

**International and European standards in the field of Nondestructive testing  
(valid on 01.09.2014)  
1. General Standards**

	EN	ISO
General	CEN/TS 15053:2005 Non-destructive testing - Recommendations for discontinuities-types in test specimens for examination	ISO/TS 22809:2007 Non-destructive testing - Discontinuities in specimens for use in qualification examinations
	CEN/TR 14748:2004 Non-destructive testing - Methodology for qualification of non-destructive tests	
General, castings	EN 1559-1:2011 Founding - Technical conditions of delivery - Part 1: General	
	EN 1559-2:2000 Founding - Technical conditions of delivery - Part 2: Additional requirements for steel castings	
	EN 1559-3:2011 Founding - Technical conditions of delivery - Part 3: Additional requirements for iron castings	
	EN 1559-4:1999 Founding - Technical conditions of delivery - Part 4: Additional requirements for aluminium alloy castings	
	EN 1559-5:1997 Founding - Technical conditions of delivery - Part 5: Additional requirements for magnesium alloy castings	
	EN 1559-6:1998 Founding - Technical conditions of delivery - Part 6: Additional requirements for zinc alloy castings	
General, welds	EN ISO 17635:2010 Non-destructive testing of welds - General rules for metallic materials	ISO 17635:2010 Non-destructive testing of welds - General rules for metallic materials
	EN ISO 5817:2014 Welding - Fusion-welded joints in steel, nickel, titanium and their alloys (beam welding excluded) - Quality levels for imperfections	ISO 5817:2014 Welding - Fusion-welded joints in steel, nickel, titanium and their alloys (beam welding excluded) - Quality levels for imperfections
	EN ISO 6520-1:2007 Welding and allied processes - Classification of geometric imperfections in metallic materials - Part 1: Fusion welding	ISO 6520-1:2007 Welding and allied processes - Classification of geometric imperfections in metallic materials - Part 1: Fusion welding
	EN ISO 6520-2:2013 Welding and allied processes - Classification of geometric imperfections in metallic materials - Part 2: Welding with pressure	ISO 6520-2:2013 Welding and allied processes - Classification of geometric imperfections in metallic materials - Part 2: Welding with pressure

	EN ISO 10042:2005/AC:2006 Welding - Arc-welded joints in aluminium and its alloys - Quality levels for imperfections	ISO 10042:2005/Cor 1:2006 Welding - Arc-welded joints in aluminium and its alloys - Quality levels for imperfections
General, aerospace	EN 2078:2001 Aerospace series - Metallic materials - Manufacturing schedule, inspection schedule, inspection and test report - Definition, general principles, preparation and approval	
General, terminology	EN 1330-1:1998 Non-destructive testing - Terminology - Part 1: List of general terms	
	EN 1330-2:1998 Non-destructive testing - Terminology - Part 2: Terms common to the non-destructive testing methods	ISO/TS 18173:2005 Non-destructive testing - General terms and definitions

## 2. Acoustic emission (AT)

	EN	ISO
General provisions	EN 13554:2011 Non-destructive testing - Acoustic emission testing - General principles	
Equipment and tools	EN 13477-1:2001 Non-destructive testing - Acoustic emission - Equipment characterization - Part 1: Equipment description	
	EN 13477-2:2010 Non-destructive testing - Acoustic emission - Equipment characterization - Part 2: Verification of operating characteristic	
		ISO 12713:1998 Non-destructive testing - Acoustic emission inspection - Primary calibration of transducers
		ISO 12714:1999 Non-destructive testing - Acoustic emission inspection - Secondary calibration of acoustic emission sensors
	CEN ISO/TR 13115:2011 Non-destructive testing -- Methods for absolute calibration of acoustic emission transducers by the reciprocity technique	ISO/TR 13115:2011 Non-destructive testing -- Methods for absolute calibration of acoustic emission transducers by the reciprocity technique
Technique	EN 14584:2013 Non-destructive testing - Acoustic emission testing - Examination of metallic pressure equipment during proof testing - Planar location of AE sources	
	EN 15495:2007 Non Destructive testing - Acoustic emission - Examination of metallic pressure equipment during proof testing -	

