 25762:2009)  
Plastika – Upute o određivanju karakteristika gorenja i ponašanja vlaknima ojačanih polimernih kompozita pri gorenju (ISO 25762:2009)

EN 26801:1993/A1:2011 en  
Rubber or plastics hoses – Determination of volumetric expansion – Amendment 1: Deletion of alcohol as pressurizing fluid (ISO 6801:1983/Amd 1:2011)  
Gumena ili plastična crijeva – Određivanje volumnog širenja – Amandman 1: Ukidanje alkohola kao tlačnog fluida (ISO 6801:1983/Amd 1:2011)

### **HZN/TO 533/PO 1, Kolničke konstrukcije; Cestograđevni materijali**

prEN 13286-54 en  
Unbound and hydraulically bound mixtures – Part 54: Test method for the determination of frost susceptibility – Resistance to freezing and thawing of hydraulically bound mixtures  
Nevezane i hidrauličnim vezivom vezane mješavine – 54. dio: Metoda ispitivanja za određivanje osjetljivosti na smrzavanje – Otpornost na smrzavanje i odmrzavanje hidrauličnim vezivom vezanih mješavina

prEN 14227-1 en  
Hydraulically bound mixtures – Specifications – Part 1: Cement bound granular mixtures  
Mješavine vezane hidrauličnim vezivom – Specifikacije – 1. dio: Zrnate mješavine vezane cementom

prEN 14227-2 en  
Hydraulically bound mixtures – Specifications – Part 2: Slag bound mixtures  
Mješavine vezane hidrauličnim vezivom – Specifikacije – 2. dio: Mješavine vezane troskom

prEN 14227-3 en  
Hydraulically bound mixtures – Specifications – Part 3: Fly ash bound mixtures  
Mješavine vezane hidrauličnim vezivom – Specifikacije – 3. dio: Mješavine vezane letećim pepelom

prEN 14227-4 en  
Hydraulically bound mixtures – Specifications – Part 4: Fly ash for hydraulically bound mixtures  
Mješavine vezane hidrauličnim vezivom – Specifikacije – 4. dio: Leteći pepeo za mješavine vezane hidrauličnim vezivom

prEN 14227-5 en  
Hydraulically bound mixtures – Specifications – Part 5: Hydraulic road binder bound mixtures  
Mješavine vezane hidrauličnim vezivom – Specifikacije – 5. dio: Mješavine vezane hidrauličnim vezivom za ceste

### **HZN/TO 534, Spremnici za teret**

EN 13081:2008/FprA1 en  
Tanks for transport of dangerous goods – Service equipment for tanks – Vapour collection adaptor and coupler

Spremnici za prijevoz opasnih tvari – Pomoćna oprema za spremnike – Spojke sabirača para

EN 13082:2008/FprA1 en  
Tanks for transport of dangerous goods – Service equipment for tanks – Vapour transfer valve  
Spremnici za prijevoz opasnih tvari – Pomoćna oprema za spremnike – Ventil za prijenos pare

### **HZN/TO 535, Agregati**

FprEN 933-8 en  
Tests for geometrical properties of aggregates – Part 8: Assessment of fines – Sand equivalent test  
Ispitivanja geometrijskih svojstava agregata – 8. dio: Procjena sitnih čestica – Određivanje ekvivalenta pijeska

### **HZN/TO 536, Vrata, prozori i staklo u graditeljstvu**

FprEN 1096-1 en  
Glass in building – Coated glass – Part 1: Definitions and classification  
Staklo u graditeljstvu – Staklo s premazom – 1. dio: Definicija i razredba

FprEN 1096-2 en  
Glass in building – Coated glass – Part 2: Requirements and test methods for class A, B and S coatings  
Staklo u graditeljstvu – Staklo s premazom – 2. dio: Zahtjevi i metode ispitivanja za razrede premaza A, B i S

FprEN 1096-3 en  
Glass in building – Coated glass – Part 3: Requirements and test methods for class C and D coatings  
Staklo u graditeljstvu – Staklo s premazom – 3. dio: Zahtjevi i metode ispitivanja za razrede premaza C i D

prEN 1096-5 en  
Glass in building – Coated glass – Part 5: Test method and classification for the self-cleaning performances of coated glass surfaces

prEN 1932 rev en  
External blinds and shutters – Resistance to wind loads – Method of testing and performance criteria

prEN 13330 rev en  
Shutters – Hard body impact and resistance against intrusion – Test methods

FprEN 13541 en  
Glass in building – Security glazing – Testing and classification of resistance against explosion pressure  
Staklo u graditeljstvu – Sigurnosno staklo – Ispitivanje i razredba otpornosti na tlak eksplozije

prEN 13561 rev en  
External blinds and awnings – Performance requirements including safety

prEN 13659 rev en  
Shutters and external venetian blinds – Performance requirements including safety

### **HZN/TO 541, Sustavi grijanja, ventilacije i klimatizacije u građevinama**

prEN 12098-1 en  
Controls for heating systems – Part 1: Control equipment for hot water heating systems  
Regulacija sustava grijanja – 1. dio: Uređaji za kontrolu sustava toplodvodnog grijanja

FprEN 15232 en  
Energy performance of buildings – Impact of Building Automation, Controls and Building Management  
Energijske značajke zgrada – Utjecaj automatizacije zgrada, nadzor i upravljanje zgradama

## HZN/TO 544, *Strojni elementi*

- EN ISO 1580:2011 en  
Slotted pan head screws – Product grade A (ISO 1580:2011)  
Vijci valjkaste glave s urezom – Proizvod kvalitete izrade A (ISO 1580:2011)
- EN ISO 2009:2011 en  
Slotted countersunk flat head screws – Product grade A (ISO 2009:2011)  
Vijci s upuštenom ravnom glavom s urezom (uobičajeni oblik glave) – Proizvod razreda A (ISO 2009:2011)
- EN ISO 2010:2011 en  
Slotted raised countersunk head screws – Product grade A (ISO 2010:2011)  
Vijci s upuštenom glavom oblika leće s urezom (uobičajeni oblik glave) – Proizvod razreda A (ISO 2010:2011)
- EN ISO 7045:2011 en  
Pan head screws with type H or type Z cross recess – Product grade A (ISO 7045:2011)  
Vijci s valjkastom zaobljenom glavom s križnim upustom tipa H ili Z – Proizvod razreda A (ISO 7045:2011)
- EN ISO 7046-1:2011 en  
Countersunk flat head screws (common head style) with type H or type Z cross recess – Product grade A – Part 1: Steel of property class 4.8 (ISO 7046-1:2011)  
Vijci s upuštenom ravnom glavom (uobičajeni oblik glave) s križnim upustom tipa H ili Z – Proizvod razreda A – 1. dio: Čelik razreda čvrstoće 4.8 (ISO 7046-1:2011)
- EN ISO 7046-2:2011 en  
Countersunk flat head screws (common head style) with type H or type Z cross recess – Product grade A – Part 2: Steel screws of property class 8.8, stainless steel screws and non-ferrous metal screws (ISO 7046-2:2011)  
Vijci s upuštenom ravnom glavom s križnim upustom (uobičajeni oblik glave) – Razred A – 2. dio: Čelični vijci razreda čvrstoće 8.8, vijci od nehrđajućeg čelika i vijci od neželjeznih metala (ISO 7046-2:2011)
- EN ISO 7047:2011 en  
Raised countersunk head screws (common head style) with type H or type Z cross recess – Product grade A (ISO 7047:2011)  
Vijci s upuštenom glavom oblika leće (uobičajeni oblik glave) s križnim upustom tipa H ili Z – Proizvod razreda A (ISO 7047:2011)

## HZN/TO 546, *Očuvanje kulturne baštine*

- prEN 16302 en  
Conservation of cultural property – Test methods – Measurement of water absorption under low pressure

## HZN/TO 549, *Svjetlo i rasvjeta*

- prEN 1838 en  
Lighting applications – Emergency lighting  
Primjena rasvjete – Nužna rasvjeta
- prEN 16276 en  
Evacuation Lighting in Road Tunnels  
Evakuacijska rasvjeta u cestovnim tunelima

## HZN/TO 551, *Gradnja*

- ISO 9836:2011 en  
Performance standards in building – Definition and calculation of area and space indicators  
Standardi za svojstva zgrada – Definiiranje i proračun površina i prostora
- ISO 11527:2010 en  
Building construction – Sealants – Test method for the determination of stringiness  
Gradnja zgrada – Brtvila – Metoda ispitivanja za određivanje ljepljivosti

- ISO 13824:2009 en  
Bases for design of structures – General principles on risk assessment of systems involving structures  
Osnove projektiranja konstrukcija – Opća načela ocjenjivanja rizika konstrukcija koje uključuju sustave
- ISO 15686-1:2011 en  
Buildings and constructed assets – Service life planning – Part 1: General principles and framework  
Zgrade i druge građevine – Planiranje vijeka uporabe – 1. dio: Opća načela i okvir
- FprEN 15804 en  
Sustainability of construction works – Environmental product declarations – Core rules for the product category of construction products  
Održivost građevina – Izjava zaštite okoliša – Osnovna pravila za kategorizaciju građevnih proizvoda
- FprEN 15942 en  
Sustainability of construction works – Environmental product declarations – Communication format business-to-business  
Održivost građevina – Izjava zaštite okoliša – Oblik komunikacije među poduzećima
- ISO 21931-1:2010 en  
Sustainability in building construction – Framework for methods of assessment of the environmental performance of construction works – Part 1: Buildings  
Održivost pri gradnji zgrada – Metodološki okvir za ocjenjivanje svojstva građevina s obzirom na okoliš – 1. dio: Zgrade

## HZN/TO 553, *Predgotovljeni proizvodi*

- EN 15037-2:2009+A1:2011 en  
Precast concrete products – Beam-and-block floor systems – Part 2: Concrete blocks  
Predgotovljeni betonski proizvodi – Stropni sustavi sastavljeni od nosača i blokova (ispune) – 2. dio: Betonski blokovi
- EN 15037-3:2009+A1:2011 en  
Precast concrete products – Beam-and-block floor systems – Part 3: Clay blocks  
Predgotovljeni betonski proizvodi – Stropni sustavi sastavljeni od nosača i blokova (ispune) – 3. dio: Glineni blokovi

## HZN/TO 555, *Medicinski proizvodi*

- prEN ISO 14644-10 en  
Cleanrooms and associated controlled environments – Part 10: Classification of surface cleanliness by chemical concentration (ISO/DIS 14644-10:2011)  
Čisti prostori i odgovarajući kontrolirani okoliš – 10. dio: Razredba površinske čistoće prema kemijskoj koncentraciji (ISO/DIS 14644-10:2011)

## HZN/TO 556, *Osobna zaštitna oprema*

- FprEN 397 en  
Industrial safety helmets  
Industrijske zaštitne kacige
- FprEN 812 en  
Industrial bump caps  
Industrijske zaštitne kape
- FprEN 966 en  
Helmets for airborne sports  
Kacige za sportove u zraku
- FprEN 1078 en  
Helmets for pedal cyclists and for users of skateboards and roller skates  
Kacige za bicikliste i korisnike koturaljki i daski na koturaljkama
- FprEN 1384 en  
Helmets for equestrian activities  
Kacige za jahačke akrobatske aktivnosti

- FprEN 1385 en  
Helmets for canoeing and white water sports  
Kacige za vožnju kanuima i sportove na divljim vodama
- FprEN 12492 en  
Mountaineering equipment – Helmets for mountaineers – Safety requirements and test methods  
Planinarska oprema – Kacige za planinare – Zahtjevi sigurnosti i metode ispitivanja
- FprEN 13087-2 en  
Protective helmets – Test methods – Part 2: Shock absorption  
Zaštitne kacige – Metode ispitivanja – 2. dio: Prigušivanje udara
- FprEN 13087-4 en  
Protective helmets – Test methods – Part 4: Retention system effectiveness  
Zaštitne kacige – Metode ispitivanja – 4. dio: Djelotvornost sustava pričvršćivanja na glavu
- FprEN 13087-5 en  
Protective helmets – Test methods – Part 5: Retention system strength  
Zaštitne kacige – Metode ispitivanja – 5. dio: Čvrstoća sustava pričvršćivanja na glavu
- FprEN 13087-6 en  
Protective helmets – Test methods – Part 6: Field of vision  
Zaštitne kacige – Metode ispitivanja – 6. dio: Vidno polje
- FprEN 13087-10 en  
Protective helmets – Test methods – Part 10: Resistance to radiant heat  
Zaštitne kacige – Metode ispitivanja – 10. dio: Otpornost na toplinsko zračenje
- FprEN 13484 en  
Helmets for users of luges  
Kacige za korisnike saonica
- FprEN 13781 en  
Protective helmets for drivers and passengers of snowmobiles and bobsleighs  
Zaštitne kacige za vozače i putnike motornih saonica i bobova
- FprEN 14052 en  
High performance industrial helmets  
Visokozahajevne industrijske kacige

### **HZN/TO 557, Zaštitna odjeća**

- prEN ISO 12127-1 en  
Clothing for protection against heat and flame – Determination of contact heat transmission through protective clothing or constituent materials – Part 1: Contact heat produced by heating cylinder (ISO/DIS 12127-1:2011)  
Odjeća za zaštitu od topline i plamena – Određivanje prijenosa kontaktne topline kroz zaštitnu odjeću ili sastavne materijale – 1. dio: Dodirna toplina proizvedena cilindrom koji se zagrijava (ISO/DIS 12127-1:2011)

### **HZN/TO 560, Tekstilni proizvodi**

- prEN ISO 105-B02 en  
Textiles – Tests for colour fastness – Part B02: Colour fastness to artificial light: Xenon arc fading lamp test (ISO/DIS 105-B02:2011)  
Tekstil – Ispitivanje postojanosti obojenja – Dio B02: Postojanost obojenja na umjetno svjetlo: ispitivanje na blijeđenje Xenon lampom (ISO/DIS 105-B02:2011)
- EN ISO 105-B10:2011 en  
Textiles – Tests for colour fastness – Part B10: Artificial weathering – Exposure to filtered xenon-arc radiation (ISO 105-B10:2011)

Tekstil – Ispitivanje postojanosti obojenja – Dio B10: Umjetno starenje – Izlaganje filtriranom zračenju Xenonske lampe (ISO 105-B10:2011)

- EN ISO 139:2005/A1:2011 en  
Textiles – Standard atmospheres for conditioning and testing (ISO 139:2005/Amd 1:2011)  
Tekstil – Standardna atmosfera za kondicioniranje i ispitivanje (ISO 139:2005/Amd 1:2011)
- prEN ISO 1140 en  
Fibre ropes – Polyamide – 3-, 4-, 8- and 12- strand ropes (ISO/DIS 1140:2011)  
Vlaknasta užad – Poliamidno vlakno – 3-, 4-, 8- i 12-struka užad (ISO/DIS 1140:2011)
- prEN ISO 1141 en  
Fibre ropes – Polyester – 3-, 4-, 8- and 12- strand ropes (ISO/DIS 1141:2011)  
Vlaknasta užad – Poliestersko vlakno – 3-, 4-, 8- i 12-struka užad (ISO/DIS 1141:2011)
- prEN ISO 1346 en  
Fibre ropes – Polypropylene split film, monofilament and multifilament (PP2) and polypropylene high tenacity multifilament (PP3) – 3-, 4-, 8- and 12- strand ropes (ISO/DIS 1346:2011)  
Vlaknasta užad – Polipropilensko vrpčasto vlakno, monofilament i multifilament (PP2) i polipropilensko vlakno visoke čvrstoće multifilament (PP3) – 3-, 4-, 8- i 12-struka užad (ISO/DIS 1346:2011)
- EN ISO 10821:2005/A1:2009 en  
Industrial sewing machines – Safety requirements for sewing machines, units and systems (ISO 10821:2005/Amd 1:2009, Corrected version 2009-08-01)  
Industrijski šivaći strojevi – Sigurnosni zahtjevi za šivaće strojeve, jedinice i sustave (ISO 10821:2005/Amd 1:2009, Ispravljena verzija 2009-08-01)

### **HZN/TO 561, Kotlovi, posude pod tlakom, cjevovodi i plinske boce**

- prEN ISO 11114-2 en  
Gas cylinders – Compatibility of cylinder and valve materials with gas contents – Part 2: Non-metallic materials (ISO/DIS 11114-2:2011)  
Plinske boce – Uskladivost materijala boce i ventila sa sadržanim plinom – 2. dio: Nemetalni materijali (ISO/DIS 11114-2:2011)
- EN ISO 11120:1999/FprA1 en  
Gas cylinders – Refillable seamless steel tubes for compressed gas transport, of water capacity between 150 l and 3000 l – Design construction and testing – Amendment 1: Requirements for design of tubes for embrittling gases (EN ISO 11120:1999/DAM 1:2011)
- EN 13480-3:2002/FprA5 en  
Metallic industrial piping – Part 3: Design and calculation  
Metalni industrijski cjevovodi – 3. dio: Projektiranje i proračun
- prEN 13480-4 rev en  
Metallic industrial piping – Part 4: Fabrication and installation  
Metalni industrijski cjevovodi – 4. dio: Izrada i ugradnja
- prEN 13480-5 rev en  
Metallic industrial piping – Part 5: Inspection and testing  
Metalni industrijski cjevovodi – 5. dio: Pregled i ispitivanje
- EN ISO 22435:2007/prA1 en  
Gas cylinders – Cylinder valves with integrated pressure regulators – Specification and type testing (ISO 22435:2007/DAM 1:2011)  
Plinske boce – Ventili za boce s regulatorom tlaka – Specifikacija i ispitivanje tipa (ISO 22435:2007/DAM 1:2011)

## **HZN/TO 563, Sigurnost strojeva**

prEN 1953 rev en  
Atomising and spraying equipment for coating materials – Safety requirements

## **HZN/TO 564, Uljarice, biljna i životinjska ulja i masti**

EN 14103:2011 en  
Fat and oil derivatives – Fatty Acid Methyl Esters (FAME) – Determination of ester and linolenic acid methyl ester contents  
Derivati masti i ulja – Metilni esteri masnih kiselina – Određivanje estera i sadržaja metilnih estera linolenske kiseline

EN 14105:2011 en  
Fat and oil derivatives – Fatty Acid Methyl Esters (FAME) – Determination of free and total glycerol and mono-, di-, triglyceride contents  
Derivati masti i ulja – Metilni esteri masnih kiselina – Određivanje sadržaja slobodnog i ukupnog glicerola sadržaja mono-, di- i triglicerida

## **HZN/TO 569, Hrana za životinje**

EN 16006:2011 en  
Animal feeding stuffs – Determination of the Sum of Fumonisin B1 & B2 in compound animal feed with immunoaffinity clean-up and RP-HPLC with fluorescence detection after pre- or post-column derivatisation  
Hrana za životinje – Određivanje sume fumonizina B1 i B2 u smjesama za životinje pročišćavanjem imunoafinitetnim kolonama te RP-HPLC sa fluorescentnom detekcijom nakon pred ili poslijekolonske derivatizacije

EN 16007:2011 en  
Animal feeding stuffs – Determination of Ochratoxin A in animal feed by immunoaffinity column clean-up and High Performance Liquid Chromatography with fluorescence detection  
Hrana za životinje – Određivanje okratoksina A u hrani za životinje pročišćavanjem imunoafinitetnim kolonama i tekućinskom kromatografijom visokog učinka sa fluorescentnom detekcijom

prEN 16277 en  
Animal feeding stuffs – Determination of mercury by cold-vapour atomic absorption spectrometry (CVAAS) after microwave pressure digestion (extraction with 65 % nitric acid and 30 % hydrogen peroxide)

prEN 16278 en  
Animal feeding stuffs – Determination of inorganic arsenic

prEN 16279 en  
Animal Feeding stuffs – Determination of fluoride content after hydrochloric acid treatment by ion-sensitive electrode method (ISE)

## **HZN/TO E9, Električna oprema za željeznicu**

FprEN 60349-4:2011 en  
Electric traction – Rotating electrical machines for rail and road vehicles – Part 4: Permanent magnet synchronous electrical machines connected to an electronic converter (IEC 60349-4:201X)

## **HZN/TO E13, Oprema za mjerenje električne energije te upravljanje tarifom i potrošnjom**

FprEN 62059-32-1:2011 en  
Electricity metering equipment – Dependability – Part 32-1: Durability – Testing of the stability of metrological characteristics by applying elevated temperature (IEC 62059-32-1:201X)

## **HZN/TO E14, Energetski transformatori**

FprEN 60076-16:2011 en  
Power transformers – Part 16: Transformers for wind turbines application (IEC 60076-16:2011)  
Energetski transformatori – 16. dio: Transformatori za primjenu u vjetroagregatima (IEC 60076-16:2011)

## **HZN/TO E17, Sklopni i upravljački uređaji**

EN 60947-4-1:2010/FprA1:2011 en  
Low-voltage switchgear and controlgear – Part 4-1: Contactors and motor-starters – Electromechanical contactors and motor-starters (IEC 60947-4-1:2009/am1:201X)

## **HZN/TO E22, Energetska elektronika**

EN 61954:2011 en  
Static VAR compensators (SVC) – Testing of thyristor valves (IEC 61954:2011)  
Statički kompenzatori jalove snage (SVC) – Ispitivanje tiristorških ventila (IEC 61954:2011)

EN 62040-3:2011 en  
Uninterruptible power systems (UPS) – Part 3: Method of specifying the performance and test requirements (IEC 62040-3:2011)  
Energetski sustavi neprekidnog napajanja (UPS) – 3. dio: Metoda specificiranja svojstava i ispitnih zahtjeva (IEC 62040-3:2011)

## **HZN/TO E23, Električni instalacijski pribor**

EN 60309-1:1999/FprA2:2011 en  
Plugs, socket-outlets and couplers for industrial purposes – Part 1: General requirements (IEC 60309-1:1999/A2:201X)

EN 60309-2:1999/FprA2:2011 en  
Plugs, socket-outlets and couplers for industrial purposes – Part 2: Dimensional interchangeability requirements for pin and contact-tube accessories (IEC 60309-2:1999/A2:201X)

EN 60309-4:2007/FprA1:2011 en  
Plugs, socket-outlets and couplers for industrial purposes – Part 4: Switched socket-outlets and connectors with or without interlock (IEC 60309-4:2006/A1:201X)

## **HZN/TO E31, Eksplozivne atmosfere**

EN 14034-1:2004+A1:2011 en  
Determination of explosion characteristics of dust clouds – Part 1: Determination of the maximum explosion pressure p<sub>max</sub> of dust clouds

EN 14034-2:2006+A1:2011 en  
Determination of explosion characteristics of dust clouds – Part 2: Determination of the maximum rate of explosion pressure rise (dp/dt)<sub>max</sub> of dust clouds

EN 14034-3:2006+A1:2011 en  
Determination of explosion characteristics of dust clouds – Part 3: Determination of the lower explosion limit LEL of dust clouds

EN 14034-4:2004+A1:2011 en  
Determination of explosion characteristics of dust clouds – Part 4: Determination of the limiting oxygen concentration LOC of dust clouds

FprEN 14491 en  
Dust explosion venting protective systems

prEN 50050-1:2011 en  
Electrostatic hand-held spraying equipment – Safety requirements – Part 1: Hand-held spraying equipment for ignitable liquid coating materials

prEN 50050-2:2011 en  
Electrostatic hand-held spraying equipment – Safety requirements – Part 2: Hand-held spraying equipment for ignitable coating powder

