

PRODUCT STANDARDS FOR BARS AND RODS

STANDARD	description
EN ISO 9443:2018	Surface quality classes for hot-rolled bars and rods - Technical delivery conditions
UNI EN 10025-1: 2005	Hot rolled products of structural steels - General technical
UNI EN 10025-2: 2005	Hot rolled products of structural steels - Part 2: Technical delivery conditions for non-alloy structural steels
EN ISO 683-1: 2018	Heat-treatable steels, alloy steels and free-cutting steels - Part 1: Non-alloy steels for quenching and tempering
EN ISO 683-2: 2018	Heat-treatable steels, alloy steels and free-cutting steels - Part 2: Alloy steels for quenching and tempering
EN ISO 683-3: 2018	Heat-treatable steels, alloy steels and free-cutting steels - Part 3: Case-hardening steels
EN ISO 683-4:2018	Heat-treatable steels, alloy steels and free-cutting steels - Part 4: Free-cutting steels
EN 10088-1: 2014	Stainless steels - Part 1: List of stainless steels
EN 10088-3: 2014	Stainless steels - part 3: Technical delivery conditions for semi-finished products, bars, rods and sections for general purposes
EN 10095: 2001	Heat resisting steels and nickel alloys
ASTM A 576	Steel Bars, Carbon, Hot-Wrought, Special Quality
UNI 7847- 79	Hot rolled, unalloyed and alloyed special steel products, bars and coils,for surface hardening - Qualities, requirements and tests
EN 10207: 2018	Steels for simple pressure vessels - Technical delivery requirements for plates, strips and bars
ASTM A 479/A 479M	Stainless Steel Bars and Shapes for Use in Boilers and Other Pressure Vessels
EN 10269: 2013	Steels and nickel alloys for fasteners with specified elevated and/or low temperature properties
EN 10272: 2016	Stainless steel bars for pressure purposes
EN 10277: 2018	Bright steel products - Technical delivery conditions
EN 10218-1: 2012	Steel wire and wire products - General - Part 1: Test methods
EN 10218-2: 2012	Steel wire and wire products - General - Part 2: Wire dimensions and tolerances
EN 10263-1: 2017	Steel rod, bars and wire for cold heading and cold extrusion - Part 1: General technical delivery conditions
EN 10263-3: 2017	Steel rod, bars and wire for cold heading and cold extrusion - Part 3: Technical delivery conditions for case hardening steels
EN 10263-4: 2017	Steel rod, bars and wire for cold heading and cold extrusion - Part 4: Technical delivery conditions for steels for quenching and tempering
EN 10263-5: 2017	Steel rod, bars and wire for cold heading and cold extrusion - Part 5: Technical delivery conditions for stainless steels
EN 10270-1: 2011+A1:2017	Steel wire for mechanical springs - Part 1: Patented cold drawn unalloyed spring steel wire
EN 10270-2: 2011	Steel wire for mechanical springs - part 2: Oil hardened and tempered spring steel wire
EN 10270-3: 2011	Steel wire for mechanical springs - part 3: Stainless spring steel wire
DIN ISO 4782: 93	Metal wire for industrial wire screens and woven wire cloth
ASTM A 29/A 29M	Steel Bars, Carbon and Alloy, Hot-Wrought, General Requirements for
ASTM A 105/A 105M	Carbon Steel Forgings for Piping Applications
ASTM A 182/A 182M	Forged or Rolled Alloy and Stainless Steel Pipe Flanges, Forged Fittings, and Valves and Parts for High-Temperature Service
ASTM A 276	Stainless Steel Bars and Shapes
ASTM A 314	Stainless Steel Billets and Bars for Forging
ASTM A 493	Stainless Steel Billets and Bars for Forging Cold Forging

ASTM A 581/A 581M	Free-Machining Stainless Steel Wire and Wire Rods
ASTM 582/A 582M	Free-Machining Stainless Steel Bars
EN ISO 683-17: 2015	Heat-treated steels, alloy steels and free-cutting steels - Part 17: Ball and roller bearing steels