	Zone location of AE sources	
	EN 15856:2010 Non-destructive testing - Acoustic emission - General principles of AE testing for the detection of corrosion within metallic surrounding filled with liquid	
	EN 15857:2010 Non-destructive testing - Acoustic emission - Testing of fibre-reinforced polymers - Specific methodology and general evaluation criteria	
Terminology	EN 1330-9:2009 Non-destructive testing - Terminology - Part 9: Terms used in acoustic emission testing	ISO 12716:2001 Non-destructive testing -Acoustic emission inspection - Vocabulary

### 3. Eddy current testing (ET)

	EN	ISO
General provisions	EN ISO 15549:2010 Non-destructive testing - Eddy current testing - General principles	ISO 15549:2008 Non-destructive testing - Eddy current testing - General principles
Equipment and tools	EN ISO 15548-1:2013 Non-destructive testing - Equipment for eddy current examination - Part 1: Instrument characteristics and verification	ISO 15548-1:2013 Non-destructive testing - Equipment for eddy current examination - Part 1: Instrument characteristics and verification
	EN ISO 15548-2:2013 Non-destructive testing - Equipment for eddy current examination - Part 2: Probe characteristics and verification	ISO 15548-2:2013 Non-destructive testing - Equipment for eddy current examination - Part 2: Probe characteristics and verification
	EN ISO 15548-3:2008 Non-destructive testing - Equipment for eddy current examination - Part 3: System characteristics and verification	ISO 15548-3:2008 Non-destructive testing - Equipment for eddy current examination - Part 3: System characteristics and verification
Special technique	EN ISO 2360:2003 Non-conductive coatings on non-magnetic electrically conductive basis materials - Measurement of coating thickness - Amplitude-sensitive eddy current method	ISO 2360:2003 Non-conductive coatings on non-magnetic electrically conductive basis materials - Measurement of coating thickness - Amplitude-sensitive eddy-current method
	EN ISO 21968:2005 Non-magnetic metallic coatings on metallic and non-metallic basis materials - Measurement of coating thickness - Phase-sensitive eddy-current method	ISO 21968:2005 Non-magnetic metallic coatings on metallic and non-metallic basis materials - Measurement of coating thickness - Phase-sensitive eddy-current method
Aerospace	prEN 2002-20 Aerospace series - Test methods for metallic materials - Part 20: Eddy current test on pipes under pressure	
Welds (w)	EN 1711:2000/A1:2003 Non-destructive examination of welds -	ISO 17643:2005 Non-destructive testing of welds - Eddy current

	Eddy current examination of welds by complex plane analysis	testing of welds by complex-plane analysis
Tubes and pipes (t)	EN 1971-1:2011 Copper and copper alloys - Eddy current test for measuring defects on seamless round copper and copper alloy tubes - Part 1: Test with an encircling test coil on the outer surface	
	EN 1971-2:2011 Copper and copper alloys - Eddy current test for measuring defects on seamless round copper and copper alloy tubes - Part 2: Test with an internal probe on the inner surface	
	EN ISO 10893-1:2011 Non-destructive testing of steel tubes - Part 1: Automated electromagnetic testing of seamless and welded (except submerged arc-welded) steel tubes for the verification of hydraulic leak tightness	ISO 10893-1:2011 Non-destructive testing of steel tubes - Part 1: Automated electromagnetic testing of seamless and welded (except submerged arc-welded) steel tubes for the verification of hydraulic leak tightness
	EN ISO 10893-2:2011 Non-destructive testing of steel tubes - Part 2: Automated eddy current testing of seamless and welded (except submerged arc-welded) steel tubes for the detection of imperfections	ISO 10893-2:2011 Non-destructive testing of steel tubes - Part 2: Automated eddy current testing of seamless and welded (except submerged arc-welded) steel tubes for the detection of imperfections
Terminology	EN ISO 12718:2008 Non-destructive testing - Eddy current testing - Vocabulary	ISO 12718:2008 Non-destructive testing - Eddy current testing - Vocabulary

#### 4. Magnetic particle testing (MT)

	EN	ISO
General provisions	EN ISO 9934-1:2001/A1:2003 Non-destructive testing - Magnetic particle testing - Part 1: General principles	ISO 9934-1:2001 Non-destructive testing - Magnetic particle testing - Part 1: General principles
	EN ISO 3059:2012 Non-destructive testing - Penetrant testing and magnetic particle testing - Viewing conditions	ISO 3059:2012 Non-destructive testing - Penetrant testing and magnetic particle testing - Viewing conditions
Special technique	CEN/TR 16638:2014 Non-destructive testing - Penetrant and magnetic particle testing using blue light	
Equipment and tools	EN ISO 9934-2:2002 Non-destructive testing - Magnetic particle testing - Part 2: Detection media	ISO 9934-2:2002 Non-destructive testing - Magnetic particle testing - Part 2: Detection media
	EN ISO 9934-2:2002 Non-destructive testing - Magnetic particle testing - Part 2: Detection media	ISO 9934-2:2002 Non-destructive testing - Magnetic particle testing - Part 2: Detection media
Castings «c»	EN 1369:2012 Founding - Magnetic particle testing	ISO 4986:2010 Steel castings - Magnetic particle inspection