- prEN 50050-3:2011 en  
Electrostatic hand-held spraying equipment – Safety requirements – Part 3: Hand-held spraying equipment for ignitable flock
- prEN 50059:2011 en  
Electrostatic hand-held spraying equipment – Safety requirements – Hand-held spraying equipment for non-ignitable coating materials

### **HZN/TO E34, Žarulje, svjetiljke i pripadna oprema**

- EN 60432-1:2000/FprA2:2011 en  
Incandescent lamps – Safety specifications – Part 1: Tungsten filament lamps for domestic and similar general lighting purposes (IEC 60432-1:1999/am2:201X)
- EN 60432-2:2000/FprA2:2011 en  
Incandescent lamps – Safety specifications – Part 2: Tungsten halogen lamps for domestic and similar general lighting purposes (IEC 60432-2:1999/am2:201X)
- EN 60432-3:2003/FprA3:2011 en  
Incandescent lamps – Safety specifications – Part 3: Tungsten-halogen lamps (non-vehicle) (IEC 60432-3:2002/am3:201X)
- FprEN 60598-2-24:2011 en  
Luminaires – Part 2-24: Particular requirements – Luminaires with limited surface temperatures (IEC 60598-2-24:201X)
- FprEN 60662:2010 en  
High-pressure sodium vapour lamps – Performance specifications (IEC 60662:2011)
- FprEN 60662:2010/FprAA:2011 en  
High-pressure sodium vapour lamps – Performance specifications
- FprEN 61347-2-9:2011 en  
Lamp electromagnetic controlgear – Part 2-9: Particular requirements for electromagnetic controlgear for discharge lamps (excluding fluorescent lamps) (IEC 61347-2-9:201X)
- EN 61549:2003/FprA3:2011 en  
Miscellaneous lamps (IEC 61549:2003/am3:201X)
- FprEN 62560:2010 en  
Self-ballasted LED-lamps for general lighting services by voltage > 50 V – Safety specifications (IEC 62560:2011)
- FprEN 62560:2010/FprAA:2011 en  
Self-ballasted LED-lamps for general lighting services by voltage > 50 V – Safety specifications

### **HZN/TO E37, Odvodnici prenapona**

- prEN 61643-11:2011 en  
Low-voltage surge protective devices – Part 11: Surge protective devices connected to low-voltage power systems – Requirements and test methods (IEC 61643-11:2011, MOD)
- EN 61643-21:2001/FprA2:2011 en  
Low voltage surge protective devices – Part 21: Surge protective devices connected to telecommunications and signalling networks – Performance requirements and testing methods (IEC 61643-21:2000/am2:201X)

### **HZN/TO E45, Nuklearna instrumentacija**

- prEN 61772 en  
Nuclear power plants – Control rooms – Application of visual display units (VDUs) (IEC 61772:2009)

### **HZN/TO E55, Žice za namote**

- FprEN 60317-49:2011 en  
Specifications for particular types of winding wires – Part 49: Glass-fibre wound high temperature resin or varnish impregnated, bare or enamelled round copper wire, temperature index 180 (IEC 60317-49:201X)

- FprEN 60317-50:2011 en  
Specifications for particular types of winding wires – Part 50: Glass-fibre wound silicone resin or varnish impregnated, bare or enamelled round copper wire, temperature index 200 (IEC 60317-50:201X)

### **HZN/TO E59, Uporabne značajke električnih kućanskih aparata**

- prEN 50193-1 en  
Electric instantaneous water heaters – Part 1: General requirements
- FprEN 60704-2-14:2011 en  
Household and similar electrical appliances – Test code for the determination of airborne acoustical noise – Part 2-14: Particular requirements for refrigerators, frozen-food storage cabinets and food freezers (IEC 60704-2-14:201X)
- prEN 62552:2011 en  
Household refrigerating appliances – Characteristics and test methods (IEC 62552:2007, MOD+Corr.:2008)

### **HZN/TO E61, Sigurnost električnih kućanskih i sličnih aparata**

- EN 50416:2005/FprAB:2011 en  
Household and similar electrical appliances – Safety – Particular requirements for commercial electric conveyor dishwashing machines
- FprEN 50569:2011 en  
Household and similar electrical appliances – Safety – Particular requirements for commercial electric spin extractors
- FprEN 50570:2011 en  
Household and similar electrical appliances – Safety – Particular requirements for commercial electric tumble dryers
- FprEN 50571:2011 en  
Household and similar electrical appliances – Safety – Particular requirements for commercial electric washing machines
- EN 60335-2-36:2002/FprAA:2011 en  
Household and similar electrical appliances – Safety – Part 2-36: Particular requirements for commercial electric cooking ranges, ovens, hobs and hob elements
- EN 60335-2-37:2002/FprAA:2011 en  
Household and similar electrical appliances – Safety – Part 2-37: Particular requirements for commercial electric deep fat fryers
- EN 60335-2-39:2003/FprAA:2011 en  
Household and similar electrical appliances – Safety – Part 2-39: Particular requirements for commercial electric multi-purpose cooking pans
- EN 60335-2-42:2003/FprAA:2011 en  
Household and similar electrical appliances – Safety – Part 2-42: Particular requirements for commercial electric forced convection ovens, steam cookers and steam-convection ovens
- EN 60335-2-47:2003/FprAA:2011 en  
Household and similar electrical appliances – Safety – Part 2-47: Particular requirements for commercial electric boiling pans
- EN 60335-2-48:2003/FprAA:2011 en  
Household and similar electrical appliances – Safety – Part 2-48: Particular requirements for commercial electric grillers and toasters
- EN 60335-2-49:2003/FprAB:2011 en  
Household and similar electrical appliances – Safety – Part 2-49: Particular requirements for commercial electric appliances for keeping food and crockery warm

- EN 60335-2-58:2005/FprAC:2011 en  
Household and similar electrical appliances – Safety – Part 2-58: Particular requirements for commercial electric dishwashing machines
- EN 60335-2-64:2000/FprAB:2011 en  
Safety of household and similar electrical appliances – Part 2-64: Particular requirements for commercial electric kitchen machines
- EN 60335-2-65:2003/FprAA:2011 en  
Household and similar electrical appliances – Safety – Part 2-65: Particular requirements for air-cleaning appliances
- EN 60335-2-76:2005/prAE:2011 en  
Household and similar electrical appliances – Safety – Part 2-76: Particular requirements

### **HZN/TO E62, Električna oprema u medicinskoj praksi**

- EN 60601-1-8:2007/FprA1:2011 en  
Medical electrical equipment – Part 1-8: General requirements for basic safety and essential performance – Collateral Standard: General requirements, tests and guidance for alarm systems in medical electrical equipment and medical electrical systems (IEC 60601-1-8:2006/am1:201X)
- EN 60601-2-41:2009/FprA1:2011 en  
Medical electrical equipment – Part 2-41: Particular requirements for basic safety and essential performance of surgical luminaires and luminaires for diagnosis (IEC 60601-2-41:2009/A1:201X)

### **HZN/TO E64, Električne instalacije i zaštita od električnog udara**

- FprHD 60364-5-557:2011 en  
Low-voltage electrical installations – Part 5-557: Selection and erection of electrical equipment – Auxiliary circuits (IEC 60364-5-55:2001/A3:201X)
- HD 60364-5-56:2010/FprAA:2011 en  
Low-voltage electrical installations – Part 5-56: Selection and erection of electrical equipment – Safety services

### **HZN/TO E65, Mjerenje, vođenje i automatizacija industrijskih procesa**

- FprEN 61131-6:2011 en  
Programmable controllers – Part 6: Functional safety (IEC 61131-6:201X)
- FprEN 61499-1:2011 en  
Function blocks – Part 1: Architecture (IEC 61499-1:201X)

### **HZN/TO E79, Alarmni sustavi**

- EN 50131-6:2008/prAA:2011 en  
Alarm systems – Intrusion and hold-up systems – Part 6: Power supplies
- CLC/TS 50131-7:2010 en  
Alarm systems – Intrusion and hold-up systems – Part 7: Application guidelines  
Alarmni sustavi – Protuprovalni i protuprepadni sustavi – 7. dio: Smjernice za primjenu
- prEN 50131-10:2011 en  
Alarm systems – Intrusion and hold-up systems – Part 10: Application specific requirements
- EN 50132-1:2010 en  
Alarm systems – CCTV surveillance systems for use in security applications – Part 1: System requirements  
Alarmni sustavi – Sustavi nadzora pomoću TV zatvorenog kruga za uporabu u primjenama zaštite – 1. dio: Zahtjevi za sustave
- prEN 50136-2:2011 en  
Alarm systems – Alarm transmission systems and equipment – Part 2: Requirements for Supervised Premises Transceiver (SPT)

- EN 50518-1:2010 en  
Monitoring and alarm receiving centre – Part 1: Location and construction requirements  
Centar za nadzor i prijam alarma – 1. dio: Zahtjevi za smještaj i izgradnju
- EN 50518-2:2010+AC:2011 en  
Monitoring and alarm receiving centre – Part 2: Technical requirements  
Centar za nadzor i prijam alarma – 2. dio: Tehnički zahtjevi
- EN 50518-3:2011 en  
Monitoring and alarm receiving centre – Part 3: Procedures and requirements for operation  
Centar za nadzor i prijam alarma – 3. dio: Postupci i zahtjevi za rad

### **HZN/TO E80, Pomorska navigacijska i radiokomunikacijska oprema i sustavi**

- EN 61162-1:2011 en  
Maritime navigation and radiocommunication equipment and systems – Digital interfaces – Part 1: Single talker and multiple listeners (IEC 61162-1:2010)  
Pomorska navigacijska i radiokomunikacijska oprema i sustavi – Digitalna sučelja – 1. dio: Jedan govornik i više slušatelja (IEC 61162-1:2010)
- EN 61162-450:2011 en  
Maritime navigation and radiocommunication equipment and systems – Digital interfaces – Part 450: Multiple talkers and multiple listeners – Ethernet interconnection (IEC 61162-450:2011)  
Pomorska navigacijska i radiokomunikacijska oprema i sustavi – Digitalna sučelja – 450. dio: Više govornika i više slušatelja – Ethernet interkonekcija (IEC 61162-450:2011)
- EN 62287-1:2011 en  
Maritime navigation and radiocommunication equipment and systems – Class B shipborne equipment of the automatic identification system (AIS) – Part 1: Carrier-sense time division multiple access (CSTDMA) techniques (IEC 62287-1:2010)  
Pomorska navigacijska i radiokomunikacijska oprema i sustavi – Brodska oprema razreda B sustava automatske identifikacije (AIS) – 1. dio: Tehnike višestrukog pristupa s vremenskom podjelom detekcije nosioca (CSTDMA) (IEC 62287-1:2010)
- EN 62376:2011 en  
Maritime navigation and radiocommunication equipment and systems – Electronic chart system (ECS) – Operational and performance requirements, methods of testing and required test results (IEC 62376:2010)  
Pomorska navigacijska i radiokomunikacijska oprema i sustavi – Sustav za elektroničke karte (ECS) – Radni i izvedbeni zahtjevi, metode ispitivanja i zahtijevani rezultati ispitivanja (IEC 62376:2010)
- FprEN 62729:2011 en  
Maritime navigation and radiocommunication equipment and systems – Shipborne equipment for long-range identification and tracking (LRIT) (IEC 62729:201X)

### **HZN/TO E112, Procjena i značajke električnih izolacijskih materijala i sustava**

- FprEN 60544-2:2011 en  
Electrical insulating materials – Guide for determining of the effects of ionizing radiation on insulating materials – Part 2: Procedures for irradiation and test (IEC 60544-2:201X)

## **HZN/TO E500, *Elektromagnetska kompatibilnost u elektrotehnici i telekomunikacijama***

EN 55103-2:2009/FprISA:2011 en  
Electromagnetic compatibility – Product family standard for audio, video, audio-visual and entertainment lighting control apparatus for professional use – Part 2: Immunity

## **HZN/TO E501, *Elektroakustika i ultrazvuk***

FprEN 60601-2-66:2011 en  
Hearing instruments and hearing instrument systems – Part 2-66: General requirements for basic safety and essential performance (IEC 60601-2-66:201X)

## **HZN/TO E502, *Elektrotehnički aspekti telekomunikacijske opreme***

EN 50173-4:2007/prAB:2011 en  
Information technology – Generic cabling systems – Part 4: Homes

## **HZN/TO Z2, *Ocjenjivanje sukladnosti i akreditacija***

prEN ISO/IEC 17065 en  
Conformity assessment – Requirements for bodies certifying products, processes and services (ISO/IEC/DIS 17065:2011)

## **HZN/TU A1, *Usluge, proizvodi za kućanstvo i slobodno vrijeme 1***

prEN 16281 en  
Child protective products – Consumer fitted child resistant locking devices for windows and balcony doors – Safety requirements and test methods

## **HZN/TU C1, *Kemikalije, kemijsko inženjerstvo, poljoprivredni i prehrambeni proizvodi 1***

prEN 16274 en  
Methods for analysis of allergens – Quantification of suspected fragrance allergens in consumer products – Step 1: GC analysis of ready-to-inject sample  
Metode za analizu alergena – Određivanje količine sumnjivog mirisa alergena u proizvodima široke potrošnje – Korak 1: GC analize uzorka spremnog za ubrizgavanje

## **HZN/TU I2, *Strojarstvo 2***

prEN ISO 6165 en  
Earth-moving machinery – Basic types – Identification and terms and definitions (ISO/DIS 6165:2011)

prEN 16297-1 en  
Pumps – Rotodynamic pumps – Glandless circulators – Part 1: General requirements and procedures for testing and calculation of energy efficiency index (EEI)

prEN 16297-2 en  
Pumps – Rotodynamic pumps – Glandless circulators – Part 2: Calculation of energy efficiency index (EEI) for standalone circulators

prEN 16297-3 en  
Pumps – Rotodynamic pumps – Glandless circulators – Part 3: Energy efficiency index (EEI) for circulators integrated in products

## **HZN/TU M1, *Metalni materijali 1***

prEN ISO 7625 rev en  
Sintered metal materials, excluding hardmetals – Preparation of samples for chemical analysis for determination of carbon content (ISO/DIS 7625:2011)  
Sinterirani metalni materijali, osim tvrdih metala – Priprema uzoraka za kemijske analize za određivanje udjela ugljika (ISO/DIS 7625:2011)

## **HZN/TU N1, *Nemetalni materijali 1***

FprEN 14961-6 en  
Solid biofuels – Fuel specifications and classes – Part 6: Non-woody pellets for non-industrial use

FprEN 15234-2 en  
Solid biofuels – Fuel quality assurance – Part 2: Wood pellets for non-industrial use

FprEN 15234-3 en  
Solid biofuels – Fuel quality assurance – Part 3: Wood briquettes for non-industrial use

FprEN 15234-4 en  
Solid biofuels – Fuel quality assurance – Part 4: Wood chips for non-industrial use

FprEN 15234-5 en  
Solid biofuels – Fuel quality assurance – Part 5: Firewood for non-industrial use

FprEN 15234-6 en  
Solid biofuels – Fuel quality assurance – Part 6: Non-woody pellets for non-industrial use

## **HZN/TU S1, *Zdravlje, okoliš i medicinska oprema 1***

prEN ISO 3630-2 en  
Dentistry – Endodontic instruments – Part 2: Enlargers (ISO/DIS 3630-2:2011)

EN ISO 8362-4:2011 en  
Injection containers and accessories – Part 4: Injection vials made of moulded glass (ISO 8362-4:2011)

EN ISO 8536-1:2011 en  
Infusion equipment for medical use – Part 1: Infusion glass bottles (ISO 8536-1:2011)

prEN ISO 10323 rev en  
Dentistry – Bore diameters for rotary instruments such as discs and wheels (ISO/DIS 10323:2011)

prEN 16280 en  
Breath alcohol test devices for general public – Requirements and test methods

## **HZN/TU T1, *Prijevoz, rukovanje materijalima i pakiranje 1***

EN 1459:1998+A2:2010/FprA3 en  
Safety of industrial trucks – Self-propelled variable reach trucks

EN 2240-061:2011 en  
Aerospace series – Lamps, incandescent – Part 061: Lamp, code 1683 – Product standard

EN 2240-062:2011 en  
Aerospace series – Lamps, incandescent – Part 062: Lamp, code 1810 – Product standard

EN 2240-063:2011 en  
Aerospace series – Lamps, incandescent – Part 063: Lamp, code 1815 – Product standard

EN 2240-064:2011 en  
Aerospace series – Lamps, incandescent – Part 064: Lamp, code 1819 – Product standard

EN 2240-065:2011 en  
Aerospace series – Lamps, incandescent – Part 065: Lamp, code 1820 – Product standard

EN 2240-066:2011 en  
Aerospace series – Lamps, incandescent – Part 066: Lamp, code 1829 – Product standard

EN 2240-067:2011 en  
Aerospace series – Lamps, incandescent – Part 067: Lamp, code 1843 – Product standard

EN 2240-068:2011 en  
Aerospace series – Lamps, incandescent – Part 068: Lamp, code 1864 – Product standard

EN 2240-069:2011 en  
Aerospace series – Lamps, incandescent – Part 069: Lamp, code 1978 – Product standard

- EN 2240-070:2011 en  
Aerospace series – Lamps, incandescent – Part 070: Lamp, code 2232 – Product standard
- EN 2491:2011 en  
Aerospace series – Molybdenum disulphide dry lubricants – Coating methods
- EN 2535:2011 en  
Aerospace series – Vacuum deposition of cadmium
- EN 2757:2011 en  
Aerospace series – Structural adhesives system – Test method – Determination of the drying and ignition residues of primers
- EN 2825:2011 en  
Aerospace series – Burning behaviour of non metallic materials under the influence of radiating heat and flames – Determination of smoke density
- EN 2997-001:2011 en  
Aerospace series – Connectors, electrical, circular, coupled by threaded ring, fire-resistant or non fire-resistant, operating temperatures – 65 °C to 175 °C continuous, 200 °C continuous, 260 °C peak – Part 001: Technical specification
- EN 2997-014:2011 en  
Aerospace series – Connectors, electrical, circular, coupled by threaded ring, fire-resistant or non fire-resistant, operating temperatures – 65 °C to 175 °C continuous, 200 °C continuous, 260 °C peak – Part 014: Square flange receptacle with integrated accessory – Product standard
- EN 2997-015:2011 en  
Aerospace series – Connectors, electrical, circular, coupled by threaded ring, fire-resistant or non fire-resistant, operating temperatures – 65 °C to 175 °C continuous, 200 °C continuous, 260 °C peak – Part 015: Jam-nut mounted receptacle with integrated accessory – Product standard
- EN 3155-002:2011 en  
Aerospace series – Electrical contacts used in elements of connection – Part 002: List and utilization of contacts
- EN 3280:2011 en  
Aerospace series – Bearings, airframe rolling, rigid or self-aligning – Technical specification
- EN 3475-603:2011 en  
Aerospace series – Cables, electrical, aircraft use – Test methods – Part 603: Resistance to wet arc tracking
- EN 4008-007:2011 en  
Aerospace series – Elements of electrical and optical connection – Crimping tools and associated accessories – Part 007: Positioner for crimping tool M22520/2-01 – Product standard
- EN 4008-008:2011 en  
Aerospace series – Elements of electrical and optical connection – Crimping tools and associated accessories – Part 008: Positioner for crimping tool M22520/7-01 – Product standard
- EN 4160:2011 en  
Aerospace series – Paints and varnishes – Determination of the effect of thermal exposure
- EN 4165-024:2011 en  
Aerospace series – Connectors, electrical, rectangular, modular – Operating temperature 175 °C continuous – Part 024: Single module plug – Product standard
- EN 4165-026:2011 en  
Aerospace series – Connectors, electrical, rectangular, modular – Operating temperature 175 °C continuous – Part 026: Accessories for single modules – Product standard
- EN 4476:2011 en  
Aerospace series – Paints and varnishes – Cold curing intermediate coat
- EN 4593:2011 en  
Aerospace series – Paints and varnishes – Determination of solar absorptance
- EN 4604-009:2011 en  
Aerospace series – Cable, electrical, for signal transmission – Part 009: Cable, coaxial, light weight, 50 ohms, 180 °C, type KW (light WN) – Product standard
- EN 4604-010:2011 en  
Aerospace series – Cable, electrical, for signal transmission – Part 010: Cable, coaxial, light weight, 50 Ohms, 200 °C, type KX (light WD) – Product standard
- EN 4641-301:2011 en  
Aerospace series – Cables, optical 125 µm diameter cladding – Part 301: Tight structure 50/125 µm GI fibre nominal 1,8 mm outside diameter – Product standard
- EN 4660-005:2011 en  
Aerospace series – Modular and Open Avionics Architectures – Part 005: Software
- EN 4672:2011 en  
Aerospace series – Steel FE-PM1504 (X1CrNiMoAlTi12-10-2) – Vacuum induction melted and consumable electrode remelted – Softened – Forging stock – a or D = 300 mm
- EN 4675:2011 en  
Aerospace series – Titanium Ti-P63002 (Ti5Al5Mo5V3Cr0.4Fe) –  $R_m = 1300$  MPa – Bars –  $D_e < 110$  mm
- EN 4678:2011 en  
Aerospace series – Weldments and brazements for aerospace structures – Joints of metallic materials by laser beam welding – Quality of weldments
- EN 4683:2011 en  
Aerospace series – Steel FE-WM 3504 (X4CrNiMo16-5-1) – Air melted – Filler metal for welding – Wire and rod
- EN 4685:2011 en  
Aerospace series – Titanium Ti10V2Fe3Al – Bars –  $D < 110$  mm –  $R_m = 1240$  MPa
- EN 9101:2011 en  
Quality Management Systems – Audit Requirements for Aviation, Space, and Defence Organizations

## **HZN/TU U1, Opća elektrotehnika 1**

- FprEN 60068-2-65:2011 en  
Environmental testing – Part 2: Methods of test – Test Fg: Vibration, acoustically induced (IEC 60068-2-65:201X)
- EN 60269-4:2009/FprA1:2011 en  
Low-voltage fuses – Part 4: Supplementary requirements for fuse-links for the protection of semiconductor devices (IEC 60269-4:2009/A1:201X)
- FprEN 60695-4:2011 en  
Fire hazard testing – Part 4: Terminology concerning fire tests for electrotechnical products (IEC 60695-4:201X)
- FprEN 60974-7:2011 en  
Arc welding equipment – Part 7: Torches (IEC 60974-7:201X)
- FprEN 61083-2:2011 en  
Instruments and software used for measurement in high-voltage and high-current tests – Part 2: Requirements for software for impulse tests (IEC 61083-2:201X)

FprEN 61788-13:2011 en  
Superconductivity – Part 13: AC loss measurements – Magnetometer methods for hysteresis loss in superconducting multifilamentary composites (IEC 61788-13:201X)

## **HZN/TU V1, Elektronika 1**

prEN 50289-4-16:2011 en  
Communication cables – Specifications for test methods – Part 4-16: Environmental test methods – Circuit integrity under fire conditions

FprEN 50411-2-2:2011 en  
Fibre organisers and closures to be used in optical fibre communication systems – Product specifications – Part 2-2: Sealed pan fibre splice closures Type 1, for category S & A

FprEN 50411-2-3:2011 en  
Fibre organisers and closures to be used in optical fibre communication systems – Product specifications – Part 2-3: Sealed inline fibre splice closures Type 1, for category S & A

FprEN 50411-2-4:2011 en  
Fibre organisers and closures to be used in optical fibre communication systems – Product specifications – Part 2-4: Sealed dome fibre splice closures Type 1, for category S & A

FprEN 60191-4:2011 en  
Mechanical standardization of semiconductor devices – Part 4: Coding system and classification into forms of package outlines for semiconductor device packages (IEC 60191-4:201X)

FprEN 60191-6-1:2011 en  
Mechanical standardization of semiconductor devices – Part 6-1: General rules for the preparation of outline drawings of surface mounted semiconductor device packages – Design guide for gull-wing lead terminals (IEC 60191-6-1:201X)

FprEN 60512-99-001:2011 en  
Test schedule for engaging and separating connectors under electrical load – Part 60512-99-001: Connectors used in twisted pair communication cabling with remote power (IEC 60512-99-001:201X)

FprEN 61169-1:2011 en  
Radio-frequency connectors – Part 1: Generic specification – General requirements and measuring methods (IEC 61169-1:201X)

FprEN 61291-1:2011 en  
Optical amplifiers – Part 1: Generic specification (IEC 61291-1:201X)

FprEN 61291-2:2011 en  
Optical amplifiers – Part 2: Digital applications – Performance specification template (IEC 61291-2:201X)

FprEN 61300-3-33:2011 en  
Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 3-33: Examinations and measurements – Withdrawal force from a resilient alignment sleeve using gauge pins (IEC 61300-3-33:201X)

FprEN 61754-28:2011 en  
Fibre optic interconnecting devices and passive components – Fibre optic connector interfaces – Part 28: Type LF3 connector family (IEC 61754-28:201X)

FprEN 61754-29:2011 en  
Fibre optic interconnecting devices and passive components – Fibre optic connector interfaces – Part 29: Type BLINK connector series for Category C. Controlled environment (IEC 61754-29:201X)

FprEN 62149-1:2011 en  
Fibre optic active components and devices – Performance standards – Part 1: General and guidance (IEC 62149-1:201X)

FprEN 62150-3:2011 en  
Fibre optic active components and devices – Test and measurement procedures – Part 3: Optical power variation induced by mechanical disturbance in optical receptacles and transceiver interfaces (IEC 62150-3:201X)

## **HZN/TU W1, Energetska elektrotehnika 1**

EN 60745-2-4:2009 en  
Hand-held motor-operated electric tools – Safety – Part 2-4: Particular requirements for sanders and polishers other than disk type (IEC 60745-2-4:2002, MOD+am1:2008, MOD)

EN 60745-2-4:2009/FprAA:2011 en  
Hand-held motor-operated electric tools – Safety – Part 2-4: Particular requirements for sanders and polishers other than disk type

FprEN 61558-2-14:2011 en  
Safety of transformers, reactors, power supply units and combinations thereof – Part 2-14: Particular requirements and test for variable transformers and power supply units incorporating variable transformers (IEC 61558-2-14:201X)

FprEN 61558-2-26:2011 en  
Safety of transformers, reactors, power supply units and combinations thereof – Part 2-26: Particular requirements and tests for transformers and power supply units for saving energy and other purposes (IEC 61558-2-26:201X)

FprEN 61982-1:2011 en  
Secondary batteries (except lithium) for the propulsion of electric road vehicles – Performance and endurance tests (IEC 61982-1:201X)

## **1.4 Povučene hrvatske norme**

Na prijedlog tehničkog odbora ravnatelj Hrvatskoga zavoda za norme donosi odluku o povlačenju hrvatske norme kada je donesena nova hrvatska norma ili kada je postojeća hrvatska norma postala neprimjenjiva. Kada je koje područje uređeno propisima i neki od propisa (pravilnik, naredba, naputak) upućuje na norme koje su povučene, one se primjenjuju silom tih propisa i bit će, do izmjene propisa ili izradbe novih, na raspolaganju u Normoteci HZN-a.