DIMENSIONAL STANDARDS

STANDARD	description
EN 10059: 2004	Hot rolled square steel bars for general purposes - Dimensions and tolerances on shape and dimensions
EN 10060: 2004	Barre di acciaio tonde laminate a caldo per impieghi generali - Dimensioni e tolleranze sulla forma e le dimensioni
EN 10061: 2004	Barre di acciaio esagone laminate a caldo per impieghi generali - Dimensioni e tolleranze nella forma e le dimensioni
EN 10278: 1999	Dimensions and tolerances of bright steel products
EN 10020: 2000	Definition and classification of grades of steel
EN 10021: 2007	General technical delivery requirements for steel and iron products
EN 10027-1: 2016	Designation systems for steels - Part 1 Steel names
EN 10027-2: 2015	Designation systems for steels - Part 2: Numerical system
EN ISO 4885: 2018	Ferrous materials - Heat treatments - Vocabulary
EN 10079: 2007	Definition of steel products

PRODUCT STANDARDS FOR STAINLESS STEELS FOR WELDING

STANDARD	description
EN ISO 14341:2011	Welding consumables - Wire electrodes and weld deposits for gas shielded metal arc welding of non alloy and fine grain steels - Classification
EN ISO 544: 2017	Welding consumables - Technical delivery conditions for filler materials and fluxes - Type of product, dimensions, tolerances and markings
EN ISO 3581: 2016	Welding consumables - Covered electrodes for manual metal arc welding of stainless and heat-resisting steels - Classification
EN ISO 14343: 2017	Welding consumables Wire electrodes, strip electrodes, wires and rods for arc welding of stainless and heat resisting steels

FASTENER STANDARDS

STANDARD	description
EN ISO 898-1: 2013	Mechanical properties of fasteners made of carbon steel and alloy steel – Part 1: Bolts, screws and studs with specified property classes – Coarse thread and fine pitch thread
EN ISO 3506-1: 2009	Mechanical properties of corrosion-resistant stainless steel fasteners – Part 1: Bolts, screws and studs
ASTM A193 / A193M	Alloy-Steel and Stainless Steel Bolting for High Temperature or High Pressure Service and Other Special
ASTM A194 / A194M	Carbon and Alloy Steel Nuts for Bolts for High Pressure or High Temperature Service, or Both
ASTM A320 / A320M	Alloy-Steel and Stainless Steel Bolting for Low-Temperature Service

STANDARDS FOR MECHANICAL AND METALLURGICAL TESTS

STANDARD	description
EN ISO 14284: 2002	Steel and iron - Sampling and preparation of samples for the determination of chemical composition
ISO 377: 2017	Steel and steel products – Location and preparation of samples and test pieces for mechanical testing
EN ISO 376: 2011	Metallic materials - Calibration of force-proving instruments used for the verification of uniaxial testing
EN ISO 6892-2:2018	Metallic materials - Tensile testing - Part 1: Method of test at room temperature
ASTM A370	Standard Test Methods and Definitions for Mechanical Testing of Steel Products
EN ISO 6506-1: 2014	Metallic materials - Brinell Hardness test - Part 1: Test Method
EN ISO 6507-1: 2018	Metallic materials - Vickers Hardness test - Part 1 : Test method
EN ISO 6508-1: 2016	Metallic materials - Rockwell hardness test - Part 1: Test method
EN ISO 148-1:2016	Metallic materials - Charpy pendulum impact test - Part 1: Test method
UNI 3244-80	Microscopic examination of ferrous materials - Rating of non-metallic inclusions in steels with reference pictures
EN ISO 643:2012	Steels - Micrographic determination of the apparent grain size
ASTM E 112	Standard Test Methods for Determining Average Grain Size

STANDARDS FOR QUALITY MANAGEMENT AND CERTIFICATION

STANDARD	description
EN ISO 9001: 2015	Quality management systems - Requirements
EN ISO 9004: 2018	Managing for the sustained success of an organization - A quality management approach
IATF 16949:2016	Quality management systems – Particular requirements for the application of ISO 9001:2008 for automotive production and relevant service part organizations
EN 10168: 2004	Steel products - Inspection documents - Lista of information and description
EN 10204: 2004	Metallic products - Types of inspection documents