Forgings «f»	EN 10228-1:1999 Non-destructive testing of steel forgings - Part 1: Magnetic particle inspection	
Welds (w)	EN ISO 17638:2009 Non-destructive testing of welds - Magnetic particle testing	ISO 17638:2003 Non-destructive testing of welds - Magnetic particle testing
	EN ISO 23278:2009 Non-destructive testing of welds - Magnetic particle testing of welds - Acceptance levels	ISO 23278:2006 Non-destructive testing of welds - Magnetic particle testing of welds - Acceptance levels
Tubes and pipes (t)	EN ISO 10893-3:2011 Non-destructive testing of steel tubes - Part 3: Automated full peripheral flux leakage testing of seamless and welded (except submerged arc-welded) ferromagnetic steel tubes for the detection of longitudinal and/or transverse imperfections	ISO 10893-3:2011 Non-destructive testing of steel tubes - Part 3: Automated full peripheral flux leakage testing of seamless and welded (except submerged arc-welded) ferromagnetic steel tubes for the detection of longitudinal and/or transverse imperfections
	EN ISO 10893-5:2011 Non-destructive testing of steel tubes - Part 5: Magnetic particle inspection of seamless and welded ferromagnetic steel tubes for the detection of surface imperfections	ISO 10893-5:2011 Non-destructive testing of steel tubes - Part 5: Magnetic particle inspection of seamless and welded ferromagnetic steel tubes for the detection of surface imperfections
Terminology	EN 1330-7:2005 Non-destructive testing - Terminology - Part 7: Terms used in magnetic particle testing	

### 5. Penetrant testing (PT)

	EN	ISO
General provisions	EN ISO 3452-1:2013 Non-destructive testing - Penetrant testing - Part 1: General principles	ISO 3452-1:2013 Non-destructive testing - Penetrant testing - Part 1: General principles
	EN ISO 3059:2012 Non-destructive testing - Penetrant testing and magnetic particle testing - Viewing conditions	ISO 3059:2012 Non-destructive testing - Penetrant testing and magnetic particle testing - Viewing conditions
Special technique	EN ISO 3452-5:2008 Non-destructive testing - Penetrant testing - Part 5: Penetrant testing at temperatures higher than 50 degrees C	ISO 3452-5:2008 Non-destructive testing - Penetrant testing - Part 5: Penetrant testing at temperatures higher than 50 degrees C
	EN ISO 3452-6:2008 Non-destructive testing - Penetrant testing - Part 6: Penetrant testing at temperatures lower than 10 degrees C	ISO 3452-6:2008 Non-destructive testing - Penetrant testing - Part 6: Penetrant testing at temperatures lower than 10 degrees C
	CEN/TR 16638:2014 Non-destructive testing - Penetrant and magnetic particle testing using blue light	
Equipment and tools	EN ISO 3452-2:2013 Non-destructive testing - Penetrant testing - Part 2: Testing of penetrant materials	ISO 3452-2:2013 Non-destructive testing - Penetrant testing - Part 2: Testing of penetrant materials
	EN ISO 3452-3:2013 Non-destructive testing - Penetrant testing -	ISO 3452-3:2013 Non-destructive testing - Penetrant testing - Part 3:

	Part 3: Reference test blocks	Reference test blocks
	EN ISO 3452-4:1998 Non-destructive testing - Penetrant testing - Part 4: Equipment	ISO 3452-4:1998 Non-destructive testing - Penetrant testing - Part 4: Equipment
Castings «C»	EN 1371-1:2011 Founding - Liquid penetrant testing- Part 1: Sand, gravity die and low pressure die castings	
	EN 1371-2:1998 Founding - Liquid penetrant inspection - Part 2: Investment castings	
		ISO 4987:2010 Steel castings - Liquid penetrant inspection
Forgings «f»	EN 10228-2:1998 Non-destructive testing of steel forgings - Part 2: Penetrant testing	
Welds (w)	EN ISO 23277:2009 Non-destructive testing of welds - Penetrant testing of welds - Acceptance levels	ISO 23277:2006 Non-destructive testing of welds - Penetrant testing of welds - Acceptance levels
Tubes and pipes (t)	EN ISO 10893-4:2011 Non-destructive testing of steel tubes - Part 4: Liquid penetrant inspection of seamless and welded steel tubes for the detection of surface imperfections	ISO 10893-4:2011 Non-destructive testing of steel tubes - Part 4: Liquid penetrant inspection of seamless and welded steel tubes for the detection of surface imperfections
Terminology	EN ISO 12706:2009 Non-destructive testing - Penetrant testing - Vocabulary	ISO 12706:2009 Non-destructive testing - Penetrant testing - Vocabulary

## 6. Radiographic testing (RT)

	EN	ISO
General provisions	EN ISO 5579:2013 Non-destructive testing - Radiographic testing of metallic materials using film and X- or gamma rays - Basic rules	ISO 5579:2013 Non-destructive testing - Radiographic testing of metallic materials using film and X- or gamma rays - Basic rules
	EN 13068-3:2001 Non-destructive testing - Radioscopic testing - Part 3: General principles of radioscopic testing of metallic materials by X- and gamma rays	
Equipment and tools	EN ISO 11699-1:2011 Non-destructive testing - Industrial radiographic film - Part 1: Classification of film systems for industrial radiography	ISO 11699-1:2008 Non-destructive testing - Industrial radiographic film - Part 1: Classification of film systems for industrial radiography
	EN ISO 11699-2:2011 Non-destructive testing - Industrial radiographic films - Part 2: Control of film processing by means of	ISO 11699-2:1998 Non-destructive testing - Industrial radiographic films - Part 2: Control of film processing by means of reference

reference values	values
EN 25580:1992 Non-destructive testing - Industrial radiographic illuminators - Minimum requirements	ISO 5580:1985 Non-destructive testing - Industrial radiographic illuminators - Minimum requirements
EN ISO 14096-1:2003 Non-destructive testing -- Qualification of radiographic film digitisation systems -- Part 1: Definitions, quantitative measurements of image quality parameters, standard reference film and qualitative control	ISO 14096-1:2005 Non-destructive testing -- Qualification of radiographic film digitisation systems -- Part 1: Definitions, quantitative measurements of image quality parameters, standard reference film and qualitative control
EN ISO 14096-2:2003 Non-destructive testing -- Qualification of radiographic film digitisation systems -- Part 2: Minimum requirements	ISO 14096-2:2005 Non-destructive testing -- Qualification of radiographic film digitisation systems -- Part 2: Minimum requirements
EN 12544-1:1999 Non-destructive testing - Measurement and evaluation of the X-ray tube voltage - Part 1: Voltage divider method	ISO 16526-1:2011 Non-destructive testing -- Measurement and evaluation of the X-ray tube voltage -- Part 1: Voltage divider method
EN 12544-2:2000 Non-destructive testing - Measurement and evaluation of the X-ray tube voltage - Part 2: Constancy check by the thick filter method	ISO 16526-2:2011 Non-destructive testing -- Measurement and evaluation of the X-ray tube voltage -- Part 2: Constancy check by the thick filter method
EN 12544-3:1999 Non-destructive testing - Measurement and evaluation of the X-ray tube voltage - Part 3: Spectrometric method	ISO 16526-3:2011 Non-destructive testing -- Measurement and evaluation of the X-ray tube voltage -- Part 3: Spectrometric method
EN 12543-1:1999 Non-destructive testing - Characteristics of focal spots in industrial X-ray systems for use in non-destructive testing - Part 1: Scanning method	
EN 12543-2:2008 Non-destructive testing - Characteristics of focal spots in industrial X-ray systems for use in non-destructive testing - Part 2: Pinhole camera radiographic method	
EN 12543-3:1999 Non-destructive testing - Characteristics of focal spots in industrial X-ray systems for use in non-destructive testing - Part 3: Slit camera radiographic method	
EN 12543-4:1999 Non-destructive testing - Characteristics of focal spots in industrial X-ray systems for use in non-destructive testing - Part 4: Edge method	
EN 12543-5:1999 Non-destructive testing - Characteristics of focal spots in industrial X-ray systems for use in non-destructive testing - Part 5: Measurement of the effective focal spot size of mini and	