## **HZN/TO 6, Papir, karton i pulpe**

HRN EN ISO 15320:2008 en  
Pulpa, papir i karton – Određivanje pentaklorofenola (PCP) u vodenom ekstraktu (ISO 15320:2003; EN ISO 15320:2003)  
Pulp, paper and board – Determination of pentachlorophenol in an aqueous extract (ISO 15320:2003; EN ISO 15320:2003)  
- zamijenjena s: HRN EN ISO 15320:2011

## **HZN/TO 25, Ljevarstvo**

HRN EN 1559-3:2001 en  
Ljevarstvo – Tehnički uvjeti isporuke – 3. dio: Dodatni zahtjevi za odljevke od željeznog lijeva (EN 1559-3:1997)  
Founding – Technical conditions of delivery – Part 3: Additional requirements for iron castings (EN 1559-3:1997)  
- zamijenjena s: HRN EN 1559-3:2011

HRN EN 1561:2001 en  
Ljevarstvo – Sivi ljevovi (EN 1561:1997)  
Founding – Grey cast irons (EN 1561:1997)  
- zamijenjena s: HRN EN 1561:2011

## HZN/TO 28, *Naftni proizvodi i maziva*

- HRN ISO 3987:2004 en  
Naftni proizvodi – Ulja za podmazivanje i aditivi –  
Određivanje sulfatnog pepela (ISO 3987:1994)  
Petroleum products – Lubricating oils and additives –  
Determination of sulfated ash (ISO 3987:1994)  
- zamijenjena s: HRN ISO 3987:2011
- HRN ISO 7507-4:1999 en  
Nafta i tekući naftni proizvodi – Umjeravanje okomitih  
valjkastih spremnika – 4. dio: Metoda mjerenja  
unutarnjega elektro-optičkog razmaka  
(ISO 7507-4:1995)  
Petroleum and liquid petroleum products – Calibration  
of vertical cylindrical tanks – Part 4: Internal electro-  
optical distance-ranging method (ISO 7507-4:1995)  
- zamijenjena s: HRN ISO 7507-4:2011
- HRN ISO 10307-1:2003 en  
Naftni proizvodi – Ukupna količina sedimenta u  
ostatnim loživim uljima – 1. dio: Određivanje vrućom  
filtracijom (ISO 10307-1:1993+Cor 1:1997)  
Petroleum products – Total sediment in residual fuel  
oils – Part 1: Determination by hot filtration  
(ISO 10307-1:1993+Cor 1:1997)  
- zamijenjena s: HRN ISO 10307-1:2011
- HRN ISO 10307-2:2003 en  
Naftni proizvodi – Ukupna količina sedimenta u  
ostatnim loživim uljima – 2. dio: Određivanje starenja  
standardnim postupkom (ISO 10307-2:1993)  
Petroleum products – Total sediment in residual fuel  
oils – Part 2: Determination using standard procedure  
for ageing (ISO 10307-2:1993)  
- zamijenjena s: HRN ISO 10307-2:2011
- HRN ISO 11158:2005 en  
Maziva, industrijska ulja i srodni proizvodi – (razred  
L) – Podrazred H (hidraulički sustavi) – Specifikacije  
za kategorije HH, HL, HM, HR, HV i HG  
(ISO 11158:1997)  
Lubricants, industrial oils and related products – (class  
L) – Family H (hydraulic systems) – Specifications for  
categories HH, HL, HM, HR, HV and HG  
(ISO 11158:1997)  
- zamijenjena s: HRN ISO 11158:2011
- HRN ISO/TR 13739:2005 en  
Naftni proizvodi – Metode za utvrđivanje praktičnih  
postupaka pretakanja brodskih goriva u brodove  
(ISO/TR 13739:1998)  
Petroleum products – Methods for specifying practical  
procedures for the transfer of bunker fuels to ships  
(ISO/TR 13739:1998)  
- zamijenjena s: HRN ISO 13739:2011

## HZN/TO 34/PO 12, *Poljoprivredni i prehrambeni proizvodi; Aditivi, kontaminanti, ambalaža za prehrambene proizvode i predmeti u dodiru s hranom*

- HRN EN 13834:2007 en  
Posuđe za kuhanje hrane – Posuđe za pećnice u  
kućanstvu (EN 13834:2007)  
Cookware – Ovenware for use in traditional domestic  
ovens (EN 13834:2007)  
- zamijenjena s: HRN EN 13834:2011

## HZN/TO 35, *Boje i lakovi*

- HRN EN ISO 1513:1999 en  
Boje i lakovi – Ispitivanje i priprema ispitnih uzoraka  
(ISO 1513:1992; EN ISO 1513:1994)  
Paints and varnishes – Examination and preparation  
of samples for testing (ISO 1513:1992;  
EN ISO 1513:1994)  
- zamijenjena s: HRN EN ISO 1513:2011

- HRN EN ISO 4628-6:2004 en  
Boje i lakovi – Ocjena razgradnje prevlaka – Označivanje  
intenziteta, količine i veličine uobičajenih vrsta  
oštećenja – 6. dio: Ocjenjivanje stupnja kredanja  
postupkom s ljepljivom vrpcom (ISO 4628-6:1990;  
EN ISO 4628-6:2001)  
Paints and varnishes – Evaluation of degradation of  
paint coatings – Designation of intensity, quantity and  
size of common types of defect – Part 6: Rating of  
degree of chalking by tape method (ISO 4628-6:1990;  
EN ISO 4628-6:2001)  
- zamijenjena s: HRN EN ISO 4628-6:2011
- HRN EN 13523-1:2002 en  
Metali zaštićeni trakom – Metode ispitivanja – 1. dio:  
Debljina sloja (EN 13523-1:2001)  
Coil coated metals – Test methods – Part 1: Coating  
thickness (EN 13523-1:2001)  
- zamijenjena s: HRN EN 13523-1:2011
- HRN EN 13523-8:2002 en  
Metali zaštićeni trakom – Metode ispitivanja – 8. dio:  
Otpornost na slanu maglu (EN 13523-8:2002)  
Coil coated metals – Test methods – Part 8: Resistance  
to salt spray (fog) (EN 13523-8:2002)  
- zamijenjena s: HRN EN 13523-8:2011
- HRN EN 13523-10:2002 en  
Metali zaštićeni trakom – Metode ispitivanja – 10. dio:  
Otpornost na fluorescentno UV zračenje i kondenzaciju  
vode (EN 13523-10:2001)  
Coil coated metals – Test methods – Part 10:  
Resistance to fluorescent UV light and water  
condensation (EN 13523-10:2001)  
- zamijenjena s: HRN EN 13523-10:2011
- HRN EN 13523-21:2004 en  
Metali zaštićeni trakom – Metode ispitivanja – 21. dio:  
Ocjena ploča izloženih vanjskim utjecajima  
(EN 13523-21:2003)  
Coil coated metals – Test methods – Part 21: Evaluation  
of outdoor exposed panels (EN 13523-21:2003)  
- zamijenjena s: HRN EN 13523-21:2011
- HRN EN 13523-22:2003 en  
Metali zaštićeni trakom – Metode ispitivanja – 22. dio:  
Razlike u boji – Vizualna usporedba  
(EN 13523-22:2003)  
Coil coated metals – Test methods – Part 22: Colour  
difference – Visual comparison (EN 13523-22:2003)  
- zamijenjena s: HRN EN 13523-22:2011

## HZN/TO 44, *Zavarivanje i srodni postupci*

- HRN EN ISO 15609-5:2007 en  
Specifikacija i kvalifikacija postupaka zavarivanja  
za metalne materijale – Specifikacija postupka  
zavarivanja – 5. dio: Elektrootporno zavarivanje  
(ISO 15609-5:2004; EN ISO 15609-5:2004)  
Specification and qualification of welding procedures  
for metallic materials – Welding procedure specification  
– Part 5: Resistance welding (ISO 15609-5:2004;  
EN ISO 15609-5:2004)  
- zamijenjena s: HRN EN ISO 15609-5:2011
- HRN EN ISO 17654:2004 en  
Razorna ispitivanja zavara metalnih materijala –  
Elektrootporno zavarivanje – Tlačno ispitivanje  
elektrootporno zavarenih šavnih spojeva  
(ISO 17654:2003; EN ISO 17654:2003)  
Destructive test on welds in metallic materials –  
Resistance welding – Pressure test on resistance seam  
welds (ISO 17654:2003; EN ISO 17654:2003)  
- zamijenjena s: HRN EN ISO 17654:2011

## **HZN/TO 54, Eterična ulja**

- HRN ISO 8897:2004 en  
Ulje bobulja borovice (*Juniperus communis* Linnaeus) (ISO 8897:1991)  
Oil of juniper berry (*Juniperus communis* Linnaeus) (ISO 8897:1991)  
- zamijenjena s: HRN ISO 8897:2011
- HRN ISO 14715:2005 en  
Ulje timijana koje sadrži timol, španjolski tip [*Thymus zygis* (Loefl.) L.] (ISO 14715:1999)  
Oil of thyme containing thymol, Spanish type [*Thymus zygis* (Loefl.) L.] (ISO 14715:1999)  
- zamijenjena s: HRN ISO 14715:2011

## **HZN/TO 82, Rudarstvo**

- HRN EN 1889-1:2008 en  
Strojevi za podzemne rudnike – Pokretni strojevi u podzemnim rudnicima – Sigurnost – 1. dio: Vozila na gumenim kotačima (EN 1889-1:2003)  
Machines for underground mines – Mobile machines working underground – Safety – Part 1: Rubber tyred vehicles (EN 1889-1:2003)  
- zamijenjena s: HRN EN 1889-1:2011

## **HZN/TO 86, Uređaji za hlađenje, klimatizaciju i dizalice topline**

- HRN EN 14276-1:2008 en  
Tlačna oprema za rashladne sustave i dizalice topline – 1. dio: Posude – Opći zahtjevi (EN 14276-1:2006)  
Pressure equipment for refrigerating systems and heat pumps – Part 1: Vessels – General requirements (EN 14276-1:2006)  
- zamijenjena s: HRN EN 14276-1:2011
- HRN EN 14276-2:2008 en  
Tlačna oprema za rashladne sustave i dizalice topline – 2. dio: Cjevovodi – Opći zahtjevi (EN 14276-2:2007)  
Pressure equipment for refrigerating systems and heat pumps – Part 2: Piping – General requirements (EN 14276-2:2007)  
- zamijenjena s: HRN EN 14276-2:2011

## **HZN/TO 89, Furniri i drvene ploče**

- HRN EN 12369-2:2008 en  
Wood-based panels – Characteristic values for structural design – Part 2: Plywood (EN 12369-2:2004)  
- zamijenjena s: HRN EN 12369-2:2011

## **HZN/TO 108, Mehaničke vibracije i udari**

- HRN ISO 7919-2:2000 en  
Mehaničke vibracije nestapnih strojeva – Mjerenja na rotirajućim osovima i kriteriji za procjenjivanje – 2. dio: Veliki kopneni parni turboagregati (ISO 7919-2:1996)  
Mechanical vibration of non-reciprocating machines – Measurements on rotating shafts and evaluation criteria – Part 2: Large land-based steam turbine generator sets (ISO 7919-2:1996)  
- zamijenjena s: HRN ISO 7919-2:2011
- HRN ISO 10816-2:1999 en  
Mehaničke vibracije – Ocjenjivanje vibracija strojeva mjerenjem na nerotirajućim dijelovima – 2. dio: Veliki kopneni parnoturbinski generatorski sklopovi koji prelaze 50 MW (ISO 10816-2:1996)  
Mechanical vibration – Evaluation of machine vibration by measurements on non-rotating parts – Part 2: Large land-based steam turbine generator sets in excess of 50 MW (ISO 10816-2:1996)  
- zamijenjena s: HRN ISO 10816-2:2011

## **HZN/TO 134, Gnojiva i poboljšivači tla**

- HRS CEN/TS 15919:2010 en  
Gnojiva – Ekstrakcija fosfora topivog u 2 % mravljoj kiselini (CEN/TS 15919:2009)

Fertilizers – Extraction of phosphorus soluble in 2 % formic acid (CEN/TS 15919:2009)  
- zamijenjena s: HRN EN 15919:2011

HRS CEN/TS 15920:2010 en  
Gnojiva – Ekstrakcija fosfora topivog u 2 % limunskoj kiselini (CEN/TS 15920:2009)  
Fertilizers – Extraction of phosphorus soluble in 2 % citric acid (CEN/TS 15920:2009)  
- zamijenjena s: HRN EN 15920:2011

HRS CEN/TS 15921:2010 en  
Gnojiva – Ekstrakcija topivog fosfora prema Petermannu na 65 °C (CEN/TS 15921:2009)  
Fertilizers – Extraction of soluble phosphorus according to Petermann at 65 °C (CEN/TS 15921:2009)  
- zamijenjena s: HRN EN 15921:2011

HRS CEN/TS 15922:2010 en  
Gnojiva – Ekstrakcija topivog fosfora prema Petermannu na sobnoj temperaturi (CEN/TS 15922:2009)  
Fertilizers – Extraction of soluble phosphorus according to Petermann at ambient temperature (CEN/TS 15922:2009)  
- zamijenjena s: HRN EN 15922:2011

HRS CEN/TS 15923:2010 en  
Gnojiva – Ekstrakcija fosfora topivog u Joulievom alkalnom amonijevom citratu (CEN/TS 15923:2009)  
Fertilizers – Extraction of phosphorus soluble in Joulie's alkaline ammonium citrate (CEN/TS 15923:2009)  
- zamijenjena s: HRN EN 15923:2011

HRS CEN/TS 15924:2010 en  
Gnojiva – Određivanje finoće mljevenja mekih prirodnih fosfata (CEN/TS 15924:2009)  
Fertilizers – Determination of the fineness of grinding of soft natural phosphates (CEN/TS 15924:2009)  
- zamijenjena s: HRN EN 15924:2011

HRS CEN/TS 15925:2010 en  
Gnojiva – Ekstrakcija ukupnog sumpora prisutnog u različitim oblicima (CEN/TS 15925:2009)  
Fertilizers – Extraction of total sulfur present in various forms (CEN/TS 15925:2009)  
- zamijenjena s: HRN EN 15925:2011

HRS CEN/TS 15926:2010 en  
Gnojiva – Ekstrakcija vodotopivog sumpora prisutnog u različitim oblicima (CEN/TS 15926:2009)  
Fertilizers – Extraction of water soluble sulfur where the sulfur is in various forms (CEN/TS 15926:2009)  
- zamijenjena s: HRN EN 15926:2011

HRS CEN/TS 15956:2010 en  
Gnojiva – Ekstrakcija fosfora topivog u mineralnim kiselinama (CEN/TS 15956:2009)  
Fertilizers – Extraction of phosphorus soluble in mineral acids (CEN/TS 15956:2009)  
- zamijenjena s: HRN EN 15956:2011

HRS CEN/TS 15957:2010 en  
Gnojiva – Ekstrakcija fosfora topivog u neutralnom amonijevom citratu (CEN/TS 15957:2009)  
Fertilizers – Extraction of phosphorus which is soluble in neutral ammonium citrate (CEN/TS 15957:2009)  
- zamijenjena s: HRN EN 15957:2011

## **HZN/TO 138, Plastične cijevi, spojnice i ventili za prijenos tekućina**

- HRN ISO 12176-3:2008 en  
Plastične cijevi i spojnice – Oprema za spajanje polietilenskih sustava zavarivanjem – 3. dio: Identifikacija izvođača (ISO 12176-3:2006)  
Plastics pipes and fittings – Equipment for fusion jointing polyethylene systems – Part 3: Operator's badge (ISO 12176-3:2006)  
- zamijenjena s: HRN ISO 12176-3:2011

HRN EN 12666-1:2006 en  
Plastični cijevni sustavi za netlačnu podzemnu odvodnju i kanalizaciju – Polietilen (PE) – 1. dio: Specifikacije za cijevi, spojnice i sustav (EN 12666-1:2005)  
Plastics piping system for non-pressure underground drainage and sewerage – Polyethylene (PE) – Part 1: Specifications for pipes, fittings and the system (EN 12666-1:2005)  
- zamijenjena s: HRN EN 12666-1:2011

### **HZN/TO 159, Ergonomija**

HRN EN 13861:2004 en  
Sigurnost strojeva – Smjernice za primjenu ergonomskih norma u dizajniranju strojeva (EN 13861:2002)  
Safety of machinery – Guidance for the application of ergonomics standards in the design of machinery (EN 13861:2002)  
- zamijenjena s: HRN EN 13861:2011

### **HZN/TO 172, Optika i optički instrumenti**

HRN EN ISO 8624:2008 en  
Oftalmološka optika – Okviri za naočale – Mjerni sustav i nazivlje (ISO 8624:2002; EN ISO 8624:2002)  
Ophthalmic optics – Spectacle frames – Measuring system and terminology (ISO 8624:2002; EN ISO 8624:2002)  
- zamijenjena s: HRN EN ISO 8624:2011

HRN ISO 9211-1:2004 en  
Optika i optički instrumenti – Optički slojevi – 1. dio: Definicije (ISO 9211-1:1994)  
Optics and optical instruments – Optical coatings – Part 1: Definitions (ISO 9211-1:1994)  
- zamijenjena s: HRN ISO 9211-1:2011

HRN ISO 9211-2:2004 en  
Optika i optički instrumenti – Optički slojevi – 2. dio: Optička svojstva (ISO 9211-2:1994)  
Optics and optical instruments – Optical coatings – Part 2: Optical properties (ISO 9211-2:1994)  
- zamijenjena s: HRN ISO 9211-2:2011

HRN ISO 9211-3:2004 en  
Optika i optički instrumenti – Optički slojevi – 3. dio: Otpornost na utjecaje okoliša (ISO 9211-3:1994)  
Optics and optical instruments – Optical coatings – Part 3: Environmental durability (ISO 9211-3:1994)  
- zamijenjena s: HRN ISO 9211-3:2011

HRN ISO 9211-4:2004 en  
Optika i optički instrumenti – Optički slojevi – 4. dio: Specifične metode ispitivanja (ISO 9211-4:1996)  
Optics and optical instruments – Optical coatings – Part 4: Specific test methods (ISO 9211-4:1996)  
- zamijenjena s: HRN ISO 9211-4:2011

HRN EN ISO 10943:2008 en  
Oftalmološki instrumenti – Indirektni oftalmoskopi (ISO 10943:2006; EN ISO 10943:2006)  
Ophthalmic instruments – Indirect ophthalmoscopes (ISO 10943:2006; EN ISO 10943:2006)  
- zamijenjena s: HRN EN ISO 10943:2011

HRN EN ISO 14534:2010 en  
Oftalmološka optika – Kontaktne leće i proizvodi za njegu kontaktnih leća – Osnovni zahtjevi (ISO 14534:2002; EN ISO 14534:2009)  
Ophthalmic optics – Contact lenses and contact lens care products – Fundamental requirements (ISO 14534:2002; EN ISO 14534:2009)  
- zamijenjena s: HRN EN ISO 14534:2011

HRN ISO 17123-1:2004 en  
Optika i optički instrumenti – Terenski postupci za ispitivanje geodetskih instrumenata i instrumenata izmjere – 1. dio: Teorija (ISO 17123-1:2002)  
Optics and optical instruments – Field procedures for testing geodetic and surveying instruments – Part 1: Theory (ISO 17123-1:2002)  
- zamijenjena s: HRN ISO 17123-1:2011

### **HZN/TO 178, Dizala, pokretne stube i pokretne trake za osobe**

HRS CEN/TS 81-11:2009 en  
Sigurnosna pravila za konstrukciju i ugradnju dizala – Osnove i tumačenja – 11. dio: Tumačenja u odnosu na EN 81 porodicu norma (CEN/TS 81-11:2009)  
Safety rules for the construction and installation of lifts – Basics and interpretations – Part 11: Interpretations related to EN 81 family of standards (CEN/TS 81-11:2009)  
- zamijenjena s: HRS CEN/TS 81-11:2011

