AMERICAN SOCIETY OF TESTING MATERIALS (ASTM)

The Volume#1 details the standards for:

1. standards for various types of steel pipes specifying requirements for high-temperature services, ordinary use, and special applications such as fire protection systems.
2. standards steel tubes list standard requirements for boiler and superheater tubes, general service tubes, still tubes in refinery service, heat exchanger and condenser tubes,
3. standards for mechanical tubing, and structural tubing.
4. standards for steel casting specifications call out the standard properties for valves, flanges, fittings, and other pressure containing parts for high-temperature and low-temperature services.

FOLLOWING FIND THE NORMS DETAILED IN DE ASTM VOLUME #1

⇒ A53/A53M-01 Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless
⇒ ASTM A-53B This general service carbon steel pipe is electrical resistance welded. This grade is typical Schedule 40 and 80 pipe. It is well suited for fabrication, and may be used for pressure vessels with pressure and temperature limitations.
⇒ Often used for oil, water, gas and petroleum products.
⇒ A105/A105M-01 Standard Specification for Carbon Steel Forgings for Piping Applications
⇒ This specification covers forged carbon steel piping components for ambient- and higher-temperature service in pressure systems. Included are flanges, fittings, valves, and similar parts ordered either to dimensions specified by the purchaser or to dimensional standards such as the ASME and API specifications referenced in Section.
⇒ A106-99e1 Standard Specification for Seamless Carbon Steel Pipe for High-Temperature Service
⇒ The specification covers seamless carbon steel pipe for high-temperature service in NPS 1/8 to NPS 48 inclusive, with nominal (average) wall thickness as given in ANSI B 36.10. It shall be permissible to furnish pipe having other dimensions provided such pipe complies with all other requirements of this specification. Pipe ordered under this specification shall be suitable for bending, flanging, and similar forming operations, and for welding.
⇒ A134-96 Standard Specification for Pipe, Steel, Electric-Fusion (Arc)-Welded (Sizes NPS 16 and Over)
⇒ A139-00 Standard Specification for Electric-Fusion (Arc)-Welded Steel Pipe (NPS 4 and Over)
⇒ A181/A181M-01 Standard Specification for Carbon Steel Forgings, for General-Purpose Piping
⇒ A182/A182M-01 Standard Specification for Forged or Rolled Alloy-Steel Pipe Flanges, Forged Fittings, and Valves and Parts for High-Temperature Service
⇒ A192/A192M-91(1996)e1 Standard Specification for Seamless Carbon Steel Boiler Tubes for High-Pressure Service
⇒ A193/A193M-01a Standard Specification for Alloy-Steel and Stainless Steel Bolting Materials for High-Temperature Service
⇒ A194/A194M-01a Standard Specification for Carbon and Alloy Steel Nuts for Bolts for High-Pressure or High-Temperature Service, or Both
⇒ A209/A209M-98 Standard Specification for Seamless Carbon-Molybdenum Alloy-Steel Boiler and Superheater Tubes
⇒ A210/A210M-96 Standard Specification for Seamless Medium-Carbon Steel Boiler and Superheater Tubes
⇒ The specification covers minimum-wall-thickness, seamless medium-carbon steel, boiler tubes and boiler flues, including safe ends, arch and stay tubes, and superheater tubes.
⇒ A234/A234M-01 Standard Specification for Piping Fittings of Wrought Carbon Steel and Alloy Steel for Moderate and High Temperature Service
⇒ A249/A249M-01 Standard Specification for Welded Austenitic Steel Boiler, Superheater, Heat-Exchanger, and Condenser Tubes
⇒ A252-98e1 Standard Specification for Welded and Seamless Steel Pipe Piles
⇒ A254-97 Standard Specification for Copper-Brazed Steel Tubing
⇒ A268/A268M-01 Standard Specification for Seamless and Welded Ferritic and Martensitic Stainless Steel Tubing for General Service
⇒ A269-01 Standard Specification for Seamless and Welded Austenitic Stainless Steel Tubing for General Service
⇒ A270-01 Standard Specification for Seamless and Welded Austenitic Stainless Steel Sanitary Tubing
⇒ A312/A312M-01 Standard Specification for Seamless and Welded Austenitic Stainless Steel Pipes
⇒ A320/A320M-01 Standard Specification for Alloy/Steel Bolting Materials for Low-Temperature Service
⇒ The specification covers several grades of minimum-wall-thickness, seamless and welded, carbon and alloy-steel tubes intended for use at low temperatures. Some product sizes may not be available under this specification because heavier wall thickness have an adverse affect on low-temperature impact properties.