	micro focus X-ray tubes	
	EN 12679:1999 Non-destructive testing - Determination of the size of industrial radiographic sources - Radiographic method	
Image quality	EN ISO 19232-1:2013 Non-destructive testing - Image quality of radiographs - Part 1: Determination of the image quality value using wire-type image quality indicators	ISO 19232-1:2013 Non-destructive testing - Image quality of radiographs - Part 1: Determination of the image quality value using wire-type image quality indicators
	EN ISO 19232-2:2013 Non-destructive testing - Image quality of radiographs - Part 2: Determination of the image quality value using step/hole-type image quality indicators	ISO 19232-2:2013 Non-destructive testing - Image quality of radiographs - Part 2: Determination of the image quality value using step/hole-type image quality indicators
	EN ISO 19232-3:2013 Non-destructive testing - Image quality of radiographs - Part 3: Image quality classes	EN ISO 19232-3:2013 Non-destructive testing - Image quality of radiographs - Part 3: Image quality classes
	EN ISO 19232-4:2013 Non-destructive testing - Image quality of radiographs - Part 4: Experimental evaluation of image quality values and image quality tables	ISO 19232-4:2013 Non-destructive testing - Image quality of radiographs - Part 4: Experimental evaluation of image quality values and image quality tables
	EN ISO 19232-5:2013 Non-destructive testing - Image quality of radiographs - Part 5: Determination of the image unsharpness value using duplex wire-type image quality indicators	ISO 19232-5:2013 Non-destructive testing - Image quality of radiographs - Part 5: Determination of the image unsharpness value using duplex wire-type image quality indicators
Special technique	EN 14784-1:2005 Non-destructive testing - Industrial computed radiography with storage phosphor imaging plates - Part 1: Classification of systems	ISO 16371-1:2011 Non-destructive testing -- Industrial computed radiography with storage phosphor imaging plates -- Part 1: Classification of systems
	EN 14784-2:2005 Non-destructive testing - Industrial computed radiography with storage phosphor imaging plates - Part 2: General principles for testing of metallic materials using X-rays and gamma rays	
	EN 16407-1:2014 Non-destructive testing - Radiographic inspection of corrosion and deposits in pipes by X- and gamma rays - Part 1: Tangential radiographic inspection	
	EN 16407-2:2014 Non-destructive testing - Radiographic inspection of corrosion and deposits in pipes by X- and gamma rays - Part 2: Double wall radiographic inspection	
Aerospace	prEN 2002-21 Aerospace series - Test methods for metallic materials - Part 21: Radiographic testing of cast components	



Castings «C»	EN 12681:2003 Founding - Radiographic examination	ISO 4993:2009 Steel and iron castings - Radiographic inspection
Welds (w)	EN ISO 17636-1:2013 Non-destructive testing of welds - Radiographic testing - Part 1: X- and gamma-ray techniques with film	ISO 17636-1:2013 Non-destructive testing of welds - Radiographic testing - Part 1: X- and gamma-ray techniques with film
	EN ISO 17636-2:2013 Non-destructive testing of welds - Radiographic testing - Part 2: X- and gamma-ray techniques with digital detectors	ISO 17636-2:2013 Non-destructive testing of welds - Radiographic testing - Part 2: X- and gamma-ray techniques with digital detectors
	EN ISO 10675-1:2013 Non-destructive testing of welds - Acceptance levels for radiographic testing - Part 1: Steel, nickel, titanium and their alloys	ISO 10675-1:2008 Non-destructive testing of welds - Acceptance levels for radiographic testing - Part 1: Steel, nickel, titanium and their alloys
	EN ISO 10675-2:2013 Non-destructive testing of welds - Acceptance levels for radiographic testing - Part 2: Aluminium and its alloys	ISO 10675-2:2010 Non-destructive testing of welds - Acceptance levels for radiographic testing - Part 2: Aluminium and its alloys
Tubes and pipes (t)	EN ISO 10893-6:2011 Non-destructive testing of steel tubes - Part 6: Radiographic testing of the weld seam of welded steel tubes for the detection of imperfections	ISO 10893-6:2011 Non-destructive testing of steel tubes - Part 6: Radiographic testing of the weld seam of welded steel tubes for the detection of imperfections
Terminology	EN 1330-3:1997 Non-destructive testing - Terminology - Part 3: Terms used in industrial radiographic testing	ISO 5576:1997 Non-destructive testing - Industrial X-ray and gamma-ray radiology -Vocabulary
	EN 1330-11:2007 Non-destructive testing - Terminology - Terms used in X-ray diffraction from polycrystalline and amorphous materials	