HRN ISO 4190-1:2000 en  
Ugradnja dizala – 1. dio: Dizala I., II., III. i VI. vrste (ISO 4190-1:1999)  
Lift (US: Elevator) installation – Part 1: Class I, II, III i VI (ISO 4190-1:1999)  
- zamijenjena s: HRN ISO 4190-1:2011

### **HZN/TO 179, Zidane konstrukcije**

HRN EN 771-1:2005 en  
Specifikacije za zidne elemente – 1. dio: Opečni zidni elementi (EN 771-1:2003+A1:2005)  
Specification for masonry units – Part 1: Clay masonry units (EN 771-1:2003+A1:2005)  
- zamijenjena s: HRN EN 771-1:2011

HRN EN 771-2:2005 en  
Specifikacije za zidne elemente – 2. dio: Vapnenosilikatni zidni elementi (EN 771-2:2003+A1:2005)  
Specification for masonry units – Part 2: Calcium silicate masonry units (EN 771-2:2003+A1:2005)  
- zamijenjena s: HRN EN 771-2:2011

HRN EN 771-3:2005 en  
Specifikacije za zidne elemente – 3. dio: Betonski zidni elementi (gusti i lagani agregat) (EN 771-3:2003+A1:2005)  
Specification for masonry units – Part 3: Aggregate concrete masonry units (Dense and light-weight aggregates) (EN 771-3:2003+A1:2005)  
- zamijenjena s: HRN EN 771-3:2011

HRN EN 771-4:2004 en  
Specifikacije za zidne elemente – 4. dio: Zidni elementi od porastoga betona (EN 771-4:2003)  
Specification for masonry units – Part 4: Autoclaved aerated concrete masonry units (EN 771-4:2003)  
- zamijenjena s: HRN EN 771-4:2011

HRN EN 771-4:2004/A1:2005 en  
Specifikacije za zidne elemente – 4. dio: Zidni elementi od porastoga betona (EN 771-4:2003/A1:2005)  
Specification for masonry units – Part 4: Autoclaved aerated concrete masonry units (EN 771-4:2003/A1:2005)  
- zamijenjena s: HRN EN 771-4:2011

HRN EN 771-5:2005 en  
Specifikacije za zidne elemente – 5. dio: Zidni elementi od umjetnoga kamena (EN 771-5:2003+A1:2005)  
Specification for masonry units – Part 5: Manufactured stone masonry units (EN 771-5:2003+A1:2005)  
- zamijenjena s: HRN EN 771-5:2011

HRN EN 771-6:2006 en  
Specifikacije za zidne elemente – 6. dio: Zidni elementi od prirodnog kamena (EN 771-6:2005)  
Specification for masonry units – Part 6: Natural stone masonry units (EN 771-6:2005)  
- zamijenjena s: HRN EN 771-6:2011

HRN EN 772-1:2003 en  
Metode ispitivanja zidnih elemenata – 1. dio: Određivanje tlačne čvrstoće (EN 772-1:2000)  
Methods of test for masonry units – Part 1: Determination of compressive strength (EN 772-1:2000)  
- zamijenjena s: HRN EN 772-1:2011

HRN EN 772-11:2003 en  
Metode ispitivanja zidnih elemenata – 11. dio:  
Određivanje kapilarne vodoupojnosti zidnih elemenata od betona, umjetnog i prirodnog kamena i početne vodoupojnosti opečnih zidnih elemenata (EN 772-11:2000)  
Methods of test for masonry units – Part 11:  
Determination of water absorption of aggregate concrete, manufactured stone and natural stone masonry units due to capillary action and the initial rate of water absorption of clay masonry units (EN 772-11:2000)  
- zamijenjena s: HRN EN 772-11:2011

HRN EN 772-11:2003/A1:2004 en  
Metode ispitivanja zidnih elemenata – 11. dio:  
Određivanje kapilarne vodoupojnosti zidnih elemenata od betona, porastoga betona, umjetnog i prirodnog kamena i početne vodoupojnosti opečnih zidnih elemenata (EN 772-11:2000/A1:2004)  
Methods of test for masonry units – Part 11:  
Determination of water absorption of aggregate concrete, autoclaved aerated concrete, manufactured stone and natural stone masonry units due to capillary action and the initial rate of water absorption of clay masonry units (EN 772-11:2000/A1:2004)  
- zamijenjena s: HRN EN 772-11:2011

HRN EN 772-16:2003 en  
Metode ispitivanja zidnih elemenata – 16. dio:  
Određivanje izmjera (EN 772-16:2000)  
Methods of test for masonry units – Part 16:  
Determination of dimensions (EN 772-16:2000)  
- zamijenjena s: HRN EN 772-16:2011

HRN EN 772-16:2003/A1:2006 en  
Metode ispitivanja zidnih elemenata – 16. dio:  
Određivanje izmjera (EN 772-16:2000/A1:2004)  
Methods of test for masonry units – Part 16:  
Determination of dimensions (EN 772-16:2000/A1:2004)  
- zamijenjena s: HRN EN 772-16:2011

HRN EN 772-16:2003/A2:2006 en  
Metode ispitivanja zidnih elemenata – 16. dio:  
Određivanje izmjera (EN 772-16:2000/A2:2005)  
Methods of test for masonry units – Part 16:  
Determination of dimensions (EN 772-16:2000/A2:2005)  
- zamijenjena s: HRN EN 772-16:2011

HRN EN 772-18:2003 en  
Metode ispitivanja zidnih elemenata – 18. dio:  
Određivanje otpornosti na zamrzavanje i odmrzavanje vapnenosilikatnih zidnih elemenata (EN 772-18:2000)  
Methods of test for masonry units – Part 18:  
Determination of freeze-thaw resistance of calcium silicate masonry units (EN 772-18:2000)  
- zamijenjena s: HRN EN 772-18:2011

### **HZN/TO 211, Geoinformacije/Geomatika**

HRI CEN/TR 15449:2008 en  
Geoinformacije – Norme, specifikacije, tehnička izvješća i smjernice, potrebne za implementaciju infrastrukture prostornih podataka (CEN/TR 15449:2006)  
Geographic information – Standards, specifications, technical reports and guidelines, required to implement spatial data infrastructure (CEN/TR 15449:2006)  
- zamijenjena s: HRI CEN/TR 15449:2011

### **HZN/TO 503, Metalni materijali**

HRN EN 10305-4:2008 en  
Precizne čelične cijevi – Tehnički uvjeti isporuke – 4. dio: Bešavne hladno vučene cijevi za hidraulične i pneumatske energetske sustave (EN 10305-4:2003)

Steel tubes for precision applications – Technical delivery conditions – Part 4: Seamless cold drawn tubes for hydraulic and pneumatic power systems (EN 10305-4:2003)  
- zamijenjena s: HRN EN 10305-4:2011

### **HZN/TO 509, Cestovna oprema**

HRN EN 1824:2000 en  
Materijali za oznake na kolniku – Ispitna kola (EN 1824:1998)  
Road marking materials – Road trails (EN 1824:1998)  
- zamijenjena s: HRN EN 1824:2011

HRN EN 12802:2004 en  
Materijali za oznake na kolniku – Laboratorijske metode za utvrđivanje svojstava (EN 12802:2000)  
Road marking materials – Laboratory methods for identification (EN 12802:2000)  
- zamijenjena s: HRN EN 12802:2011

HRN EN 13197:2004 en  
Materijali za oznake na kolniku – Simulatori istrošenosti (EN 13197:2001)  
Road marking materials – Wear simulator (EN 13197:2001)  
- zamijenjena s: HRN EN 13197:2011

HRN EN 13212:2002 en  
Materijali za oznake na kolniku – Zahtjevi za tvorničkom kontrolom proizvodnje (EN 13212:2001)  
Road marking materials – Requirements for the factory production control (EN 13212:2001)  
- zamijenjena s: HRN EN 13212:2011

HRN ENV 13459-1:2004 en  
Materijali za oznake na cesti – Kontrola kvalitete – 1. dio: Uzimanje uzoraka iz skladišta i ispitivanje (ENV 13459-1:1999)  
Road marking materials – Quality control – Part 1: Sampling from storage and testing (ENV 13459-1:1999)  
- zamijenjena s: HRN EN 13459:2011

### **HZN/TO 522, Karakterizacija i zbrinjavanje otpada**

HRN EN 1501-1:2010 en  
Vozila za skupljanje otpada i pripadne naprave za podizanje – Opći i sigurnosni zahtjevi – 1. dio: Vozila za skupljanje otpada sa stražnjim punjenjem (EN 1501-1:1998+A2:2009)  
Refuse collection vehicles and their associated lifting devices – General requirements and safety requirements – Part 1: Rear-end loaded refuse collection vehicles (EN 1501-1:1998+A2:2009)  
- zamijenjena s: HRN EN 1501-1:2011

### **HZN/TO 524, Cestovni prijevoz i prometna telematika**

HRS CEN/TS 15722:2009 en  
Cestovni prijevoz i prometna telematika – Elektronička sigurnost – Najmanji skup podataka za elektroničke hitne pozive iz vozila (MSD) (CEN/TS 15722:2009)  
Road transport and traffic telematics – ESafety – ECall minimum set of data (MSD) (CEN/TS 15722:2009)  
- zamijenjena s: HRN EN 15722:2011

### **HZN/TO 525, Hidroizolacijski materijali i proizvodi za pokrivanje krovova**

HRN EN 544:2008 en  
Bitumenske šindre s mineralnim i/ili sintetičkim ulošcima – Specifikacija proizvoda i metode ispitivanja (EN 544:2005)  
Bitumen shingles with mineral and/or synthetic reinforcements – Product specification and test methods (EN 544:2005)  
- zamijenjena s: HRN EN 544:2011

## **HZN/TO 528, Oprema za željeznice**

- HRN EN 12561-1:2003 en  
Oprema za željeznice – Vagoni cisterne – 1. dio: Označivanje vagon-cisterni za prijevoz opasnih tvari (EN 12561-1:1998)  
Railway applications – Tank wagons – Part 1: Marking of tank wagons for the carriage of dangerous goods (EN 12561-1:1998)  
- zamijenjena s: HRN EN 12561-1:2011
- HRN EN 12561-2:2004 en  
Oprema za željeznice – Vagoni cisterne – 2. dio: Uređaji za donje pražnjenje tekućina uključivši povrat para (EN 12561-2:2002)  
Railway applications – Tank wagons – Part 2: Bottom emptying devices for liquid products including vapour return (EN 12561-2:2002)  
- zamijenjena s: HRN EN 12561-2:2011
- HRN EN 12561-3:2004 en  
Oprema za željeznice – Vagoni cisterne – 3. dio: Donji uređaji za punjenje i pražnjenje za ukapljene plinove pod tlakom (EN 12561-3:2002)  
Railway applications – Tank wagons – Part 3: Bottom filling and emptying devices for gases liquefied under pressure (EN 12561-3:2002)  
- zamijenjena s: HRN EN 12561-3:2011
- HRN EN 12561-4:2004 en  
Oprema za željeznice – Vagoni cisterne – 4. dio: Gornji uređaji za gornje pražnjenje i punjenje tekućina (EN 12561-4:2002)  
Railway applications – Tank wagons – Part 4: Top devices for top emptying and filling of liquid products (EN 12561-4:2002)  
- zamijenjena s: HRN EN 12561-4:2011
- HRN EN 12561-5:2004 en  
Oprema za željeznice – Vagoni cisterne – 5. dio: Gornji uređaji za donje pražnjenje i gornje punjenje tekućina (EN 12561-5:2002)  
Railway applications – Tank wagons – Part 5: Top devices for bottom emptying and top filling of liquid products (EN 12561-5:2002)  
- zamijenjena s: HRN EN 12561-5:2011
- HRN EN 12561-6:2008 en  
Oprema za željeznice – Vagoni cisterne – 6. dio: Provlake (EN 12561-6:2002)  
Railway applications – Tank wagons – Part 6: Manholes (EN 12561-6:2002)  
- zamijenjena s: HRN EN 12561-6:2011
- HRN EN 12561-7:2004 en  
Oprema za željeznice – Vagoni cisterne – 7. dio: Platforme i ljestve (EN 12561-7:2004)  
Railway applications – Tank wagons – Part 7: Platforms and ladders (EN 12561-7:2004)  
- zamijenjena s: HRN EN 12561-7:2011
- HRN EN 12561-8:2004 en  
Oprema za željeznice – Vagoni cisterne – 8. dio: Priklučci grijanja (EN 12561-8:2004)  
Railway applications – Tank wagons – Part 8: Heating connections (EN 12561-8:2004)  
- zamijenjena s: HRN EN 12561-8:2011

## **HZN/TO 531, Plastika i guma**

- HRN ISO 4649:2008 en  
Guma i elastoplastomeri – Određivanje abrazijske otpornosti uređajem s rotirajućim cilindričnim bubnjem (ISO 4649:2002)  
Rubber, vulcanized or thermoplastic – Determination of abrasion resistance using a rotating cylindrical drum device (ISO 4649:2002)  
- zamijenjena s: HRN ISO 4649:2011
- HRN ISO 23529:2008 en  
Guma – Opći postupci pripreme i kondicioniranja ispitnih uzoraka za fizikalne ispitne metode (ISO 23529:2004)

Rubber – General procedures for preparing and conditioning test pieces for physical test methods (ISO 23529:2004)  
- zamijenjena s: HRN ISO 23529:2011

- HRN ISO 23794:2008 en  
Guma i elastoplastomeri – Abrazijska ispitivanja – Upute (ISO 23794:2003)  
Rubber, vulcanized or thermoplastic – Abrasion testing – Guidance (ISO 23794:2003)  
- zamijenjena s: HRN ISO 23794:2011

## **HZN/TO 532, Dimnjaci**

- HRN EN 1858:2008 en  
Dimnjaci – Dijelovi – Betonski blokovi dimnjaka (EN 1858:2008)  
Chimneys – Components – Concrete flue blocks (EN 1858:2008)  
- zamijenjena s: HRN EN 1858:2011
- HRN EN 12446:2003 en  
Dimnjaci – Dijelovi – Elementi betonskog plašta (EN 12446:2003)  
Chimneys – Components – Concrete outer wall elements (EN 12446:2003)  
- zamijenjena s: HRN EN 12446:2011

## **HZN/TO 543, Poštanske usluge**

- HRN EN 14142-1:2004 en  
Poštanske usluge – Adresne baze podataka – 1. dio: Sastavni dijelovi poštanske adrese (EN 14142-1:2003)  
Postal services – Address databases – Part 1: Components of postal addresses (EN 14142-1:2003)  
- zamijenjena s: HRN EN 14142-1:2011

## **HZN/TO 548, Konstrukcijski eurokodovi**

- HRN EN 1990:2008/Ispr.1:2011 en  
Eurokod: Osnove projektiranja konstrukcija (EN 1990:2002/A1:2005/AC:2010)  
Eurocode: Basis of structural design (EN 1990:2002/A1:2005/AC:2010)  
- zamijenjena s: HRN EN 1990:2011

## **HZN/TO 554, Obrada otpadnih voda**

- HRN EN 773:2005 en  
Opći zahtjevi za dijelove koji se upotrebljavaju za cijevi te odvodne i kanalizacijske sustave pod hidrauličkim tlakom (EN 773:1999)  
General requirements for components used in hydraulically pressurized discharge pipes, drains and sewers (EN 773:1999)  
- zamijenjena s: HRN EN 476:2011
- HRN EN 1293:2008 en  
Opći zahtjevi za sastavne dijelove u pneumatski tlačnim ispusnim cjevovodima, odvodima i kanalizaciji (EN 1293:1999)  
General requirements for components used in pneumatically pressurized discharge pipes, drains and sewers (EN 1293:1999)  
- zamijenjena s: HRN EN 476:2011
- HRN EN 13508-2:2006 en  
Uvjeti za sustave odvodnje izvan zgrada – 2. dio: Sustav kodiranja optičkog nadzora (EN 13508-2:2003)  
Conditions of drain and sewer systems outside buildings – Part 2: Visual inspection coding system (EN 13508-2:2003)  
- zamijenjena s: HRN EN 13508-2:2011
- HRN EN 13508-2/AC:2007 en  
Uvjeti za sustave odvodnje izvan zgrada – 2. dio: Sustav kodiranja optičkog nadzora (EN 13508-2:2003/AC:2007)

Conditions of drain and sewer systems outside buildings – Part 2: Visual inspection coding system (EN 13508-2:2003/AC:2007)  
- zamijenjena s: HRN EN 13508-2:2011

### **HZN/TO 559, Zaporni, regulacijski i sigurnosni uređaji**

HRN EN 593:2010 en  
Industrijski zaporni uređaji – Metalne leptiraste zaklopke (EN 593:2009)  
Industrial valves – Metallic butterfly valves (EN 593:2009)  
- zamijenjena s: HRN EN 593:2011

### **HZN/TO 560, Tekstilni proizvodi**

HRN ISO 2076:2003 en  
Tekstil – Umjetna vlakna – Generički nazivi (ISO 2076:1999)  
Textiles – Man-made fibres – Generic names (ISO 2076:1999)  
- zamijenjena s: HRN ISO 2076:2011

HRN ISO 3932:2003 en  
Tekstil – Tkanine – Mjerenje širine komada (ISO 3932:1976)  
Textiles – Woven fabrics – Measurement of width of pieces (ISO 3932:1976)  
- zamijenjena s: HRN ISO 22198:2011

HRN ISO 3933:2003 en  
Tekstil – Tkanine – Mjerenje duljine komada (ISO 3933:1976)  
Textiles – Woven fabrics – Measurement of length of pieces (ISO 3933:1976)  
- zamijenjena s: HRN ISO 22198:2011

HRN ISO 7768:2005 en  
Tekstil – Metoda ocjene izgleda tkanina obrađenih protiv gužvanja nakon pranja i sušenja u kućanstvu (ISO 7768:1985)  
Textiles – Method for assessing the appearance of durable press fabrics after domestic washing and drying (ISO 7768:1985)  
- zamijenjena s: HRN ISO 7768:2011

HRN ISO 7769:2005 en  
Tekstil – Metoda ocjene izgleda nabora na proizvodima obrađenim protiv gužvanja nakon pranja i sušenja u kućanstvu (ISO 7769:1992)  
Textiles – Method for assessing the appearance of creases in durable-press products after domestic washing and drying (ISO 7769:1992)  
- zamijenjena s: HRN ISO 7769:2011

HRN ISO 7770:2005 en  
Tekstil – Metoda ocjene izgleda šavova na proizvodima obrađenim protiv gužvanja nakon pranja i sušenja u kućanstvu (ISO 7770:1985)  
Textiles – Method for assessing the appearance of seams in durable press products after domestic washing and drying (ISO 7770:1985)  
- zamijenjena s: HRN ISO 7770:2011

HRN ISO 9867:2003 en  
Tekstil – Procjena oporavka nabora na plošnom tekstu – Metoda izgleda (ISO 9867:1991)  
Textiles – Evaluation of the wrinkle recovery of fabrics – Appearance method (ISO 9867:1991)  
- zamijenjena s: HRN ISO 9867:2011

HRN EN ISO 14184-2:2008 en  
Tekstilije – Određivanje formaldehida – 2. dio: Slobodni formaldehid (metoda apsorpcije parom) (ISO 14184-2:1998; EN ISO 14184-2:1998)  
Textiles – Determination of formaldehyde – Part 2: Released formaldehyde (vapour absorption method) (ISO 14184-2:1998; EN ISO 14184-2:1998)  
- zamijenjena s: HRN EN ISO 14184-2:2011

### **HZN/TO 561, Kotlovi, posude pod tlakom, cjevovodi i plinske boce**

HRN EN 12953-6:2004 en  
Dimnocijevni kotlovi – 6. dio: Zahtjevi za opremu kotla (EN 12953-6:2002)  
Shell boilers – Part 6: Requirements for equipment for the boiler (EN 12953-6:2002)  
- zamijenjena s: HRN EN 12953-6:2011

### **HZN/TO 563, Sigurnost strojeva**

HRN EN 1010-1:2008 en  
Safety of machinery – Safety requirements for the design and construction of printing and paper converting machines – Part 1: Common requirements (EN 1010-1:2004)  
- zamijenjena s: HRN EN 1010-1:2011

### **HZN/TO 564, Uljarice, biljna i životinjska ulja i masti**

HRN EN ISO 3656:2004 en  
Životinjske i biljne masti i ulja – Određivanje apsorbanacija u ultraljubičastom spektru izraženih kao specifična UV ekstinkcija (ISO 3656:2002; EN ISO 3656:2002)  
Animal and vegetable fats and oils – Determination of ultraviolet absorbance expressed as specific UV extinction (ISO 3656:2002; EN ISO 3656:2002)  
- zamijenjena s: HRN EN ISO 3656:2011

HRN EN ISO 3961:2004 en  
Životinjske i biljne masti i ulja – Određivanje jednog broja (ISO 3961:1996; EN ISO 3961:1999)  
Animal and vegetable fats and oils – Determination of iodine value (ISO 3961:1996; EN ISO 3961:1999)  
- zamijenjena s: HRN EN ISO 3961:2011

HRN EN ISO 17932:2007 en  
Životinjske i biljne masti i ulja – Određivanje vrijednosti indeksa bijeljenja (ISO 17932:2005; EN ISO 17932:2007)  
Animal and vegetable fats and oils – Determination of the deterioration of bleachability index (DOBI) (ISO 17932:2005; EN ISO 17932:2007)  
- zamijenjena s: HRN EN ISO 17932:2011

### **HZN/TO E79, Alarmni sustavi**

HRN CLC/TS 50131-2-2:2005 en  
Alarmni sustavi – Protuprovalni sustavi – Dio 2-2: Zahtjevi za pasivne infracrvene detektore (CLC/TS 50131-2-2:2004)  
Alarm systems – Intrusion systems – Part 2-2: Requirements for passive infrared detectors (CLC/TS 50131-2-2:2004)  
- zamijenjena s: HRN EN 50131-2-2:2008

HRN CLC/TS 50131-2-3:2005 en  
Alarmni sustavi – Protuprovalni sustavi – Dio 2-3: Zahtjevi za mikrovalne detektore (CLC/TS 50131-2-3:2004)  
Alarm systems – Intrusion systems – Part 2-3: Requirements for microwave detectors (CLC/TS 50131-2-3:2004)  
- zamijenjena s: HRN EN 50131-2-3:2010

HRN CLC/TS 50131-2-4:2005 en  
Alarmni sustavi – Protuprovalni sustavi – Dio 2-4: Zahtjevi za kombinirane pasivne infracrvene i mikrovalne detektore (CLC/TS 50131-2-4:2004)  
Alarm systems – Intrusion systems – Part 2-4: Requirements for combined passive infrared and microwave detectors (CLC/TS 50131-2-4:2004)  
- zamijenjena s: HRN EN 50131-2-4:2008

HRN CLC/TS 50131-2-5:2005 en  
Alarmni sustavi – Protuprovalni sustavi – Dio 2-5: Zahtjevi za kombinirane pasivne infracrvene i ultrazvučne detektore (CLC/TS 50131-2-5:2004)

Alarm systems – Intrusion systems – Part 2-5:  
Requirements for combined passive infrared and  
ultrasonic detectors (CLC/TS 50131-2-5:2004)  
- zamijenjena s: HRN EN 50131-2-5:2010

HRN CLC/TS 50131-2-6:2005 en  
Alarmni sustavi – Protuprovalni sustavi – Dio 2-6:  
Zahtjevi za magnetske kontakte za detekciju otvaranja  
(CLC/TS 50131-2-6:2004)  
Alarm systems – Intrusion systems – Part 2-6:  
Requirements for opening contacts (magnetic)  
(CLC/TS 50131-2-6:2004)  
- zamijenjena s: HRN EN 50131-2-6:2010