⇒ A335/A335M-01 Standard Specification for Seamless Ferritic Alloy-Steel Pipe for High-Temperature Service
⇒ A350/A350M-0Cc Standard Specification for Carbon and Low-Alloy Steel Forgings, Requiring Notch Toughness Testing for Piping Components
⇒ A369/A369M-01 Standard Specification for Carbon and Ferritic Alloy Steel Forged and Bored Pipe for High-Temperature Service
⇒ A376/A376M-01 Standard Specification for Seamless Austenitic Steel Pipe for High-Temperature Central-Station Service
⇒ A381-96 Standard Specification for Metal-Arc-Welded Steel Pipe for Use With High-Pressure Transmission Systems
⇒ A403/A403M-00b Standard Specification for Wrought Austenitic Stainless Steel Piping Fittings
⇒ A409/A409M-01 Standard Specification for Welded Large Diameter Austenitic Steel Pipe for Corrosive or High-Temperature Service
⇒ A420/A420M-01 Standard Specification for Piping Fittings of Wrought Carbon Steel and Alloy Steel for Low-Temperature Service
⇒ A437/A437M-01a Standard Specification for Alloy-Steel Turbine-Type Bolting Material Specially Heat Treated for High-Temperature Service
⇒ A453/A453M-00e1 Standard Specification for High-Temperature Bolting Materials, with Expansion Coefficients Comparable to Austenitic Stainless Steels
⇒ A500-01a Standard Specification for Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes
⇒ A501-01 Standard Specification for Hot-Formed Welded and Seamless Carbon Steel Structural Tubing
⇒ A511-96 Standard Specification for Seamless Stainless Steel Mechanical Tubing
⇒ A512-96 Standard Specification for Cold-Drawn Buttweld Carbon Steel Mechanical Tubing
⇒ A513-00 Standard Specification for Electric-Resistance-Welded Carbon and Alloy Steel Mechanical Tubing
⇒ A519-96 Standard Specification for Seamless Carbon and Alloy Steel Mechanical Tubing
⇒ A522/A522M-01 Standard Specification for Forged or Rolled 8 and 9% Nickel Alloy Steel Flanges, Fittings, Valves, and Parts for Low-Temperature Service
⇒ A523-96 Standard Specification for Plain End Seamless and Electric-Resistance-Welded Steel Pipe for High-Pressure Pipe-Type Cable Circuits
⇒ A524-96 Standard Specification for Seamless Carbon Steel Pipe for Atmospheric and Lower Temperatures
⇒ A530/A530M-99e1 Standard Specification for General Requirements for Specialized Carbon and Alloy Steel Pipe
⇒ A540/A540M-00 Standard Specification for Alloy-Steel Bolting Materials for Special Applications
⇒ A554-98e1 Standard Specification for Welded Stainless Steel Mechanical Tubing
⇒ A556/A556M-96 Standard Specification for Seamless Cold-Drawn Carbon Steel Feedwater Heater Tubes
⇒ A589-96 Standard Specification for Seamless and Welded Carbon Steel Water-Well Pipe
⇒ A595-98 Standard Specification for Steel Tubes, Low-Carbon, Tapered for Structural Use
⇒ A618-01 Standard Specification for Hot-Formed Welded and Seamless High-Strength Low-Alloy Structural Tubing
⇒ A632-01 Standard Specification for Seamless and Welded Austenitic Stainless Steel Tubing (Small-Diameter) for General Service
⇒ A660-96 Standard Specification for Centrifugally Cast Carbon Steel Pipe for High-Temperature Service
⇒ A671-96 Standard Specification for Electric-Fusion-Welded Steel Pipe for Atmospheric and Lower Temperatures
A672-96 Standard Specification for Electric-Fusion-Welded Steel Pipe for High-Pressure Service at Moderate Temperatures
A688/A688M-01a Standard Specification for Welded Austenitic Stainless Steel Feedwater Heater Tubes
A691-98 Standard Specification for Carbon and Alloy Steel Pipe, Electric-Fusion-Welded for High-Pressure Service at High Temperatures
A694/A694M-00 Standard Specification for Carbon and Alloy Steel Forgings for Pipe Flanges, Fittings, Valves, and Parts for High-Pressure Transmission Service
A707/A707M-00a Standard Specification for Forged Carbon and Alloy Steel Flanges for Low-Temperature Service