### 7. Ultrasonic testing (UT)

	EN	ISO
General provisions	ISOEN ISO 16810:2014 Non-destructive testing - Ultrasonic testing - General principles	ISO 16810:2012 Non-destructive testing - Ultrasonic testing - General principles
	EN ISO 16823:2014 Non-destructive testing - Ultrasonic testing - Transmission technique	ISO 16823:2012 Non-destructive testing - Ultrasonic testing - Transmission technique
		ISO 10375:1997 Non-destructive testing -- Ultrasonic inspection -- Characterization of search unit and sound field
Equipment and	EN ISO 2400:2012 Non-destructive testing - Ultrasonic testing -	ISO 2400:2012 Non-destructive testing - Ultrasonic testing -

tools	Specification for calibration block No. 1	Specification for calibration block No. 1
	EN ISO 7963:2010 Non-destructive testing - Ultrasonic testing - Specification for calibration block No. 2	ISO 7963:2006 Non-destructive testing - Ultrasonic testing - Specification for calibration block No. 2
	EN 12668-1:2010 Non-destructive testing - Characterization and verification of ultrasonic examination equipment - Part 1: Instruments	
	EN 12668-2:2010 Non-destructive testing - Characterization and verification of ultrasonic examination equipment - Part 2: Probes	
	EN 12668-3:2013 Non-destructive testing - Characterization and verification of ultrasonic examination equipment - Part 3: Combined equipment	
	CEN/TR 15134:2005 Non-destructive testing - Automated ultrasonic examination - Selection and application of systems	
		ISO 12710:2002 Non-destructive testing -- Ultrasonic inspection -- Evaluating electronic characteristics of ultrasonic test instruments
		ISO 12715:2014 Non-destructive testing -- Ultrasonic testing -- Reference blocks and test procedures for the characterization of contact probe sound beams
	EN 15317:2013 Non-destructive testing - Ultrasonic testing - Characterization and verification of ultrasonic thickness measuring equipment	ISO 16831:2012 Non-destructive testing -- Ultrasonic testing -- Characterization and verification of ultrasonic thickness measuring equipment
		ISO 18175:2004 Non-destructive testing -- Evaluating performance characteristics of ultrasonic pulse-echo testing systems without the use of electronic measurement instruments
	EN 16392-2:2014 Non-destructive testing - Characterisation and verification of ultrasonic phased array equipment - Part 2: Probes	
Technique	EN ISO 16811:2014 Non-destructive testing - Ultrasonic testing - Sensitivity and range setting	ISO 16811:2012 Non-destructive testing - Ultrasonic testing - Sensitivity and range setting
	EN ISO 16826:2014 Non-destructive testing - Ultrasonic testing - Examination for discontinuities perpendicular to the surface	ISO 16826:2012 Non-destructive testing - Ultrasonic testing - Examination for discontinuities perpendicular to the surface
	EN ISO 16827:2014 Non-destructive testing - Ultrasonic testing -	ISO 16827:2012 Non-destructive testing - Ultrasonic testing -