HRN CLC/TS 50131-7:2004 en  
Alarmni sustavi – Protuprovalni sustavi – 7. Dio:  
Smjernice za primjenu (CLC/TS 50131-7:2003)  
Alarm systems – Intrusion systems – Part 7: Application  
guidelines (CLC/TS 50131-7:2003)  
- zamijenjena s: HRS CLC/TS 50131-7:2010

### **HZN/TU A1, Usluge, proizvodi za kućanstvo i slobodno vrijeme 1**

HRN EN 131-1:2008 en  
Ladders – Part 1: Terms, types, functional sizes  
(EN 131-1:2007)  
- zamijenjena s: HRN EN 131-1:2011

### **HZN/TU I2, Strojarstvo 2**

HRN EN 22858:2008 en  
End-suction centrifugal pumps (rating 16 bar) –  
Designation, nominal duty point and dimensions  
(ISO 2858:1975; EN 22858:1993)  
- zamijenjena s: HRN EN ISO 2858:2010

### **HZN/TU S1, Zdravlje, okoliš i medicinska oprema 1**

HRN EN 455-2:2010 en  
Medical gloves for single use – Part 2: Requirements  
and testing for physical properties (EN 455-2:2009)  
- zamijenjena s: HRN EN 455-2:2011

HRN EN ISO 1797-1:2008 en  
Dental rotary instruments – Shanks – Part 1: Shanks  
made of metals (ISO 1797-1:1992+Amd 1:1997;  
EN ISO 1797-1:1995+A1:1999)  
- zamijenjena s: HRN EN ISO 1797-1:2011

HRN EN ISO 7494-1:2008 en  
Dentistry – Dental units – Part 1: General requirements  
and test methods (ISO 7494-1:2004;  
EN ISO 7494-1:2005)  
- zamijenjena s: HRN EN ISO 7494-1:2011

HRN EN ISO 9999:2008 en  
Assistive products for persons with disability –  
Classification and terminology (ISO 9999:2007;  
EN ISO 9999:2007)  
- zamijenjena s: HRN EN ISO 9999:2011

HRN EN ISO 10271:2008 en  
Dental metallic materials – Corrosion test methods  
(ISO 10271:2001+Cor 1:2005;  
EN ISO 10271:2001+AC:2006)  
- zamijenjena s: HRN EN ISO 10271:2011

### **HZN/TU T1, Prijevoz, rukovanje materijalima i pakiranje 1**

HRN EN 4604-001:2008 en  
Aerospace series – Cable, electrical, for signal  
transmission – Part 001: Technical specification  
(EN 4604-001:2006)  
- zamijenjena s: HRN EN 4604-001:2011

## 2 Rezultati međunarodne i europske normizacije razvrstani po predmetnom ustroju

### 01.040.17 Metrologija i mjerenje. Fizikalne pojave (Rječnici)

#### Međunarodna normizacija (ISO)

ISO 772:2011  
Hydrometry – Vocabulary and symbols

### 01.040.29 Elektrotehnika (Rječnici)

#### Europska normizacija

EN 60034-16-1:2011  
Rotating electrical machines – Part 16-1: Excitation systems for synchronous machines – Definitions (IEC 60034-16-1:2011)

### 01.040.31 Elektronika (Rječnici)

#### Međunarodna normizacija (IEC)

IEC/TS 61994-2:2011  
Piezoelectric, dielectric and electrostatic devices and associated materials for frequency control, selection and detection – Glossary – Part 2: Piezoelectric and dielectric filters

IEC 61988-1:2011  
Plasma display panels – Part 1: Terminology and letter symbols

### 01.040.85 Papirna tehnologija (Rječnici)

#### Međunarodna normizacija (ISO)

ISO 12625-1:2011  
Tissue paper and tissue products – Part 1: General guidance on terms

### 01.040.91 Građevna gradiva i gradnja (Rječnici)

#### Europska normizacija

EN 12665:2011  
Light and lighting – Basic terms and criteria for specifying lighting requirements

### 01.040.97 Kućna i poslovna oprema. Zabava. Šport (Rječnici)

#### Europska normizacija

EN 131-1:2007+A1:2011  
Ladders – Part 1: Terms, types, functional sizes

### 01.070 Označivanje bojama

#### Međunarodna normizacija (ISO)

ISO 7010:2011  
Graphical symbols – Safety colours and safety signs – Registered safety signs

#### Europska normizacija

EN 1089-3:2011  
Transportable gas cylinders – Gas cylinder identification (excluding LPG) – Part 3: Colour coding

### 01.080.10 Znakovi za javne obavijesti

#### Međunarodna normizacija (ISO)

ISO 7010:2011  
Graphical symbols – Safety colours and safety signs – Registered safety signs

ISO 2575:2010/Amd 1:2011  
Road vehicles – Symbols for controls, indicators and tell-tales

#### Međunarodna normizacija (IEC)

IEC 80416-3:2002/am1:2011  
Basic principles for graphical symbols for use on equipment – Part 3: Guidelines for the application of graphical symbols

### 01.100.20 Građevni crteži

#### Međunarodna normizacija (ISO)

ISO 8015:2011  
Geometrical product specifications (GPS) – Fundamentals – Concepts, principles and rules

#### Europska normizacija

EN ISO 8015:2011  
Geometrical product specifications (GPS) – Fundamentals – Concepts, principles and rules (ISO 8015:2011)

### 01.100.25 Crteži u elektrotehnici i elektronici

#### Međunarodna normizacija (IEC)

IEC 60191-6-12:2011  
Mechanical standardization of semiconductor devices – Part 6-12: General rules for the preparation of outline drawings of surface mounted semiconductor device packages – Design guidelines for fine-pitch lan

#### Europska normizacija

EN 61837-2:2011  
Surface mounted piezoelectric devices for frequency control and selection – Standard outlines and terminal lead connections – Part 2: Ceramic enclosures (IEC 61837-2:2011)

### 01.120 Normizacija. Opća pravila

#### Europska normizacija

CEN/CENELEC Guide 20:2011  
Guide on membership criteria of CEN and CENELEC

### 03.100.01 Ustrojstvo poduzeća i upravljanje poduzećem općenito

#### Međunarodna normizacija (ISO)

ISO/TR 22312:2011  
Societal security – Technological capabilities

### 03.100.10 Nabava. Opskrba. Upravljanje zalihama

#### Međunarodna normizacija (ISO)

ISO 28002:2011  
Security management systems for the supply chain – Development of resilience in the supply chain – Requirements with guidance for use

### 03.100.30 Upravljanje ljudskim vrelima

#### Međunarodna normizacija (ISO)

ISO/IEC 19788-2:2011  
Information technology – Learning, education and training – Metadata for learning resources – Part 2: Dublin Core elements

### 03.120.20 Potvrđivanje proizvoda i tvrtki. Procjena sukladnosti

#### Europska normizacija

EN 9101:2011  
Quality Management Systems – Audit Requirements for Aviation, Space, and Defence Organizations

### 03.120.30 Primjena statističkih metoda

#### Međunarodna normizacija (ISO)

ISO 2859-1:1999/Amd 1:2011  
Sampling procedures for inspection by attributes – Part 1: Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection

ISO 7870-4:2011  
Control charts – Part 4: Cumulative sum charts

ISO/TR 12888:2011  
Selected illustrations of gauge repeatability and reproducibility studies

### 03.220.01 Prijevoz općenito

#### Međunarodna normizacija (ISO)

ISO 14825:2011  
Intelligent transport systems – Geographic Data Files (GDF) – GDF5.0

ISO 29282:2011  
Intelligent transport systems – Communications access for land mobiles (CALM) – Satellite networks

#### Europska normizacija

EN ISO 14825:2011  
Intelligent transport systems – Geographic Data Files (GDF) – GDF5.0 (ISO 14825:2011)

### 03.220.20 Cestovni prijevoz

#### Europska normizacija

EN 15722:2011  
Intelligent transport systems – eSafety – eCall minimum set of data (MSD)

### 03.220.30 Željeznički prijevoz

#### Međunarodna normizacija (IEC)

IEC 62290-2:2011  
Railway applications – Urban guided transport management and command/control systems – Part 2: Functional requirements specification

### 07.060 Geologija. Meteorologija. Hidrologija

#### Europska normizacija

EN 50536:2011/AC:2011  
Protection against lightning – Thunderstorm warning systems

### 07.100.30 Mikrobiologija hrane

#### Međunarodna normizacija (ISO)

ISO 22118:2011  
Microbiology of food and animal feeding stuffs – Polymerase chain reaction (PCR) for the detection and quantification of food-borne pathogens – Performance characteristics

ISO 22119:2011  
Microbiology of food and animal feeding stuffs – Real-time polymerase chain reaction (PCR) for the detection of food-borne pathogens – General requirements and definitions

#### Europska normizacija

EN ISO 22118:2011  
Microbiology of food and animal feeding stuffs – Polymerase chain reaction (PCR) for the detection and quantification of food-borne pathogens – Performance characteristics (ISO 22118:2011)

EN ISO 22119:2011  
Microbiology of food and animal feeding stuffs – Real-time polymerase chain reaction (PCR) for the detection of food-borne pathogens – General requirements and definitions (ISO 22119:2011)

### 11.040.25 Injekcioni uređaji. Igle. Kateteri

#### Međunarodna normizacija (ISO)

ISO 23908:2011  
Sharps injury protection – Requirements and test methods – Sharps protection features for single-use hypodermic needles, introducers for catheters and needles used for blood sampling

#### Europska normizacija

EN ISO 23908:2011  
Sharps injury protection – Requirements and test methods – Sharps protection features for single-use hypodermic needles, introducers for catheters and needles used for blood sampling (ISO 23908:2011)

### 11.040.40 Implantati za kirurgiju, protetiku i ortotiku

#### Međunarodna normizacija (ISO)

ISO 7207-2:2011  
Implants for surgery – Components for partial and total knee joint prostheses – Part 2: Articulating surfaces made of metal, ceramic and plastics materials

### 11.040.50 Radiografska i druga dijagnostička oprema

#### Međunarodna normizacija (IEC)

IEC 60601-2-54:2009/Corr.2:2011  
Medical electrical equipment – Part 2-54: Particular requirements for the basic safety and essential performance of X-ray equipment for radiography and radioscopy

IEC 60601-2-54:2009/Corr.1:2011  
Medical electrical equipment – Part 2-54: Particular requirements for the basic safety and essential performance of X-ray equipment for radiography and radioscopy

## 11.040.60 Terapeutska oprema

### Međunarodna normizacija (IEC)

IEC 60601-2-31:2008/am1:2011

Medical electrical equipment – Part 2-31: Particular requirements for the basic safety and essential performance of external cardiac pacemakers with internal power source

## 11.040.99 Druga medicinska oprema

### Europska normizacija

EN ISO 23908:2011

Sharps injury protection – Requirements and test methods – Sharps protection features for single-use hypodermic needles, introducers for catheters and needles used for blood sampling (ISO 23908:2011)

## 11.060.10 Zubarska gradiva

### Međunarodna normizacija (ISO)

ISO 10271:2011

Dentistry – Corrosion test methods for metallic materials

ISO 15912:2006/Amd 1:2011

Dentistry – Casting investments and refractory die materials – Amendment 1: Requirement and test method for adequacy of expansion of Type 1 and Type 2 materials

ISO/TR 28642:2011

Dentistry – Guidance on colour measurement

### Europska normizacija

EN ISO 15912:2006/A1:2011

Dentistry – Casting investments and refractory die materials – Amendment 1: Requirement and test method for adequacy of expansion of Type 1 and Type 2 materials (ISO 15912:2006/Amd 1:2011)

## 11.060.20 Zubarska oprema

### Međunarodna normizacija (ISO)

ISO 6875:2011

Dentistry – Patient chair

### Europska normizacija

EN ISO 6875:2011

Dentistry – Patient chair (ISO 6875:2011)

## 11.060.25 Zubarski instrumenti

### Međunarodna normizacija (ISO)

ISO 7711-2:2011

Dentistry – Rotary diamond instruments – Part 2: Discs

### Europska normizacija

EN ISO 7711-2:2011

Dentistry – Rotary diamond instruments – Part 2: Discs (ISO 7711-2:2011)

## 11.080.01 Sterilizacija i dezinfekcija općenito

### Europska normizacija

EN ISO 25424:2011

Sterilization of medical devices – Low temperature steam and formaldehyde – Requirements for development, validation and routine control of a sterilization process for medical devices (ISO 25424:2009)

## 11.080.20 Dezinfektanti i antiseptici

### Međunarodna normizacija (ISO)

ISO 14160:2011

Sterilization of health care products – Liquid chemical sterilizing agents for single-use medical devices utilizing animal tissues and their derivatives – Requirements for characterization, development, validation and routine control of a sterilization process for medical devices

### Europska normizacija

EN ISO 14160:2011

Sterilization of health care products – Liquid chemical sterilizing agents for single-use medical devices utilizing animal tissues and their derivatives – Requirements for characterization, development, validation and routine control of a sterilization process for medical devices (ISO 14160:2011)

## 11.100.20 Biološka ocjena medicinskih uređaja

### Međunarodna normizacija (ISO)

ISO 14155:2011/Cor 1:2011

Clinical investigation of medical devices for human subjects – Good clinical practice; Technical Corrigendum 1

### Europska normizacija

EN ISO 14155:2011/AC:2011

Clinical investigation of medical devices for human subjects – Good clinical practice – Technical Corrigendum 1 (ISO 14155:2011/Cor 1:2011)

## 11.180.01 Pomoć za invalidne i hendikepirane osobe općenito

### Međunarodna normizacija (ISO)

ISO 9999:2011

Assistive products for persons with disability – Classification and terminology

### Europska normizacija

EN ISO 9999:2011

Assistive products for persons with disability – Classification and terminology (ISO 9999:2011)

## 11.180.99 Druge norme povezane s pomoći za invalidne i hendikepirane osobe

### Međunarodna normizacija (ISO)

ISO 11156:2011

Packaging – Accessible design – General

## 11.200 Nadzor nad rađanjem. Mehanička kontracepcijska sredstva

### Međunarodna normizacija (ISO)

- ISO 7439:2011  
Copper-bearing contraceptive intrauterine devices – Requirements and tests
- ISO 25841:2011  
Female condoms – Requirements and test methods
- ISO 29942:2011  
Prophylactic dams – Requirements and test methods

### Europska normizacija

- EN ISO 7439:2011  
Copper-bearing contraceptive intrauterine devices – Requirements and tests (ISO 7439:2011)

## 13.020.10 Upravljanje okolišem

### Međunarodna normizacija (ISO)

- ISO 14006:2011  
Environmental management systems – Guidelines for incorporating ecodesign

### Europska normizacija

- EN ISO 14006:2011  
Environmental management systems – Guidelines for incorporating ecodesign (ISO 14006:2011)

## 13.030.99 Druge norme koje se odnose na otpad

### Europska normizacija

- CEN/TR 16184:2011  
Characterization of Waste – State-of-the-art document – Analysis of eluates

## 13.040.20 Kakvoća zraka u okolišu

### Međunarodna normizacija (ISO)

- ISO 16000-18:2011  
Indoor air – Part 18: Detection and enumeration of moulds – Sampling by impaction
- ISO 16000-25:2011  
Indoor air – Part 25: Determination of the emission of semi-volatile organic compounds by building products – Micro-chamber method

## 13.060.50 Ispitivanje voda na kemijske tvari

### Međunarodna normizacija (ISO)

- ISO 11206:2011  
Water quality – Determination of dissolved bromate – Method using ion chromatography (IC) and post column reaction (PCR)
- ISO 28540:2011  
Water quality – Determination of 16 polycyclic aromatic hydrocarbons (PAH) in water – Method using gas chromatography with mass spectrometric detection (GC-MS)

## 13.080.01 Kakvoća tla i pedologija općenito

### Europska normizacija

- EN ISO 16133:2011  
Soil quality – Guidance on the establishment and maintenance of monitoring programmes (ISO 16133:2004)
- EN ISO 17402:2011  
Soil quality – Requirements and guidance for the selection and application of methods for the assessment of bioavailability of contaminants in soil and soil materials (ISO 17402:2008)

## 13.080.10 Kemijske značajke tla

### Europska normizacija

- EN ISO 11260:2011  
Soil quality – Determination of effective cation exchange capacity and base saturation level using barium chloride solution (ISO 11260:1994+Cor 1:1996)
- EN ISO 14254:2011  
Soil quality – Determination of exchangeable acidity in barium chloride extracts (ISO 14254:2001)
- EN ISO 16703:2011  
Soil quality – Determination of content of hydrocarbon in the range C10 to C40 by gas chromatography (ISO 16703:2004)

## 13.080.30 Biologijska svojstva tla

### Europska normizacija

- EN ISO 14240-1:2011  
Soil quality – Determination of soil microbial biomass – Part 1: Substrate-induced respiration method (ISO 14240-1:1997)
- EN ISO 14240-2:2011  
Soil quality – Determination of soil microbial biomass – Part 2: Fumigation-extraction method (ISO 14240-2:1997)
- EN ISO 15952:2011  
Soil quality – Effects of pollutants on juvenile land snails (Helicidae) – Determination of the effects on growth by soil contamination (ISO 15952:2006)
- EN ISO 16072:2011  
Soil quality – Laboratory methods for determination of microbial soil respiration (ISO 16072:2002)

## 13.080.40 Hidrologijska svojstva tla

### Europska normizacija

- EN ISO 15175:2011  
Soil quality – Characterization of soil related to groundwater protection (ISO 15175:2004)

## 13.180 Ergonomija

### Međunarodna normizacija (ISO)

- ISO 9241-420:2011  
Ergonomics of human-system interaction – Part 420: Selection of physical input devices
- ISO 9241-910:2011  
Ergonomics of human-system interaction – Part 910: Framework for tactile and haptic interaction

## Europska normizacija

- EN ISO 9241-420:2011  
Ergonomics of human-system interaction – Part 420:  
Selection of physical input devices  
(ISO 9241-420:2011)
- EN ISO 9241-910:2011  
Ergonomics of human-system interaction – Part 910:  
Framework for tactile and haptic interaction  
(ISO 9241-910:2011)

### 13.220.20 Oprema za zaštitu od požara

#### Međunarodna normizacija (ISO)

- ISO 7240-6:2011  
Fire detection and alarm systems – Part 6: Carbon  
monoxide fire detectors using electro-chemical cells
- ISO 7240-11:2011  
Fire detection and alarm systems – Part 11: Manual  
call points
- ISO 21927-10:2011  
Smoke and heat control systems – Part 10: Specification  
for power output devices

### 13.230 Zaštita od eksplozija

#### Europska normizacija

- EN 1127-1:2011  
Explosive atmospheres – Explosion prevention  
and protection – Part 1: Basic concepts and  
methodology
- EN 13463-5:2011  
Non-electrical equipment intended for use in  
potentially explosive atmospheres – Part 5: Protection  
by constructional safety 'c'
- EN 16009:2011  
Flameless explosion venting devices

### 13.280 Zaštita od zračenja

#### Međunarodna normizacija (IEC)

- IEC 60825-4ed2.2:2011  
Safety of laser products – Part 4: Laser guards

### 13.300 Zaštita od opasnih tvari

#### Europska normizacija

- EN 12561-1:2011  
Railway applications – Tank wagons – Part 1:  
Identification plates for tank wagons for the carriage  
of dangerous goods
- EN 12561-2:2011  
Railway applications – Tank wagons – Part 2: Bottom  
emptying devices for liquid products including vapour  
return
- EN 12561-3:2011  
Railway applications – Tank wagons – Part 3: Bottom  
filling and emptying devices for gases liquefied under  
pressure
- EN 12561-4:2011  
Railway applications – Tank wagons – Part 4: Devices  
for top filling and emptying of liquid products
- EN 12561-5:2011  
Railway applications – Tank wagons – Part 5: Devices  
for vapour return while filling or emptying of liquid  
products
- EN 12561-6:2011  
Railway applications – Tank wagons – Part 6:  
Manholes

### 13.310 Zaštita od kriminala

#### Europska normizacija

- EN 1300:2004+A1:2011  
Secure storage units – Classification for high security  
locks according to their resistance to unauthorized  
opening

### 13.320 Alarmni sustavi i sustavi uzbunjivanja

#### Europska normizacija

- EN 50130-4:2011  
Alarm systems – Part 4: Electromagnetic compatibility  
– Product family standard: Immunity requirements for  
components of fire, intruder, hold up, CCTV, access  
control and social alarm systems
- EN 50130-5:2011  
Alarm systems – Part 5: Environmental test methods

### 13.340.10 Zaštitna odjeća

#### Međunarodna normizacija (ISO)

- ISO 22488:2011  
Ships and marine technology – Shipboard fire-fighters'  
outfits (protective clothing, gloves, boots and helmet)

### 13.340.99 Drugi zaštitni uređaji

#### Europska normizacija

- EN 341:2011  
Personal fall protection equipment – Descender  
devices for rescue

### 17.040.30 Mjerila

#### Međunarodna normizacija (ISO)

- ISO 10360-7:2011  
Geometrical product specifications (GPS) – Acceptance  
and reverification tests for coordinate measuring  
machines (CMM) – Part 7: CMMs equipped with  
imaging probing systems
- ISO 16610-21:2011  
Geometrical product specifications (GPS) – Filtration  
– Part 21: Linear profile filters: Gaussian filters
- ISO 13385-1:2011  
Geometrical product specifications (GPS) – Dimensional  
measuring equipment – Part 1: Callipers; Design and  
metrological characteristics
- ISO 13385-2:2011  
Geometrical product specifications (GPS) – Dimensional  
measuring equipment – Part 2: Calliper depth gauges;  
Design and metrological characteristics

#### Europska normizacija

- EN ISO 10360-7:2011  
Geometrical product specifications (GPS) – Acceptance  
and reverification tests for coordinate measuring  
machines (CMM) – Part 7: CMMs equipped with  
imaging probing systems (ISO 10360-7:2011)
- EN ISO 13385-1:2011  
Geometrical product specifications (GPS) – Dimensional  
measuring equipment – Part 1: Callipers; Design and  
metrological characteristics (ISO 13385-1:2011)
- EN ISO 13385-2:2011  
Geometrical product specifications (GPS) – Dimensional  
measuring equipment – Part 2: Calliper depth gauges;  
Design and metrological characteristics  
(ISO 13385-2:2011)

## 17.120.20 Protok u otvorenim kanalima

### Međunarodna normizacija (ISO)

ISO 772:2011

Hydrometry – Vocabulary and symbols

## 17.140.20 Buka koju proizvode strojevi i oprema

### Međunarodna normizacija (ISO)

ISO 10302-2:2011

Acoustics – Measurement of airborne noise emitted and structure-borne vibration induced by small air-moving devices – Part 2: Structure-borne vibration measurements

## 17.140.50 Elektroakustika

### Međunarodna normizacija (IEC)

IEC 60268-16:2011

Sound system equipment – Part 16: Objective rating of speech intelligibility by speech transmission index

## 17.160 Vibracije, udari i mjerenja vibracija

### Međunarodna normizacija (ISO)

ISO 7626-1:2011

Mechanical vibration and shock – Experimental determination of mechanical mobility – Part 1: Basic terms and definitions, and transducer specifications

## 17.180.30 Optička mjerila

### Europska normizacija

EN 62129-2:2011

Calibration of wavelength/optical frequency measurement instruments – Part 2: Michelson interferometer single wavelength meters (IEC 62129-2:2011)