	Characterization and sizing of discontinuities	Characterization and sizing of discontinuities
	EN 14127:2011 Non-destructive testing - Ultrasonic thickness measurement	ISO 16809:2012 Non-destructive testing - Ultrasonic thickness measurement
Special technique	EN ISO 16828:2014 Non-destructive testing - Ultrasonic testing - Time-of-flight diffraction technique as a method for detection and sizing of discontinuities	ISO 16828:2012 Non-destructive testing - Ultrasonic testing - Time-of-flight diffraction technique as a method for detection and sizing of discontinuities
	EN ISO 17405:2014 Non-destructive testing -- Ultrasonic testing -- Technique of testing claddings produced by welding, rolling and explosion	ISO 17405:2014 Non-destructive testing -- Ultrasonic testing -- Technique of testing claddings produced by welding, rolling and explosion
Aerospace	EN 4050-1:2012 Aerospace series - Test method for metallic materials - Ultrasonic inspection of bars, plates, forging stock and forgings - Part 1: General requirements	
	EN 4050-2:2012 Aerospace series - Test method for metallic materials - Ultrasonic inspection of bars, plates, forging stock and forgings - Part 2: Performance of test	
	EN 3718:2012 Aerospace series - Test method for metallic materials - Ultrasonic inspection of tubes	
	EN 4050-3:2012 Aerospace series - Test method for metallic materials - Ultrasonic inspection of bars, plates, forging stock and forgings - Part 3: Reference blocks	
	EN 4050-4:2012 Aerospace series - Test method for metallic materials - Ultrasonic inspection of bars, plates, forging stock and forgings - Part 4: Acceptance criteria	
Castings «c»	EN 12680-1:2003 Founding - Ultrasonic examination - Part 1: Steel castings for general purposes	ISO 4992-1:2006 Steel castings - Ultrasonic examination - Part 1: Steel castings for general purposes
	EN 12680-2:2003 Founding - Ultrasonic examination - Part 2: Steel castings for highly stressed components	ISO 4992-2:2006 Steel castings - Ultrasonic examination - Part 2: Steel castings for highly stressed components
	EN 12680-3:2011 Founding - Ultrasonic testing - Part 3: Spheroidal graphite cast iron castings	
Forgings «f»	EN 10228-3:1998 Non-destructive testing of steel forgings - Part 3: Ultrasonic testing of ferritic or martensitic steel forgings	

	EN 10228-4:1999 Non-destructive testing of steel forgings - Part 4: Ultrasonic testing of austenitic and austenitic-ferritic stainless steel forgings	
Welds (w)	EN ISO 17640:2010 Non-destructive testing of welds - Ultrasonic testing - Techniques, testing levels, and assessment	ISO 17640:2010 Non-destructive testing of welds - Ultrasonic testing - Techniques, testing levels, and assessment
	EN ISO 22825:2012 Non-destructive testing of welds - Ultrasonic testing - Testing of welds in austenitic steels and nickel-based alloys	ISO 22825:2012 Non-destructive testing of welds - Ultrasonic testing - Testing of welds in austenitic steels and nickel-based alloys
	EN ISO 23279:2010 Non-destructive testing of welds - Ultrasonic testing - Characterization of indications in welds	ISO 23279:2010 Non-destructive testing of welds - Ultrasonic testing - Characterization of indications in welds
	EN ISO 11666:2010 Non-destructive testing of welds - Ultrasonic testing - Acceptance levels	ISO 11666:2010 Non-destructive testing of welds - Ultrasonic testing - Acceptance levels
Tubes and pipes (t)	EN ISO 10893-8:2011 Non-destructive testing of steel tubes - Part 8: Automated ultrasonic testing of seamless and welded steel tubes for the detection of laminar imperfections	ISO 10893-8:2011 Non-destructive testing of steel tubes - Part 8: Automated ultrasonic testing of seamless and welded steel tubes for the detection of laminar imperfections
	EN ISO 10893-9:2011 Non-destructive testing of steel tubes - Part 9: Automated ultrasonic testing for the detection of laminar imperfections in strip/plate used for the manufacture of welded steel tubes	ISO 10893-9:2011 Non-destructive testing of steel tubes - Part 9: Automated ultrasonic testing for the detection of laminar imperfections in strip/plate used for the manufacture of welded steel tubes
	EN ISO 10893-10:2011 Non-destructive testing of steel tubes - Part 10: Automated full peripheral ultrasonic testing of seamless and welded (except submerged arc-welded) steel tubes for the detection of longitudinal and/or transverse imperfections	ISO 10893-10:2011 Non-destructive testing of steel tubes - Part 10: Automated full peripheral ultrasonic testing of seamless and welded (except submerged arc-welded) steel tubes for the detection of longitudinal and/or transverse imperfections
	EN ISO 10893-11:2011 Non-destructive testing of steel tubes - Part 11: Automated ultrasonic testing of the weld seam of welded steel tubes for the detection of longitudinal and/or transverse imperfections	ISO 10893-11:2011 Non-destructive testing of steel tubes - Part 11: Automated ultrasonic testing of the weld seam of welded steel tubes for the detection of longitudinal and/or transverse imperfections
	EN ISO 10893-12:2011 Non-destructive testing of steel tubes - Part 12: Automated full peripheral ultrasonic thickness testing of seamless and welded (except submerged arc-welded) steel tubes	ISO 10893-12:2011 Non-destructive testing of steel tubes - Part 12: Automated full peripheral ultrasonic thickness testing of seamless and welded (except submerged arc-welded) steel tubes
		ISO 10332:2010 Non-destructive testing of steel tubes - Automated ultrasonic testing of seamless and welded (except submerged arc-