## 17.220.20 Mjerenje električnih i magnetskih veličina

### Međunarodna normizacija (IEC)

IEC 61557-13:2011

Electrical safety in low voltage distribution systems up to 1 000 V a.c. and 1 500 V d.c. – Equipment for testing, measuring or monitoring of protective measures – Part 13: Hand-held and hand-manipulated current clamps and sensors for measurement of leakage currents in electrical distribution systems

IEC 61869-3:2011

Instrument transformers – Part 3: Additional requirements for inductive voltage transformers

IEC 61869-5:2011

Instrument transformers – Part 5: Additional requirements for capacitor voltage transformers

## 17.240 Mjerenje zračenja

### Međunarodna normizacija (ISO)

ISO 20785-2:2011

Dosimetry for exposures to cosmic radiation in civilian aircraft – Part 2: Characterization of instrument response

## Europska normizacija

EN 62244:2011

Radiation protection instrumentation – Installed radiation monitors for the detection of radioactive and special nuclear materials at national borders (IEC 62244:2006, modified)

EN 62327:2011

Radiation protection instrumentation – Hand-held instruments for the detection and identification of radionuclides and for the indication of ambient dose equivalent rate from photon radiation (IEC 62327:2006, modified)

EN 62363:2011

Radiation protection instrumentation – Portable photon contamination meters and monitors (IEC 62363:2008, modified)

## 21.060.10 Svornjaci, vijci, usadni vijci

### Međunarodna normizacija (ISO)

ISO 1207:2011

Slotted cheese head screws – Product grade A

ISO 1479:2011

Hexagon head tapping screws

ISO 1481:2011

Slotted pan head tapping screws

ISO 1482:2011

Slotted countersunk (flat) head tapping screws

ISO 1483:2011

Slotted raised countersunk (oval) head tapping screws

ISO 7049:2011

Cross-recessed pan head tapping screws

ISO 7050:2011

Cross-recessed countersunk (flat) head tapping screws

ISO 7051:2011

Cross-recessed raised countersunk (oval) head tapping screws

ISO 7053:2011

Hexagon washer head tapping screws

## 23.020.30 Tlačne posude, cilindrični plinski spremnici

### Europska normizacija

EN 1089-3:2011

Transportable gas cylinders – Gas cylinder identification (excluding LPG) – Part 3: Colour coding

CEN/TR 13445-9:2011

Unfired pressure vessels – Part 9: Conformance of the EN 13445 series to ISO 16528

## 23.040.01 Cjevovodne sastavnice i cjevovodi općenito

### Europska normizacija

EN 13480-5:2002/A1:2011

Metallic industrial piping – Part 5: Inspection and testing

EN 13480-8:2007/A1:2011

Metallic industrial piping – Part 8: Additional requirements for aluminium and aluminium alloy piping

## 23.040.60 Prirubnice, spojke i druge cijevne veze

### Međunarodna normizacija (ISO)

- ISO 7005-1:2011  
Pipe flanges – Part 1: Steel flanges for industrial and general service piping systems

## 23.120 Ventilatori. Klimatizacijski uređaji

### Međunarodna normizacija (ISO)

- ISO 10302-2:2011  
Acoustics – Measurement of airborne noise emitted and structure-borne vibration induced by small air-moving devices – Part 2: Structure-borne vibration measurements
- ISO 13253:2011  
Ducted air-conditioners and air-to-air heat pumps – Testing and rating for performance

## 25.040.30 Industrijski roboti. Manipulatori

### Međunarodna normizacija (ISO)

- ISO 10218-1:2011  
Robots and robotic devices – Safety requirements for industrial robots – Part 1: Robots
- ISO 10218-2:2011  
Robots and robotic devices – Safety requirements for industrial robots – Part 2: Robot systems and integration

### Europska normizacija

- EN ISO 10218-1:2011  
Robots and robotic devices – Safety requirements for industrial robots – Part 1: Robots (ISO 10218-1:2011)
- EN ISO 10218-2:2011  
Robots and robotic devices – Safety requirements for industrial robots – Part 2: Robot systems and integration (ISO 10218-2:2011)

## 25.100.20 Alati za glodanje

### Međunarodna normizacija (ISO)

- ISO 1641-2:2011  
End mills and slot drills – Part 2: Dimensions and designation of milling cutters with Morse taper shanks
- ISO 1641-3:2011  
End mills and slot drills – Part 3: Dimensions and designation of milling cutters with 7/24 taper shanks

## 25.140.20 Električni alati

### Europska normizacija

- EN 60745-2-22:2011  
Hand-held motor-operated electric tools – Safety – Part 2-22: Particular requirements for cut-off machines (IEC 60745-2-22:2011, modified)

## 25.160.01 Zavarivanje, meko i tvrdo lemljenje općenito

### Europska normizacija

- EN 287-1:2011  
Qualification test of welders – Fusion welding – Part 1: Steels

## 25.160.20 Potrošna gradiva za zavarivanje

### Međunarodna normizacija (ISO)

- ISO 14372:2011  
Welding consumables – Determination of moisture resistance of manual metal arc welding electrodes by measurement of diffusible hydrogen

### Europska normizacija

- EN ISO 14372:2011  
Welding consumables – Determination of moisture resistance of manual metal arc welding electrodes by measurement of diffusible hydrogen (ISO 14372:2011)

## 25.160.30 Oprema za zavarivanje

### Međunarodna normizacija (IEC)

- IEC 60974-10:2007/Corr.1:2011  
Arc welding equipment – Part 10: Electromagnetic compatibility (EMC) requirements

## 25.160.50 Tvrdo i meko lemljenje

### Međunarodna normizacija (IEC)

- IEC/PAS 62647-1:2011  
Process management for avionics – Aerospace and defence electronic systems containing lead-free solder – Part 1: Lead-free management
- IEC/PAS 62647-2:2011  
Process management for avionics – Aerospace and defence electronic systems containing lead-free solder – Part 2: Mitigation of the deleterious effects of tin
- IEC/PAS 62647-21:2011  
Process management for avionics – Aerospace and defence electronic systems containing lead-free solder – Part 21: Program management – Systems engineering guidelines for managing the transition to lead-free electronics
- IEC/PAS 62647-22:2011  
Process management for avionics – Aerospace and defence electronic systems containing lead-free solder – Part 22: Technical guidelines
- IEC/PAS 62647-23:2011  
Process management for avionics – Aerospace and defence electronic systems containing lead-free solder – Part 23: Rework and repair guidance to address the implications of lead-free electronics and mixed assemblies

## 25.220.40 Prevlačenje kovinama

### Međunarodna normizacija (ISO)

- ISO 6158:2011  
Metallic and other inorganic coatings – Electrodeposited coatings of chromium for engineering purposes

### Europska normizacija

- EN 10244-1:2009/AC:2011  
Steel wire and wire products – Non-ferrous metallic coatings on steel wire – Part 1: General principles
- EN ISO 6158:2011  
Metallic and other inorganic coatings – Electrodeposited coatings of chromium for engineering purposes (ISO 6158:2011)

## 25.220.60 Organsko premazivanje

### Europska normizacija

- EN 13523-11:2011  
Coil coated metals – Test methods – Part 11:  
Resistance to solvents (rubbing test)
- EN 13523-19:2011  
Coil coated metals – Test methods – Part 19: Panel  
design and method of atmospheric exposure testing

## 27.010 Tehnika prijenosa energije i topline općenito

### Međunarodna normizacija (ISO)

- ISO 50001:2011  
Energy management systems – Requirements with  
guidance for use

## 27.080 Toplinske pumpe

### Međunarodna normizacija (ISO)

- ISO 13253:2011  
Ducted air-conditioners and air-to-air heat pumps –  
Testing and rating for performance

## 27.120.30 Fisijska gradiva

### Međunarodna normizacija (ISO)

- ISO 11311:2011  
Nuclear criticality safety – Critical values for  
homogeneous plutonium-uranium oxide fuel mixtures  
outside of reactors
- ISO 27468:2011  
Nuclear criticality safety – Evaluation of systems  
containing PWR UOX fuels – Bounding burnup credit  
approach

## 27.160 Sunčeva energija

### Međunarodna normizacija (IEC)

- IEC 62109-2:2011  
Safety of power converters for use in photovoltaic  
power systems – Part 2: Particular requirements for  
inverters

### Europska normizacija

- EN 50548:2011  
Junction boxes for photovoltaic modules

## 29.020 Elektrotehnika općenito

### Međunarodna normizacija (IEC)

- IEC 80416-3:2002/am1:2011  
Basic principles for graphical symbols for use on  
equipment – Part 3: Guidelines for the application of  
graphical symbols

## 29.035.01 Izolacijska gradiva općenito

### Europska normizacija

- EN 62631-1:2011  
Dielectric and resistive properties of solid insulating  
materials – Part 1: General (IEC 62631-1:2011)

## 29.035.20 Plastična i gumena izolacijska gradiva

### Međunarodna normizacija (IEC)

- IEC 60684-3-205:2011  
Flexible insulating sleeving – Part 3: Specifications  
for individual types of sleeving – Sheet 205: Heat-  
shrinkable chlorinated polyolefin sleeving, flame  
retarded, nominal shrink ratio 1,7:1 and 2:1
- IEC 60684-3-247:2011  
Flexible insulating sleeving – Part 3: Specifications  
for individual types of sleeving – Sheet 247: Heat-  
shrinkable, polyolefin sleeving, dual wall, not flame  
retarded, thick and medium wall
- IEC 60684-3-271:2011  
Flexible insulating sleeving – Part 3: Specifications  
for individual types of sleeving – Sheet 271: Heat-  
shrinkable elastomer sleeveings, flame retarded, fluid  
resistant, shrink ratio 2:1
- IEC 60674-3-8:2011  
Plastic films for electrical purposes – Part 3:  
Specifications for individual materials – Sheet 8:  
Balanced biaxially oriented polyethylene naphthalate  
(PEN) films used for electrical insulation

### Europska normizacija

- EN 60893-3-2:2004/A1:2011  
Insulating materials – Industrial rigid laminated sheets  
based on thermosetting resins for electrical purposes  
– Part 3-2: Specifications for individual materials –  
Requirements for rigid laminated sheets based on  
epoxy resins (IEC 60893-3-2:2003/A1:2011)

## 29.050 Električno vodljiva gradiva

### Međunarodna normizacija (IEC)

- IEC 61788-4:2011  
Superconductivity – Part 4: Residual resistance ratio  
measurement – Residual resistance ratio of Nb-Ti  
composite superconductors
- IEC 61788-6:2011  
Superconductivity – Part 6: Mechanical properties  
measurement – Room temperature tensile test of  
Cu/Nb-Ti composite superconductors
- IEC 61788-11:2011  
Superconductivity – Part 11: Residual resistance ratio  
measurement – Residual resistance ratio of Nb3Sn  
composite superconductors

## 29.060.10 Žice

### Međunarodna normizacija (IEC)

- IEC 60851-5:2008/am1:2011  
Methods of test for winding wires – Part 5: Electrical  
properties

## 29.080.10 Izolatori

### Međunarodna normizacija (IEC)

- IEC 62621:2011  
Railway applications – Fixed installations – Electric  
traction – Specific requirements for composite  
insulators used for overhead contact line systems

## 29.080.30 Izolacijski sustavi

### Međunarodna normizacija (IEC)

- IEC 60505:2011  
Evaluation and qualification of electrical insulation  
systems

## 29.120.10 Zaštitne cijevi za električne potrebe

### Međunarodna normizacija (IEC)

- IEC 60670-1ed1.1:2011  
Boxes and enclosures for electrical accessories for household and similar fixed electrical installations – Part 1: General requirements

### Europska normizacija

- EN 50548:2011  
Junction boxes for photovoltaic modules

## 29.120.50 Osigurači i drugi uređaji za nadstrujnu zaštitu

### Europska normizacija

- EN 60127-1:2006/A1:2011  
Miniature fuses – Part 1: Definitions for miniature fuses and general requirements for miniature fuse-links (IEC 60127-1:2006/am1:2011)

## 29.130.10 Visokonaponski rasklopni i upravljački uređaji

### Međunarodna normizacija (IEC)

- IEC 62271-1:2007/am1:2011  
High-voltage switchgear and controlgear – Part 1: Common specifications
- IEC 62271-103:2011  
High-voltage switchgear and controlgear – Part 103: Switches for rated voltages above 1 kV up to and including 52 kV
- IEC 62271-204:2011  
High-voltage switchgear and controlgear – Part 204: Rigid gas-insulated transmission lines for rated voltage above 52 kV

## 29.140.10 Kape i držači svjetiljki

### Međunarodna normizacija (IEC)

- IEC 60238 Edition 8.2:2011  
Edison screw lampholders
- IEC 60838-1 Edition 4.2:2011  
Miscellaneous lampholders – Part 1: General requirements and tests
- IEC 60061-1:2005/am45:2011  
Amendment 45 – Lamp caps and holders together with gauges for the control of interchangeability and safety – Part 1: Lamp caps
- IEC 60061-1:2005/am46:2011  
Amendment 46 – Lamp caps and holders together with gauges for the control of interchangeability and safety – Part 1: Lamp caps
- IEC 60061-2:2005/am42:2011  
Amendment 42 – Lamp caps and holders together with gauges for the control of interchangeability and safety – Part 2: Lampholders
- IEC 60061-2:2005/am43:2011  
Amendment 43 – Lamp caps and holders together with gauges for the control of interchangeability and safety – Part 2: Lampholders
- IEC 60061-3:2005/am43:2011  
Amendment 43 – Lamp caps and holders together with gauges for the control of interchangeability and safety – Part 3: Gauges
- IEC 61184 Edition 3.1:2011  
Bayonet lampholders

### Europska normizacija

- EN 60400:2008/A1:2011  
Lampholders for tubular fluorescent lamps and starterholders (IEC 60400:2008/am1:2011)
- EN 61184:2008/A1:2011  
Bayonet lampholders (IEC 61184:2008/am1:2011)

## 29.140.20 Svjetiljke sa žarnom niti

### Europska normizacija

- EN 61341:2011  
Method of measurement of centre beam intensity and beam angle(s) of reflector lamps (IEC/TR 61341:2010)

## 29.140.30 Fluorescentne svjetiljke. Svjetiljke s izbojem

### Međunarodna normizacija (IEC)

- IEC 62386-209:2011  
Digital addressable lighting interface – Part 209: Particular requirements for control gear – Colour control (device type 8)
- IEC 61199:2011  
Single-capped fluorescent lamps – Safety specifications

### Europska normizacija

- EN 62386-210:2011  
Digital addressable lighting interface – Part 210: Particular requirements for control gear – Sequencer (device type 9) (IEC 62386-210:2011)

## 29.140.40 Rasvjetna tijela

### Međunarodna normizacija (IEC)

- IEC/PAS 62722-1:2011  
Luminaire performance – Part 1: General requirements
- IEC/PAS 62722-2-1:2011  
Luminaire performance – Part 2-1: Particular requirements for LED luminaires

## 29.140.50 Rasvjetni instalacijski sustavi

### Europska normizacija

- EN 61534-1:2011  
Powertrack systems – Part 1: General requirements

## 29.140.99 Druge norme koje se odnose na svjetiljke

### Europska normizacija

- EN 60929:2011  
AC and/or DC-supplied electronic control gear for tubular fluorescent lamps – Performance requirements (IEC 60929:2011)
- EN 61347-2-3:2011  
Lamp control gear – Part 2-3: Particular requirements for a.c. and/or d.c. supplied electronic control gear for fluorescent lamps (IEC 61347-2-3:2011)

## 29.160.01 Rotacijski strojevi općenito

### Europska normizacija

EN 60034-16-1:2011  
Rotating electrical machines – Part 16-1: Excitation systems for synchronous machines – Definitions (IEC 60034-16-1:2011)

## 29.160.40 Električni agregati

### Europska normizacija

EN 62040-3:2011  
Uninterruptible power systems (UPS) – Part 3: Method of specifying the performance and test requirements (IEC 62040-3:2011)

## 29.180 Transformatori. Prigušnice

### Međunarodna normizacija (IEC)

IEC 61378-1:2011  
Converter transformers – Part 1: Transformers for industrial applications  
IEC 61869-3:2011  
Instrument transformers – Part 3: Additional requirements for inductive voltage transformers  
IEC 61869-5:2011  
Instrument transformers – Part 5: Additional requirements for capacitor voltage transformers

## 29.200 Ispravljači. Pretvarači. Stabilizirano napajanje

### Međunarodna normizacija (IEC)

IEC 61204-3:2011  
Low voltage power supplies, d.c. output – Part 3: Electromagnetic compatibility (EMC)  
IEC 62109-2:2011  
Safety of power converters for use in photovoltaic power systems – Part 2: Particular requirements for inverters

## 29.220.30 Alkalni sekundarni članci i baterije

### Međunarodna normizacija (IEC)

IEC 61960:2011  
Secondary cells and batteries containing alkaline or other non-acid electrolytes – Secondary lithium cells and batteries for portable applications

### Europska normizacija

EN 61951-2:2011  
Secondary cells and batteries containing alkaline or other non-acid electrolytes – Portable sealed rechargeable single cells – Part 2: Nickel-metal hydride (IEC 61951-2:2011)

## 29.260.20 Električni uređaji za eksplozivnu atmosferu

### Međunarodna normizacija (IEC)

IEC 60079-0:2011  
Explosive atmospheres – Part 0: Equipment – General requirements  
IEC 60079-11:2011  
Explosive atmospheres – Part 11: Equipment protection by intrinsic safety “i”

IECEx 05A:2011

IEC System for Certification to Standards relating to Equipment for use in Explosive Atmospheres (IECEx System) – Guidance and Instructions for Applicants to obtain a Certificate of Personnel Competence (CoPC)

### Europska normizacija

EN ISO/IEC 80079-34:2011  
Explosive atmospheres – Part 34: Application of quality systems for equipment manufacture (ISO/IEC 80079-34:2011, modified)

## 29.280 Oprema za električnu vuču

### Međunarodna normizacija (IEC)

IEC 62621:2011  
Railway applications – Fixed installations – Electric traction – Specific requirements for composite insulators used for overhead contact line systems

### Europska normizacija

EN 50122-1:2011/A1:2011  
Railway applications – Fixed installations – Electrical safety, earthing and the return circuit – Part 1: Protective provisions against electric shock

## 31.020 Elektroničke sastavnice općenito

### Međunarodna normizacija (IEC)

IEC 61709:2011  
Electric components – Reliability – Reference conditions for failure rates and stress models for conversion  
IEC/PAS 62647-1:2011  
Process management for avionics – Aerospace and defence electronic systems containing lead-free solder – Part 1: Lead-free management  
IEC/PAS 62647-2:2011  
Process management for avionics – Aerospace and defence electronic systems containing lead-free solder – Part 2: Mitigation of the deleterious effects of tin  
IEC/PAS 62647-21:20  
Process management for avionics – Aerospace and defence electronic systems containing lead-free solder – Part 21: Program management – Systems engineering guidelines for managing the transition to lead-free electronics  
IEC/PAS 62647-22:2011  
Process management for avionics – Aerospace and defence electronic systems containing lead-free solder – Part 22: Technical guidelines  
IEC/PAS 62647-23:2011  
Process management for avionics – Aerospace and defence electronic systems containing lead-free solder – Part 23: Rework and repair guidance to address the implications of lead-free electronics and mixed assemblies

## 31.040.10 Nepromjenjivi otpornici

### Europska normizacija

EN 140401-804:2011  
Detail Specification: Fixed low power film high stability SMD resistors – Rectangular – Stability classes 0,1;0,25

## 31.080.01 Poluvodički uređaji općenito

### Međunarodna normizacija (IEC)

- IEC 60749-7:2011  
Semiconductor devices – Mechanical and climatic test methods – Part 7: Internal moisture content measurement and the analysis of other residual gases
- IEC 62047-7:2011  
Semiconductor devices – Micro-electromechanical devices – Part 7: MEMS BAW filter and duplexer for radio frequency control and selection
- IEC 60749-40:2011  
Semiconductor devices – Mechanical and climatic test methods – Part 40: Board level drop test method using a strain gauge
- IEC 62047-5:2011  
Semiconductor devices – Micro-electromechanical devices – Part 5: RF MEMS switches
- IEC 62047-9:2011  
Semiconductor devices – Micro-electromechanical devices – Part 9: Wafer to wafer bonding strength measurement for MEMS

### Europska normizacija

- EN 60749-30:2005/A1:2011  
Semiconductor devices – Mechanical and climatic test methods – Part 30: Preconditioning of non-hermetic surface mount devices prior to reliability testing (IEC 60749-30:2005/am1:2011)
- EN 62258-2:2011  
Semiconductor die products – Part 2: Exchange data formats

## 31.080.20 Tiristori

### Europska normizacija

- EN 61954:2011  
Static VAR compensators (SVC) – Testing of thyristor valves (IEC 61954:2011)

## 31.120 Elektronički pokazni uređaji

### Međunarodna normizacija (IEC)

- IEC 61747-5-2:2011  
Liquid crystal display devices – Part 5-2: Environmental, endurance and mechanical test methods – Visual inspection of active matrix colour liquid crystal display modules
- IEC 61747-6-2:2011  
Liquid crystal display devices – Part 6-2: Measuring methods for liquid crystal display modules – Reflective type
- IEC 61747-6-3:2011  
Liquid crystal display devices – Part 6-3: Measuring methods for liquid crystal display modules – Motion artifact measurement of active matrix liquid crystal display modules
- IEC 61988-1:2011  
Plasma display panels – Part 1: Terminology and letter symbols

## 31.140 Piezoelektrični i dielektrični uređaji

### Međunarodna normizacija (IEC)

- IEC/TS 61994-2:2011  
Piezoelectric, dielectric and electrostatic devices and associated materials for frequency control, selection and detection – Glossary – Part 2: Piezoelectric and dielectric filters

## 31.220.01 Elektromehaničke sastavnice općenito

### Međunarodna normizacija (IEC)

- IEC 62047-7:2011  
Semiconductor devices – Micro-electromechanical devices – Part 7: MEMS BAW filter and duplexer for radio frequency control and selection
- IEC 62047-5:2011  
Semiconductor devices – Micro-electromechanical devices – Part 5: RF MEMS switches
- IEC 62047-9:2011  
Semiconductor devices – Micro-electromechanical devices – Part 9: Wafer to wafer bonding strength measurement for MEMS
- IEC 62047-10:2011  
Semiconductor devices – Micro-electromechanical devices – Part 10: Micro-pillar compression test for MEMS materials

## 31.220.10 Utikački i utičnički uređaji. Konektori

### Međunarodna normizacija (IEC)

- IEC 60512-9-3:2011  
Connectors for electronic equipment – Tests and measurements – Part 9-3: Endurance tests – Test 9c: Mechanical operation (engaging and separating) with electrical load
- IEC 61076-2:2011  
Connectors for electronic equipment – Product requirements – Part 2: Sectional specification for circular connectors
- IEC 61076-2-001:2011  
Connectors for electronic equipment – Product requirements – Part 2-001: Circular connectors – Blank detail specification
- IEC 61076-2-106:2011  
Connectors for electronic equipment – Product requirements – Part 2-106: Circular connectors – Detail specification for connectors M 16 x 0,75 with screw-locking and degree of protection IP40 or IP65/67

### Europska normizacija

- EN 60512-8-2:2011  
Connectors for electronic equipment – Tests and measurements – Part 8-2: Static load tests (fixed connectors) – Test 8b: Static load, axial (IEC 60512-8-2:2011)
- EN 60512-8-3:2011  
Connectors for electronic equipment – Tests and measurements – Part 8-3: Static load tests (fixed connectors) – Test 8c: Robustness of actuating lever (IEC 60512-8-3:2011)
- EN 60512-9-4:2011  
Connectors for electronic equipment – Tests and measurements – Part 9-4: Endurance tests – Test 9d: Durability of contact retention system and seals (maintenance, ageing) (IEC 60512-9-4:2011)
- EN 60512-17-2:2011  
Connectors for electronic equipment – Tests and measurements – Part 17-2: Cable clamping tests – Test 17b: Cable clamp resistance to cable rotation (IEC 60512-17-2:2011)
- EN 60603-7-1:2011  
Connectors for electronic equipment – Part 7-1: Detail specification for 8-way, shielded, free and fixed connectors (IEC 60603-7-1:2011)

## 31.240 Mehaničke konstrukcije za elektroničku opremu

### Međunarodna normizacija (IEC)

IEC 60191-6-12:2011

Mechanical standardization of semiconductor devices – Part 6-12: General rules for the preparation of outline drawings of surface mounted semiconductor device packages – Design guidelines for fine-pitch land grid array (FLGA)

### Europska normizacija

EN 61837-2:2011

Surface mounted piezoelectric devices for frequency control and selection – Standard outlines and terminal lead connections – Part 2: Ceramic enclosures (IEC 61837-2:2011)

## 31.260 Optoelektronika. Laserska oprema

### Međunarodna normizacija (ISO)

ISO 21254-1:2011

Lasers and laser-related equipment – Test methods for laser-induced damage threshold – Part 1: Definitions and general principles

ISO 21254-2:2011

Lasers and laser-related equipment – Test methods for laser-induced damage threshold – Part 2: Threshold determination

ISO 21254-3:2011

Lasers and laser-related equipment – Test methods for laser-induced damage threshold – Part 3: Assurance of laser power (energy) handling capabilities

### Međunarodna normizacija (IEC)

IEC 60825-4 Edition 2.2:2011

Safety of laser products – Part 4: Laser guards

### Europska normizacija

EN ISO 21254-1:2011

Lasers and laser-related equipment – Test methods for laser-induced damage threshold – Part 1: Definitions and general principles (ISO 21254-1:2011)

EN ISO 21254-2:2011

Lasers and laser-related equipment – Test methods for laser-induced damage threshold – Part 2: Threshold determination (ISO 21254-2:2011)

EN ISO 21254-3:2011

Lasers and laser-related equipment – Test methods for laser-induced damage threshold – Part 3: Assurance of laser power (energy) handling capabilities (ISO 21254-3:2011)

## 33.040.40 Mreže za prijenos podataka

### Međunarodna normizacija (IEC)

IEC 61850-8-1:2011

Communication networks and systems for power utility automation – Part 8-1: Specific communication service mapping (SCSM) – Mappings to MMS (ISO 9506-1 and ISO 9506-2) and to ISO/IEC 8802-3

IEC 61850-7-1:2011

Communication networks and systems for power utility automation – Part 7-1: Basic communication structure – Principles and models

### Europska normizacija

EN 61850-4:2011

Communication networks and systems for power utility automation – Part 4: System and project management (IEC 61850-4:2011)

## 33.060.20 Prijamna i odašiljačka oprema

### Europska normizacija

EN 301 908-1 V5.2.1

IMT cellular networks – Harmonized EN covering the essential requirements of article 3.2 of the R&TTE Directive – Part 1: Introduction and common requirements

EN 301 908-13 V5.2.1

IMT cellular networks – Harmonized EN covering the essential requirements of article 3.2 of the R&TTE Directive – Part 13: Evolved Universal Terrestrial Radio Access (E-UTRA) User Equipment (UE)

EN 301 908-14 V5.2.1

IMT cellular networks – Harmonized EN covering the essential requirements of article 3.2 of the R&TTE Directive – Part 14: Evolved Universal Terrestrial Radio Access (E-UTRA) Base Stations (BS)

EN 302 729-1 V1.1.2

Electromagnetic compatibility and Radio spectrum Matters (ERM) – Short Range Devices (SRD) – Level Probing Radar (LPR) equipment operating in the frequency ranges 6 GHz to 8,5 GHz, 24,05 GHz to 26,5 GHz, 57 GHz to 64 GHz, 75 GHz to 85 GHz – Part 1: Technical characteristics and test methods

EN 302 729-2 V1.1.2

Electromagnetic compatibility and Radio spectrum Matters (ERM) – Short Range Devices (SRD) – Level Probing Radar (LPR) equipment operating in the frequency ranges 6 GHz to 8,5 GHz, 24,05 GHz to 26,5 GHz, 57 GHz to 64 GHz, 75 GHz to 85 GHz – Part 2: Harmonized EN covering the essential requirements of article 3.2 of the R&TTE Directive

EN 302 774 V1.1.1

Broadband Wireless Access Systems (BWA) in the 3 400 MHz to 3 800 MHz frequency band – Base Stations – Harmonized EN covering the essential requirements of article 3.2 of the R&TTE Directive

EN 302 885-1 V1.1.1

Electromagnetic compatibility and Radio spectrum Matters (ERM) – Portable Very High Frequency (VHF) radiotelephone equipment for the maritime mobile service operating in the VHF bands with integrated handheld class D DSC – Part 1: Technical characteristics and methods of measurement

EN 302 998-1 V1.1.1

Electromagnetic compatibility and Radio spectrum Matters (ERM) – Transmitting equipment for terrestrial mobile TV to provide multimedia multicast service – Part 1: Harmonized EN covering the essential requirements of article 3.2 of the R&TTE Directive, Common requirements

EN 302 998-2 V1.1.1

Electromagnetic compatibility and Radio spectrum Matters (ERM) – Transmitting equipment for terrestrial mobile TV to provide multimedia multicast service – Part 2: Harmonized EN covering the essential requirements of article 3.2 of the R&TTE Directive, Test Arrangements for transmitters utilizing OFDM technology

### 33.060.40 Kabelski sustavi za razdiobu

#### Europska normizacija

EN 60728-6:2011

Cable networks for television signals, sound signals and interactive services – Part 6: Optical equipment

### 33.070.10 Zemaljski radio (TETRA)

#### Međunarodna normizacija (IEC)

IEC 60974-10:2007/Corr.1:2011

Arc welding equipment – Part 10: Electromagnetic compatibility (EMC) requirements

#### Europska normizacija

EN 302 296-2 V1.2.1

Electromagnetic compatibility and Radio spectrum Matters (ERM) – Transmitting equipment for the digital television broadcast service, Terrestrial (DVB-T) – Part 2: Harmonized EN covering the essential requirements of article 3.2 of the R&TTE Directive

### 33.100.01 Elektromagnetska spojivost općenito

#### Međunarodna normizacija (IEC)

IEC 61326-2-4:2006/Corr.1:2011

Corrigendum 1 – Electrical equipment for measurement, control and laboratory use – EMC requirements – Part 2-4: Particular requirements – Test configurations, operational conditions and performance criteria for insulation monitoring devices according to IEC 61557-8 and for equipment for insulation fault location according to IEC 61557-9

### 33.100.10 Zračenje

#### Međunarodna normizacija (IEC)

IEC 61000-6-3 am1 Interpretation Sheet:2011

Electromagnetic compatibility (EMC) – Part 6-3: Generic standards – Emission standard for residential, commercial and light-industrial environments

IEC 61000-6-4 am1 Interpretation Sheet:2011

Electromagnetic compatibility (EMC) – Part 6-4: Generic standards – Emission standard for industrial environments

#### Europska normizacija

EN 61000-4-15:2011

Electromagnetic compatibility (EMC) – Part 4-15: Testing and measurement techniques – Flickermeter – Functional and design specifications (IEC 61000-4-15:2011)

### 33.120.30 RF konektori

#### Međunarodna normizacija (IEC)

IEC 61169-35:2011

Radio-frequency connectors – Part 35: Sectional specification for 2,92 series RF connectors

### 33.160.01 Audiosustavi, videosustavi i audiovizualni sustavi općenito

#### Međunarodna normizacija (IEC)

IEC 60268-16:2011

Sound system equipment – Part 16: Objective rating of speech intelligibility by speech transmission index

IEC/TR 62368-2:2011

Audio/video, information and communication technology equipment – Part 2: Explanatory information related to IEC 62368-1

IEC 62516-2:2011

Terrestrial digital multimedia broadcasting (T-DMB) receivers – Part 2: Interactive data services using BIFS

### 33.160.30 Audiosustavi

#### Europska normizacija

EN 61937-10:2011

Digital audio – Interface for non-linear PCM encoded audio bitstreams applying IEC 60958 – Part 10: Non-linear PCM bitstreams according to the MPEG-4 Audio Lossless Coding (ALS) format (IEC 61937-10:2011)

EN 62574:2011

Audio, video and multimedia systems – General channel assignment of multichannel audio (IEC 62574:2011)

### 33.170 Televizijski i radijski prijenos

#### Međunarodna normizacija (IEC)

IEC 62634:2011

Radio data system (RDS) – Receiver products and characteristics – Methods of measurement

#### Europska normizacija

EN 302 296-2 V1.2.1

Electromagnetic compatibility and Radio spectrum Matters (ERM) – Transmitting equipment for the digital television broadcast service, Terrestrial (DVB-T) – Part 2: Harmonized EN covering the essential requirements of article 3.2 of the R&TTE Directive

### 33.180.10 Svjetlovodna vlakna i kabeli

#### Europska normizacija

EN 60793-1-44:2011

Optical fibres – Part 1-44: Measurement methods and test procedures – Cut-off wavelength (IEC 60793-1-44:2011)

### 33.180.20 Svjetlovodni vezni uređaji

#### Međunarodna normizacija (IEC)

IEC 61300-3-46:2011

Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 3-46: Measurement – Bore diameter for guide pin in MT ferrules

#### Europska normizacija

EN 50377-14-1:2011

Connector sets and interconnect components to be used in optical fibre communication systems – Product specifications – Part 14-1: Cords with IEC 60793-2-50 singlemode category B1.1 and B1.3 fibre for category C

EN 50411-6-1:2011

Fibre organisers and closures to be used in optical fibre communication systems – Product specifications – Part 6-1: Unprotected microduct for category S and A

EN 61753-141-2:2011

Fibre optic interconnecting devices and passive components – Performance standard – Part 141-2: Fibre optic passive chromatic dispersion compensator using single-mode dispersion compensating fibre for category C – Controlled environments (IEC 61753-141-2:2011)

EN 61300-3-45:2011

Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 3-45: Examinations and measurements – Attenuation of random mated multi-fibre connectors (IEC 61300-3-45:2011)

### **33.180.30 Optička pojačala**

#### **Međunarodna normizacija (IEC)**

IEC 61290-4-2:2011

Optical amplifiers – Test methods – Part 4-2: Gain transient parameters – Broadband source method

### **33.180.99 Druga svjetlovodna oprema**

#### **Međunarodna normizacija (IEC)**

IEC 62496-2-1:2011

Optical circuit boards – Part 2-1: Measurements – Optical attenuation and isolation

### **35.040 Skupovi znakova i informacijsko kodiranje**

#### **Međunarodna normizacija (ISO)**

ISO/IEC TR 18047-3:2011

Information technology – Radio frequency identification device conformance test methods – Part 3: Test methods for air interface communications at 13,56 MHz

ISO/IEC 23006-1:2011

Information technology – MPEG extensible middleware (MXM) – Part 1: MXM architecture and technologies

ISO/IEC 23006-2:2011

Information technology – MPEG extensible middleware (MXM) – Part 2: MXM API

ISO/IEC 24800-2:2011

Information technology – JPSearch – Part 2: Registration, identification and management of schema and ontology

ISO/IEC 15938-12:2008/Amd 2:2011

Information technology – Multimedia content description interface – Part 12: Query format – Amendment 2: Semantic enhancement

ISO/IEC 23000-11:2009/Amd 1:2011

Information technology – Multimedia application format (MPEG-A) – Part 11: Stereoscopic video application format – Amendment 1: Stereoscopic video application format conformance and reference software

ISO/IEC 23007-3:2011

Information technology – Rich media user interfaces – Part 3: Conformance and reference software

ISO/IEC TR 29199-1:2011

Information technology – JPEG XR image coding system – Part 1: System architecture

#### **Europska normizacija**

EN 62258-2:2011

Semiconductor die products – Part 2: Exchange data formats (IEC 62258-2:2011)

### **35.060 Jezici koji se upotrebljavaju u informatičkoj tehnici**

#### **Međunarodna normizacija (ISO)**

ISO/IEC 16262:2011

Information technology – Programming languages, their environments and system software interfaces – ECMAScript language specification

ISO/IEC 19756:2011

Information technology – Topic Maps – Constraint Language (TMCL)

ISO/IEC TR 19075-1:2011

Information technology – Database languages – SQL Technical Reports – Part 1: XQuery Regular Expression Support in SQL

### **35.080 Razvoj računalne podrške i dokumentacijski sustav**

#### **Europska normizacija**

EN 50128:2011

Railway applications – Communication, signalling and processing systems – Software for railway control and protection systems

### **35.110 Umreživanje**

#### **Europska normizacija**

EN 50173-1:2011

Information technology – Generic cabling systems – Part 1: General requirements

### **35.140 Računalna grafika**

#### **Međunarodna normizacija (ISO)**

ISO/IEC 19776-3:2011

Information technology – Computer graphics, image processing and environmental data representation – Extensible 3D (X3D) encodings – Part 3: Compressed binary encoding

### **35.160 Mikroprocesorski sustavi**

#### **Međunarodna normizacija (ISO)**

ISO/IEC/IEEE 60559:2011

Information technology – Microprocessor Systems – Floating-Point arithmetic

#### **Europska normizacija**

EN 61784-3-18:2011

Industrial communication networks – Profiles – Part 3-18: Functional safety fieldbuses – Additional specifications for CPF 18 (IEC 61784-3-18:2011)

### **35.180 Terminalna i druga vanjska oprema**

#### **Međunarodna normizacija (ISO)**

ISO 9241-420:2011

Ergonomics of human-system interaction – Part 420: Selection of physical input devices

ISO 9241-910:2011

Ergonomics of human-system interaction – Part 910: Framework for tactile and haptic interaction

## Europska normizacija

EN ISO 9241-910:2011

Ergonomics of human-system interaction – Part 910: Framework for tactile and haptic interaction (ISO 9241-910:2011)

## 35.200 Sučelna i vezna oprema

### Međunarodna normizacija (ISO)

ISO/IEC 13187:2011

Information technology – Server management command line protocol (SM CLP) specification

## 35.220.30 Optički uređaji za pohranu podataka

### Međunarodna normizacija (ISO)

ISO/IEC 10995:2011

Information technology – Digitally recorded media for information interchange and storage – Test method for the estimation of the archival lifetime of optical media

## 35.240.15 Identifikacijske kartice i srodni uređaji

### Međunarodna normizacija (ISO)

ISO/IEC 24745:2011

Information technology – Security techniques – Biometric information protection

ISO/IEC 10373-9:2011

Identification cards – Test methods – Part 9: Optical memory cards – Holographic recording method

ISO/IEC 12905:2011

Integrated circuit cards – Enhanced terminal accessibility using cardholder preference interface

ISO/IEC 19794-1:2011

Information technology – Biometric data interchange formats – Part 1: Framework

ISO/IEC 29109-9:2011

Information technology – Conformance testing methodology for biometric data interchange formats defined in ISO/IEC 19794 – Part 9: Vascular image data

## 35.240.30 Primjene IT-a u obavješćivanju, dokumentaciji i izdavaštvu

### Međunarodna normizacija (ISO)

ISO/TR 14105:2011

Document management – Change management for successful electronic document management system (EDMS) implementation

ISO 19005-2:2011

Document management – Electronic document file format for long-term preservation – Part 2: Use of ISO 32000-1 (PDF/A-2)

ISO 12642-1:2011

Graphic technology – Input data for characterization of four-colour process printing – Part 1: Initial data set

### Međunarodna normizacija (IEC)

IEC 62605:2011

Multimedia systems and equipment – Multimedia e-publishing and e-books – Interchange format for e-dictionaries

## 35.240.50 Primjene IT-a u industriji

### Međunarodna normizacija (ISO)

ISO 16100-6:2011

Industrial automation systems and integration – Manufacturing software capability profiling for interoperability – Part 6: Interface services and protocols for matching profiles based on multiple capability class structures

### Europska normizacija

EN 61784-3-18:2011

Industrial communication networks – Profiles – Part 3-18: Functional safety fieldbuses – Additional specifications for CPF 18 (IEC 61784-3-18:2011)

## 35.240.60 Primjene IT-a u prijevozu i trgovini

### Međunarodna normizacija (IEC)

IEC 62290-2:2011

Railway applications – Urban guided transport management and command/control systems – Part 2: Functional requirements specification

ISO 14825:2011

Intelligent transport systems – Geographic Data Files (GDF) – GDF5.0

ISO/IEC 15944-1:2011

Information technology – Business Operational View – Part 1: Operational aspects of Open-edi for implementation

ISO 29282:2011

Intelligent transport systems – Communications access for land mobiles (CALM) – Satellite networks

### Europska normizacija

EN 15722:2011

Intelligent transport systems – eSafety – eCall minimum set of data (MSD)

EN 50128:2011

Railway applications – Communication, signalling and processing systems – Software for railway control and protection systems

EN ISO 14825:2011

Intelligent transport systems – Geographic Data Files (GDF) – GDF5.0 (ISO 14825:2011)

## 35.240.70 Primjene IT-a u znanosti

### Međunarodna normizacija (ISO)

ISO 19110:2005/Amd1:2011

Geographic information – Methodology for feature cataloguing; Amendment 1

### Europska normizacija

EN ISO 19110:2006/A1:2011

Geographic information – Methodology for feature cataloguing – Amendment 1 (ISO 19110:2005/AMD 1:2011)

## 35.240.99 Primjene IT-a u drugim područjima

### Međunarodna normizacija (ISO)

ISO/IEC 19788-2:2011

Information technology – Learning, education and training – Metadata for learning resources – Part 2: Dublin Core elements

- ISO 11783-11:2011  
Tractors and machinery for agriculture and forestry –  
Serial control and communications data network –  
Part 11: Mobile data element dictionary
- ISO/IEC TR 29127:2011  
Information technology – System Process and  
Architecture for Multilingual Semantic Reverse Query  
Expansion

#### **Međunarodna normizacija (IEC)**

- IEC 62386-209:2011  
Digital addressable lighting interface – Part 209:  
Particular requirements for control gear – Colour  
control (device type 8)

#### **Europska normizacija**

- EN 62386-210:2011  
Digital addressable lighting interface – Part 210:  
Particular requirements for control gear – Sequencer  
(device type 9) (IEC 62386-210:2011)

### **37.020 Optička oprema**

#### **Međunarodna normizacija (ISO)**

- ISO 19012-1:2011  
Microscopes – Designation of microscope objectives  
– Part 1: Flatness of field/Plan

### **37.100.99 Druge norme koje se odnose na grafičku tehniku**

#### **Međunarodna normizacija (ISO)**

- ISO 19005-2:2011  
Document management – Electronic document file  
format for long-term preservation – Part 2: Use of  
ISO 32000-1 (PDF/A-2)
- ISO 12642-1:2011  
Graphic technology – Input data for characterization of  
four-colour process printing – Part 1: Initial data set

### **39.040.10 Ručni i džepni satovi**

#### **Međunarodna normizacija (ISO)**

- ISO 23160:2011  
Watch cases and accessories – Tests of the resistance  
to wear, scratching and impacts

### **43.040.30 Pokazni i upravljački uređaji**

#### **Međunarodna normizacija (ISO)**

- ISO 2575:2010/Amd 1:2011  
Road vehicles – Symbols for controls, indicators and  
tell-tales

### **43.040.40 Sustavi kočenja**

#### **Međunarodna normizacija (ISO)**

- ISO 27667:2011  
Road vehicles – Brake lining friction materials –  
Evaluation of corrosion effects on painted backing  
plates and brake shoes

### **43.060.10 Blok motora i unutrašnje sastavnice**

#### **Međunarodna normizacija (ISO)**

- ISO 6627:2011  
Internal combustion engines – Piston rings – Expander/  
segment oil-control rings

### **43.160 Vozila za posebne namjene**

#### **Europska normizacija**

- EN 15432-1:2011  
Winter and road service area maintenance equipments  
– Front-mounted equipments – Part 1: Fixed front  
mounting plates

### **45.060.01 Željeznička tračna vozila. Općenito**

#### **Europska normizacija**

- EN 14535-2:2011  
Railway applications – Brake discs for railway rolling  
stock – Part 2: Brake discs mounted onto the wheel,  
dimensions and quality requirements

### **45.060.20 Željeznička tračna vučena vozila**

#### **Europska normizacija**

- EN 12561-1:2011  
Railway applications – Tank wagons – Part 1:  
Identification plates for tank wagons for the carriage  
of dangerous goods
- EN 12561-2:2011  
Railway applications – Tank wagons – Part 2: Bottom  
emptying devices for liquid products including vapour  
return
- EN 12561-3:2011  
Railway applications – Tank wagons – Part 3: Bottom  
filling and emptying devices for gases liquefied under  
pressure
- EN 12561-4:2011  
Railway applications – Tank wagons – Part 4: Devices  
for top filling and emptying of liquid products
- EN 12561-5:2011  
Railway applications – Tank wagons – Part 5: Devices  
for vapour return while filling or emptying of liquid  
products
- EN 12561-6:2011  
Railway applications – Tank wagons – Part 6:  
Manholes
- EN 12561-7:2011  
Railway applications – Tank wagons – Part 7: Platforms  
and ladders
- EN 12561-8:2011  
Railway applications – Tank wagons – Part 8: Heating  
connections

### **47.020.60 Električna oprema brodova i pomorskih konstrukcija**

#### **Međunarodna normizacija (IEC)**

- IEC 62613-1:2011  
Plugs, socket-outlets and ship couplers for high-  
voltage shore connection systems (HVSC-Systems)  
– Part 1: General requirements

## 47.020.70 Oprema za navigaciju i upravljanje

### Međunarodna normizacija (IEC)

IEC 61162-450:2011  
Maritime navigation and radiocommunication equipment and systems – Digital interfaces – Part 450: Multiple talkers and multiple listeners – Ethernet interconnection

## 47.020.99 Druge norme koje se odnose na brodogradnju i pomorske konstrukcije

### Međunarodna normizacija (ISO)

ISO 22488:2011  
Ships and marine technology – Shipboard fire-fighters' outfits (protective clothing, gloves, boots and helmet)

ISO 28002:2011  
Security management systems for the supply chain – Development of resilience in the supply chain – Requirements with guidance for use

## 47.080 Mali plovni objekti

### Međunarodna normizacija (ISO)

ISO 6185-4:2011  
Inflatable boats – Part 4: Boats with a hull length of between 8 m and 24 m with a motor power rating of 15 kW and greater

### Europska normizacija

EN ISO 6185-4:2011  
Inflatable boats – Part 4: Boats with a hull length of between 8 m and 24 m with a motor power rating of 15 kW and greater (ISO 6185-4:2011)

## 49.020 Zrakoplovi i svemirska vozila općenito

### Europska normizacija

EN 9101:2011  
Quality Management Systems – Audit Requirements for Aviation, Space, and Defence Organizations

## 49.025.05 Željezne slitine općenito

### Europska normizacija

EN 4678:2011  
Aerospace series – Weldments and brazements for aerospace structures – Joints of metallic materials by laser beam welding – Quality of weldments

## 49.025.10 Čelici

### Europska normizacija

EN 4683:2011  
Aerospace series – Steel FE-WM 3504 (X4CrNiMo16-5-1) – Air melted – Filler metal for welding – Wire and rod