		welded) steel tubes for verification of hydraulic leak-tightness
Wrought products (wp)	EN 10160:1999 Ultrasonic testing of steel flat product of thickness equal or greater than 6 mm (reflection method)	
	EN 10306:2001 Iron and steel - Ultrasonic testing of H beams with parallel flanges and IPE beams	
	EN 10307:2001 Non-destructive testing - Ultrasonic testing of austenitic and austenitic-ferritic stainless steels flat products of thickness equal to or greater than 6 mm (reflection method)	
	EN 10308:2001 Non destructive testing - Ultrasonic testing of steel bars	
Terminology	EN 1330-4:2010 Non-destructive testing - Terminology - Part 4: Terms used in ultrasonic testing	ISO 5577:2000 Non-destructive testing - Ultrasonic inspection - Vocabulary
	EN 16018:2011 Non-destructive testing - Terminology - Terms used in ultrasonic testing with phased arrays	

### 8. Visual testing (VT)

	EN	ISO
General provisions	EN 13018:2001/A1:2003 Non-destructive testing - Visual testing - General principles	
Equipment and tools	EN 13927:2003 Non-destructive testing - Visual testing - Equipment	
	EN ISO 13385-1:2011 Geometrical product specifications (GPS) - Dimensional measuring equipment - Part 1: Callipers; Design and metrological characteristics	ISO 13385-1:2011 Geometrical product specifications (GPS) - Dimensional measuring equipment - Part 1: Callipers; Design and metrological characteristics
	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 Geometrical product specifications (GPS) - Dimensional measuring equipment - Part 2: Calliper depth gauges; Design and metrological characteristics
		ISO 3058:1998 Non-destructive testing - Aids to visual inspection - Selection of low-power magnifiers
Castings «C»	EN 1370:2011 Founding - Examination of surface condition	ISO 11971:2008 Steel and iron castings - Visual examination of surface quality

		ISO 19959:2005 Visual examination of the surface condition of investment castings - Steel, nickel alloys and cobalt alloys
Welds (w)	EN ISO 17637:2011 Non-destructive testing of welds - Visual testing of fusion-welded joints	ISO 17637:2003 Non-destructive testing of welds - Visual testing of fusion-welded joints
Wrought products (wp)	EN 10163-1:2004/AC:2007 Delivery requirements for surface condition of hot-rolled steel plates, wide flats and sections - Part 1: General requirements	
	EN 10163-2:2004 Delivery requirements for surface condition of hot-rolled steel plates, wide flats and sections - Part 2: Plate and wide flats	
	EN 10163-3:2004 Delivery requirements for surface condition of hot-rolled steel plates, wide flats and sections - Part 3: Sections	
	EN 10029:2010 Hot-rolled steel plates 3 mm thick or above - Tolerances on dimensions and shape	
Terminology	EN 1330-10:2003 Non-destructive testing - Terminology - Part 10: Terms used in visual testing	
	EN ISO 8785:1999 Geometrical product specification (GPS) - Surface imperfections - Terms, definitions and parameters (ISO 8785:1998)	ISO 8785:1998 Geometrical Product Specification (GPS) - Surface imperfections - Terms, definitions and parameters

### 9. Leak testing (RT)

	EN	ISO
General provisions	EN 1779:1999/A1:2003 Non-destructive testing - Leak testing - Criteria for method and technique selection	
Equipment and tools	EN 13192:2001/AC:2003 Non destructive testing - Leak testing - Calibration of reference leaks for gases	
	EN 13625:2001 Non-destructive testing - Leak test - Guide to the selection of instrumentation for the measurement of gas leakage	
	EN 1518:1998 Non-destructive testing - Leak testing - Characterization of mass spectrometer leak detectors	

		ISO 3530:1979 Vacuum technology -- Mass-spectrometer-type leak-detector calibration
Techniques	EN 13184:2001/A1:2003 Non-destructive testing - Leak testing - Pressure change method	
	EN 13185:2001/A1:2003 Non-destructive testing - Leak testing - Tracer gas method	
	EN 1593:1999/A1:2003 Non-destructive testing - Leak testing - Bubble emission techniques	
		ISO 27895:2009 Vacuum technology -- Valves -- Leak test
Terminology	EN 1330-8:1998 Non-destructive testing - Terminology - Part 8: Terms used in leak tightness testing	