## 49.025.30 Titan

### Europska normizacija

EN 4685:2011  
Aerospace series – Titanium Ti10V2Fe3Al – Bars –  $D < 110 \text{ mm}$  –  $R_m = 1\,240 \text{ MPa}$

## 49.025.99 Druga gradiva

### Međunarodna normizacija (IEC)

IEC/PAS 62647-3:2011  
Process management for avionics – Aerospace and defence electronic systems containing lead-free solder – Part 3: Performance testing for systems containing lead-free solder and finishes

## 49.035 Sastavnice za zrakoplovne konstrukcije

### Međunarodna normizacija (IEC)

IEC/PAS 62647-1:2011  
Process management for avionics – Aerospace and defence electronic systems containing lead-free solder – Part 1: Lead-free management

IEC/PAS 62647-2:2011  
Process management for avionics – Aerospace and defence electronic systems containing lead-free solder – Part 2: Mitigation of the deleterious effects of tin

IEC/PAS 62647-21:2011  
Process management for avionics – Aerospace and defence electronic systems containing lead-free solder – Part 21: Program management – Systems engineering guidelines for managing the transition to lead-free electronics

IEC/PAS 62647-22:2011  
Process management for avionics – Aerospace and defence electronic systems containing lead-free solder – Part 22: Technical guidelines

IEC/PAS 62647-23:2011  
Process management for avionics – Aerospace and defence electronic systems containing lead-free solder – Part 23: Rework and repair guidance to address the implications of lead-free electronics and mixed assemblies

## 49.040 Premazivanje i srodni procesi koji se upotrebljavaju u zrakoplovnoj industriji

### Europska normizacija

EN 2491:2011  
Aerospace series – Molybdenum disulphide dry lubricants – Coating methods

## 49.060 Zrakoplovna električna oprema i sustavi

### Međunarodna normizacija (IEC)

IEC/PAS 62647-23:2011  
Process management for avionics – Aerospace and defence electronic systems containing lead-free solder – Part 23: Rework and repair guidance to address the implications of lead-free electronics and mixed assemblies

### Europska normizacija

EN 2240-061:2011  
Aerospace series – Lamps, incandescent – Part 061: Lamp, code 1683 – Product standard

EN 2240-062:2011  
Aerospace series – Lamps, incandescent – Part 062: Lamp, code 1810 – Product standard

EN 2240-063:2011  
Aerospace series – Lamps, incandescent – Part 063: Lamp, code 1815 – Product standard

- EN 2240-064:2011  
Aerospace series – Lamps, incandescent – Part 064:  
Lamp, code 1819 – Product standard
- EN 2240-065:2011  
Aerospace series – Lamps, incandescent – Part 065:  
Lamp, code 1820 – Product standard
- EN 2240-066:2011  
Aerospace series – Lamps, incandescent – Part 066:  
Lamp, code 1829 – Product standard
- EN 2240-067:2011  
Aerospace series – Lamps, incandescent – Part 067:  
Lamp, code 1843 – Product standard
- EN 2240-068:2011  
Aerospace series – Lamps, incandescent – Part 068:  
Lamp, code 1864 – Product standard
- EN 2240-069:2011  
Aerospace series – Lamps, incandescent – Part 069:  
Lamp, code 1978 – Product standard
- EN 2240-070:2011  
Aerospace series – Lamps, incandescent – Part 070:  
Lamp, code 2232 – Product standard
- EN 2997-014:2011  
Aerospace series – Connectors, electrical, circular,  
coupled by threaded ring, fire-resistant or non fire-  
resistant, operating temperatures – 65 °C to 175 °C  
continuous, 200 °C continuous, 260 °C peak – Part  
014: Square flange receptacle with integrated  
accessory – Product standard
- EN 3155-002:2011  
Aerospace series – Electrical contacts used in  
elements of connection – Part 002: List and utilization  
of contacts
- EN 4008-007:2011  
Aerospace series – Elements of electrical and  
optical connection – Crimping tools and associated  
accessories – Part 007: Positioner for crimping tool  
M22520/2-01 – Product standard
- EN 4008-008:2011  
Aerospace series – Elements of electrical and  
optical connection – Crimping tools and associated  
accessories – Part 008: Positioner for crimping tool  
M22520/7-01 – Product standard

## 49.140 Svemirski sustavi i radnje

### Međunarodna normizacija (ISO)

- ISO 17566:2011  
Space systems – General test documentation
- ISO 10786:2011  
Space systems – Structural components and  
assemblies
- ISO 10830:2011  
Space systems – Non-destructive testing – Automatic  
ultrasonic inspection method of graphite ingot for solid  
rocket motors
- ISO 11221:2011  
Space systems – Space solar panels – Spacecraft  
charging induced electrostatic discharge test  
methods
- ISO 14300-1:2011  
Space systems – Programme management – Part 1:  
Structuring of a project
- ISO 27852:2011  
Space systems – Estimation of orbit lifetime

## 53.020.20 Dizalice

### Međunarodna normizacija (ISO)

- ISO 10571:2011  
Tyres for mobile cranes and similar specialized  
machines

## 53.100 Strojevi za zemljane radove

### Međunarodna normizacija (ISO)

- ISO 2867:2011  
Earth-moving machinery – Access systems

### Europska normizacija

- EN ISO 2867:2011  
Earth-moving machinery – Access systems  
(ISO 2867:2011)

## 59.080.01 Tekstili općenito

### Međunarodna normizacija (ISO)

- ISO 139:2005/AMD 1:2011  
Textiles – Standard atmospheres for conditioning and  
testing; Amendment 1

### Europska normizacija

- EN ISO 139:2005/A1:2011  
Textiles – Standard atmospheres for conditioning and  
testing – Amendment 1 (ISO 139:2005/AMD 1:2011)

## 59.080.60 Tekstilni podni pokrivači

### Međunarodna normizacija (ISO)

- ISO 10965:2011  
Textile floor coverings – Determination of electrical  
resistance

## 59.080.70 Geotekstili

### Europska normizacija

- EN ISO 10769:2011  
Clay geosynthetic barriers – Determination of water  
absorption of bentonite (ISO 10769:2011)

## 59.140.30 Koža i krzno

### Međunarodna normizacija (ISO)

- ISO 17076-2:2011  
Leather – Determination of abrasion resistance –  
Part 2: Martindale ball plate method

### Europska normizacija

- EN ISO 17076-2:2011  
Leather – Determination of abrasion resistance – Part 2:  
Martindale ball plate method (ISO 17076-2:2011)

## 65.060.01 Poljoprivredni strojevi i oprema općenito

### Međunarodna normizacija (ISO)

- ISO 11783-11:2011  
Tractors and machinery for agriculture and forestry –  
Serial control and communications data network –  
Part 11: Mobile data element dictionary

## 65.060.10 Poljoprivredni traktori i priključna vozila

### Međunarodna normizacija (ISO)

- ISO 5692-3:2011  
Agricultural vehicles – Mechanical connections on towed vehicles – Part 3: Swivel hitch rings
- ISO 6489-5:2011  
Agricultural vehicles – Mechanical connections between towed and towing vehicles – Part 5: Specifications for non-swivel clevis couplings

## 65.060.40 Oprema za njegu biljaka

### Međunarodna normizacija (ISO)

- ISO 10988:2011  
Equipment for crop protection – Knapsack motorized air-assisted sprayers – Test methods and performance limits

## 65.060.80 Oprema za šumarstvo

### Međunarodna normizacija (ISO)

- ISO 11837:2011  
Machinery for forestry – Saw chain shot guarding systems – Test method and performance criteria

## 65.160 Duhan, duhanski proizvodi i odgovarajuća oprema

### Međunarodna normizacija (ISO)

- ISO 10315:2000/Amd 1:2011  
Cigarettes – Determination of nicotine in smoke condensates – Gas-chromatographic method
- ISO 10362-1:1999/Amd 1:2011  
Cigarettes – Determination of water in smoke condensates – Part 1: Gas-chromatographic method
- ISO 10362-2:1994/Amd 1:2011  
Cigarettes – Determination of water in smoke condensates – Part 2: Karl Fischer method

## 67.060 Žitarice, mahunjače i proizvodi od žitarica i mahunjača

### Međunarodna normizacija (ISO)

- ISO 6646:2011  
Rice – Determination of the potential milling yield from paddy and from husked rice

## 67.200.10 Životinjske i biljne masti i ulja

### Međunarodna normizacija (ISO)

- ISO 9936:2006/Amd 1:2011  
Animal and vegetable fats and oils – Determination of tocopherol and tocotrienol contents by high-performance liquid chromatography – Amendment 1: Updating of reagents and confirmation of statistical data validity
- ISO 15753:2006/Amd 1:2011  
Animal and vegetable fats and oils – Determination of polycyclic aromatic hydrocarbons – Amendment 1: Exclusion of olive pomace oil from the scope

## 67.240 Osjetilna analiza

### Međunarodna normizacija (ISO)

- ISO 11037:2011  
Sensory analysis – Guidelines for sensory assessment of the colour of products
- ISO 29842:2011  
Sensory analysis – Methodology – Balanced incomplete block designs

## 71.040.20 Laboratorijsko posuđe i srodni uređaji

### Međunarodna normizacija (ISO)

- ISO 13079:2011  
Laboratory glass and plastics ware – Tubes for the measurement of the erythrocyte sedimentation rate by the Westergren method
- ISO 13130:2011  
Laboratory glassware – Desiccators
- ISO 13132:2011  
Laboratory glassware – Petri dishes

### Europska normizacija

- EN ISO 13079:2011  
Laboratory glass and plastics ware – Tubes for the measurement of the erythrocyte sedimentation rate by the Westergren method (ISO 13079:2011)
- EN ISO 13130:2011  
Laboratory glassware – Desiccators (ISO 13130:2011)
- EN ISO 13132:2011  
Laboratory glassware – Petri dishes (ISO 13132:2011)

## 71.040.40 Kemijska analiza

### Međunarodna normizacija (ISO)

- ISO 28600:2011  
Surface chemical analysis – Data transfer format for scanning-probe microscopy
- ISO 27911:2011  
Surface chemical analysis – Scanning-probe microscopy – Definition and calibration of the lateral resolution of a near-field optical microscope

## 73.100.40 Oprema za prijevoz i izvlačenje

### Europska normizacija

- EN 1889-1:2011  
Machines for underground mines – Mobile machines working underground – Safety – Part 1: Rubber tyred vehicles

## 75.060 Prirodni plin

### Međunarodna normizacija (ISO)

- ISO 15112:2011  
Natural gas – Energy determination

## 75.100 Maziva, industrijska ulja i srodni proizvodi

### Međunarodna normizacija (ISO)

- ISO 13738:2011  
Lubricants, industrial oils and related products (class L) – Family E (Internal combustion engine oils) – Specifications for two-stroke-cycle gasoline engine oils (categories EGB, EGC and EGD)

## 75.160.10 Kruta goriva

### Europska normizacija

- EN 14778:2011  
Solid biofuels – Sampling
- EN 14780:2011  
Solid biofuels – Sample preparation
- EN 14961-2:2011  
Solid biofuels – Fuel specifications and classes –  
Part 2: Wood pellets for non-industrial use
- EN 14961-3:2011  
Solid biofuels – Fuel specifications and classes –  
Part 3: Wood briquettes for non-industrial use
- EN 14961-4:2011  
Solid biofuels – Fuel specifications and classes –  
Part 4: Wood chips for non-industrial use

## 75.180.10 Oprema za iskorištavanje i vađenje

### Međunarodna normizacija (ISO)

- ISO 10414-2:2011  
Petroleum and natural gas industries – Field testing  
of drilling fluids – Part 2: Oil-based fluids
- ISO 11960:2011  
Petroleum and natural gas industries – Steel pipes for  
use as casing or tubing for wells
- ISO 13501:2011  
Petroleum and natural gas industries – Drilling fluids  
– Processing equipment evaluation
- ISO 13628-4:2010/Cor 1:2011  
Petroleum and natural gas industries – Design and  
operation of subsea production systems – Part 4:  
Subsea wellhead and tree equipment; Technical  
Corrigendum

### Europska normizacija

- EN ISO 10414-2:2011  
Petroleum and natural gas industries – Field testing  
of drilling fluids – Part 2: Oil-based fluids  
(ISO 10414-2:2011)
- EN ISO 11960:2011  
Petroleum and natural gas industries – Steel pipes for  
use as casing or tubing for wells (ISO 11960:2011)
- EN ISO 13501:2011  
Petroleum and natural gas industries – Drilling fluids –  
Processing equipment evaluation (ISO 13501:2011)
- EN ISO 13628-4:2010/AC:2011  
Petroleum and natural gas industries – Design and  
operation of subsea production systems – Part 4:  
Subsea wellhead and tree equipment – Technical  
Corrigendum 1 (ISO 13628-4:2010/Cor 1:2011)

## 75.200 Naftni proizvodi i oprema za rukovanje prirodnim plinom

### Međunarodna normizacija (ISO)

- ISO 21809-1:2011  
Petroleum and natural gas industries – External  
coatings for buried or submerged pipelines used in  
pipeline transportation systems – Part 1: Polyolefin  
coatings (3-layer PE and 3-layer PP)

### Europska normizacija

- EN ISO 21809-1:2011  
Petroleum and natural gas industries – External coatings  
for buried or submerged pipelines used in pipeline  
transportation systems – Part 1: Polyolefin coatings  
(3-layer PE and 3-layer PP) (ISO 21809-1:2011)

## 77.040.10 Mehaničko ispitivanje kovina

### Međunarodna normizacija (ISO)

- ISO 376:2011  
Metallic materials – Calibration of force-proving  
instruments used for the verification of uniaxial testing  
machines

### Europska normizacija

- EN ISO 376:2011  
Metallic materials – Calibration of force-proving  
instruments used for the verification of uniaxial testing  
machines (ISO 376:2011)

## 77.060 Hrđanje kovina

### Međunarodna normizacija (ISO)

- ISO 8565:2011  
Metals and alloys – Atmospheric corrosion testing –  
General requirements

## 77.120.40 Nikal, krom i njihove slitine

### Međunarodna normizacija (ISO)

- ISO 11435:2011  
Nickel alloys – Determination of molybdenum content  
– Inductively coupled plasma/atomic emission  
spectrometric method

## 77.140.65 Čelična žica, žičana užad i lanci

### Međunarodna normizacija (ISO)

- ISO 16120-1:2011  
Non-alloy steel wire rod for conversion to wire –  
Part 1: General requirements
- ISO 16120-2:2011  
Non-alloy steel wire rod for conversion to wire – Part 2:  
Specific requirements for general-purpose wire rod
- ISO 16120-3:2011  
Non-alloy steel wire rod for conversion to wire –  
Part 3: Specific requirements for rimmed and rimmed  
substitute, low-carbon steel wire rod
- ISO 16120-4:2011  
Non-alloy steel wire rod for conversion to wire –  
Part 4: Specific requirements for wire rod for special  
applications

### Europska normizacija

- EN 10244-1:2009/AC:2011  
Steel wire and wire products – Non-ferrous metallic  
coatings on steel wire – Part 1: General principles
- EN ISO 16120-1:2011  
Non-alloy steel wire rod for conversion to wire –  
Part 1: General requirements (ISO 16120-1:2011)
- EN ISO 16120-2:2011  
Non-alloy steel wire rod for conversion to wire –  
Part 2: Specific requirements for general-purpose wire  
rod (ISO 16120-2:2011)
- EN ISO 16120-3:2011  
Non-alloy steel wire rod for conversion to wire –  
Part 3: Specific requirements for rimmed and rimmed  
substitute, low-carbon steel wire rod  
(ISO 16120-3:2011)
- EN ISO 16120-4:2011  
Non-alloy steel wire rod for conversion to wire –  
Part 4: Specific requirements for wire rod for special  
applications (ISO 16120-4:2011)

## 77.140.75 Čelične cijevi

### Međunarodna normizacija (ISO)

ISO 11960:2011  
Petroleum and natural gas industries – Steel pipes for use as casing or tubing for wells

### Europska normizacija

EN ISO 11960:2011  
Petroleum and natural gas industries – Steel pipes for use as casing or tubing for wells (ISO 11960:2011)

## 77.140.80 Željezni i čelični odljevci

### Međunarodna normizacija (ISO)

ISO 7186:2011  
Ductile iron products for sewerage applications

## 77.150.10 Aluminijski proizvodi

### Međunarodna normizacija (ISO)

ISO 7271:2011  
Aluminium and aluminium alloys – Foil and thin strip – Dimensional tolerances

## 79.060.01 Ploče s drvenom osnovom općenito

### Međunarodna normizacija (ISO)

ISO 12460-5:2011  
Wood-based panels – Determination of formaldehyde release – Part 5: Extraction method (called the perforator method)

## 79.060.10 Slojevite ploče

### Europska normizacija

EN 12369-2:2011  
Wood-based panels – Characteristic values for structural design – Part 2: Plywood

## 79.120.10 Strojevi za obradbu drveta

### Europska normizacija

EN 61029-2-3:2011  
Safety of transportable motor-operated electric tools – Part 2-3: Particular requirements for planers and thicknessers (IEC 61029-2-3:1993, modified+A1:2001)

## 81.040.20 Građevno staklo

### Europska normizacija

EN 674:2011  
Glass in building – Determination of thermal transmittance (U value) – Guarded hot plate method

EN 675:2011  
Glass in building – Determination of thermal transmittance (U value) – Heat flow meter method

## 81.060.30 Keramika

### Međunarodna normizacija (ISO)

ISO 10677:2011  
Fine ceramics (advanced ceramics, advanced technical ceramics) – Ultraviolet light source for testing semiconducting photocatalytic materials

## 83.060 Guma

### Međunarodna normizacija (ISO)

ISO 12493:2011  
Rubber, vulcanized – Determination of stress in tension upon heating

## 83.080.01 Plastika općenito

### Međunarodna normizacija (ISO)

ISO 179-2:1997/Amd 1:2011  
Plastics – Determination of Charpy impact properties – Part 2: Instrumented impact test – Amendment 1: Precision data

ISO 22196:2011  
Measurement of antibacterial activity on plastics and other non-porous surfaces

## 83.080.20 Termoplastična gradiva

### Europska normizacija

EN ISO 294-4:2003/AC:2011  
Plastics – Injection moulding of test specimens of thermoplastic materials – Part 4: Determination of moulding shrinkage – Technical Corrigendum 1 (ISO 294-4:2001/Cor 1:2007)

## 83.160.99 Druge vrste guma za vozila

### Međunarodna normizacija (ISO)

ISO 10571:2011  
Tyres for mobile cranes and similar specialized machines

## 85.060 Papir i karton

### Međunarodna normizacija (ISO)

ISO 12625-1:2011  
Tissue paper and tissue products – Part 1: General guidance on terms

## 85.080.30 Karton

### Međunarodna normizacija (ISO)

ISO 3034:2011  
Corrugated fibreboard – Determination of single sheet thickness

## 87.040 Boje i lakovi

### Europska normizacija

EN 16074:2011  
Paints and varnishes – Determination of non-volatile-matter content and spreading rate of coil coating materials

EN ISO 1518-1:2011  
Paints and varnishes – Determination of scratch resistance – Part 1: Constant-loading method (ISO 1518-1:2011)

## 91.040.01 Zgrade općenito

### Međunarodna normizacija (ISO)

ISO 11863:2011  
Buildings and building-related facilities – Functional and user requirements and performance – Tools for assessment and comparison

## 91.060.40 Dimnjaci, okna, kanali

### Europska normizacija

EN 12446:2011  
Chimneys – Components – Concrete outer wall elements

## 91.080.20 Drvene konstrukcije

### Međunarodna normizacija (ISO)

ISO 22452:2011  
Timber structures – Structural insulated panel walls – Test methods  
ISO 20152-2:2011  
Timber structures – Bond performance of adhesives – Part 2: Additional requirements

## 91.100.10 Cement. Gips. Vapno. Žbuka

### Europska normizacija

EN 480-1:2006+A1:2011  
Admixtures for concrete, mortar and grout – Test methods – Part 1: Reference concrete and reference mortar for testing  
EN 480-13:2009+A1:2011  
Admixtures for concrete, mortar and grout – Test methods – Part 13: Reference masonry mortar for testing mortar admixtures

## 91.100.30 Beton i betonski proizvodi

### Europska normizacija

EN 480-1:2006+A1:2011  
Admixtures for concrete, mortar and grout – Test methods – Part 1: Reference concrete and reference mortar for testing

## 91.100.50 Veziva. Brtvena gradiva

### Međunarodna normizacija (ISO)

ISO 11600:2002/Amd 1:2011  
Building construction – Jointing products – Classification and requirements for sealants

### Europska normizacija

EN 544:2011  
Bitumen shingles with mineral and/or synthetic reinforcements – Product specification and test methods  
EN ISO 11600:2003/A1:2011  
Building construction – Jointing products – Classification and requirements for sealants (ISO 11600:2002/Amd 1:2011)

## 91.120.40 Zaštita od groma

### Međunarodna normizacija (IEC)

IEC 62561-5:2011  
Lightning protection system components (LPSC) – Part 5: Requirements for earth electrode inspection housings and earth electrode seals  
IEC 62561-6:2011  
Lightning protection system components (LPSC) – Part 6: Requirements for lightning strike counters (LSC)

### Europska normizacija

EN 50536:2011/AC:2011  
Protection against lightning – Thunderstorm warning systems

## 91.140.30 Sustavi prozračivanja i klimatizacije

### Europska normizacija

EN 13053:2006+A1:2011  
Ventilation for buildings – Air handling units – Rating and performance for units, components and sections

## 91.160.01 Rasvjeta općenito

### Europska normizacija

EN 12665:2011  
Light and lighting – Basic terms and criteria for specifying lighting requirements

## 93.030 Vanjska kanalizacija

### Međunarodna normizacija (ISO)

ISO 7186:2011  
Ductile iron products for sewerage applications

## 93.080.20 Sredstva za cestogradnju

### Europska normizacija

EN 1824:2011  
Road marking materials – Road trials  
EN 12802:2011  
Road marking materials – Laboratory methods for identification  
EN 13197:2011  
Road marking materials – Wear simulator Turntable  
EN 13212:2011  
Road marking materials – Requirements for factory production control  
EN 13459:2011  
Road marking materials – Sampling from storage and testing

## 97.060 Praonički uređaji

### Europska normizacija

EN 60456:2011  
Clothes washing machines for household use – Methods for measuring the performance (IEC 60456:2011, modified)  
EN 60456:2011/AC:2011  
Clothes washing machines for household use – Methods for measuring the performance (IEC 60456:2011, modified)

## 97.080 Uređaji za čišćenje podova

### Međunarodna normizacija (IEC)

IEC 60312-1:2010/am1:2011  
Vacuum cleaners for household use – Part 1: Dry vacuum cleaners – Methods for measuring the performance

## 97.120 Automatsko upravljanje za kućansku uporabu

### Međunarodna normizacija (IEC)

IEC 60730-2-9 Edition 3.1:2011  
Automatic electrical controls for household and similar use – Part 2-9: Particular requirements for temperature sensing controls

## **97.145 Ljestve**

### **Europska normizacija**

EN 131-1:2007+A1:2011

Ladders – Part 1: Terms, types, functional sizes

## **97.200.50 Igračke**

### **Europska normizacija**

EN 71-1:2011

Safety of toys – Part 1: Mechanical and physical properties

## **97.220.20 Oprema za zimske športove**

### **Međunarodna normizacija (ISO)**

ISO 7331:2011

Ski-poles for alpine skiing – Requirements and test methods