A714-99 Standard Specification for High-Strength Low-Alloy Welded and Seamless Steel Pipe
A727/A727M-00 Standard Specification for Carbon Steel Forgings for Piping Components with Inherent Notch Toughness
A733-01 Standard Specification for Welded and Seamless Carbon Steel and Austenitic Stainless Steel Pipe Nipples
A738/A738M-00 Standard Specification for Wrought-Carbon Steel Butt-Welding Piping Fittings with Improved Notch Toughness
A774/A774M-00 Standard Specification for As-Welded Wrought Austenitic Stainless Steel Fittings for General Corrosive Service at Low and Moderate Temperatures
A778-01 Standard Specification for Welded, Unannealed Austenitic Stainless Steel Tubular Products
A787-01 Standard Specification for Electric-Resistance-Welded Metallic-Coated Carbon Steel Mechanical Tubing
A789/A789M-01a Standard Specification for Seamless and Welded Ferritic/Austenitic Stainless Steel Tubing for General Service
A790/A790M-01 Standard Specification for Seamless and Welded Ferritic/Austenitic Stainless Steel Pipe
A795-00 Standard Specification for Black and Hot-Dipped Zinc-Coated (Galvanized) Welded and Seamless Steel Pipe for Fire Protection Use
A803/A803M-01 Standard Specification for Welded Ferritic Stainless Steel Feedwater Heater Tubes
A813/A813M-01 Standard Specification for Single- or Double-Welded Austenitic Stainless Steel Pipe
A814/A814M-01 Standard Specification for Cold-Worked Welded Austenitic Stainless Steel Pipe
A815/A815M-01a Standard Specification for Wrought Ferritic, Ferritic/Austenitic, and Martensitic Stainless Steel Piping Fittings
A847-99a Standard Specification for Cold-Formed Welded and Seamless High Strength, Low Alloy Structural Tubing with Improved Atmospheric Corrosion Resistance
A851-96 Standard Specification for High-Frequency Induction Welded, Unannealed, Austenitic Steel Condenser Tubes
A858/A858M-00 Standard Specification for Heat-Treated Carbon Steel Fittings for Low-Temperature and Corrosive Service
A860/A860M-00 Standard Specification for Wrought High-Strength Low-Alloy Steel Butt-Welding Fittings
A865-97 Standard Specification for Threaded Couplings, Steel, Black or Zinc-Coated (Galvanized) Welded or Seamless, for Use in Steel Pipe Joints
A928/A928M-00 Standard Specification for Ferritic/Austenitic (Duplex) Stainless Steel Pipe Electric Fusion Welded with Addition of Filler Metal
A941-01 Terminology Relating to Steel, Stainless Steel, Related Alloys, and Ferroalloys
A943/A943M-01 Standard Specification for Spray-Formed Seamless Austenitic Stainless Steel Pipes
A949/A949M-01 Standard Specification for Spray-Formed Seamless Ferritic/Austenitic Stainless Steel Pipe
A953-96 Standard Specification for Austenitic Chromium-Nickel-Silicon Alloy Steel Seamless and Welded Tubing
A954-96 Standard Specification for Austenitic Chromium-Nickel-Silicon Alloy Steel Seamless and Welded Pipe
A959-00a Standard Guide for Specifying Harmonized Standard Grade Compositions for Wrought Stainless Steels
A960-00 Standard Specification for Common Requirements for Wrought Steel Piping Fittings
A961-01 Standard Specification for Common Requirements for Steel Flanges, Forged Fittings, Valves, and Parts for Piping Applications
A962/A962M-01a Standard Specification for Common Requirements for Steel Fasteners or Fastener Materials, or Both, Intended for Use at Any Temperature from Cryogenic to the Creep Range
A972/A972M-00 Standard Specification for Fusion Bonded Epoxy-Coated Pipe Piles
A984/A984M-00 Standard Specification for Steel Line Pipe, Black, Plain-End, Electric-Resistance-Welded
A988-98 Standard Specification for Hot Isostatically-Pressed Stainless Steel Flanges, Fittings, Valves, and Parts for High Temperature Service
A999/A999M-01 Standard Specification for General Requirements for Alloy and Stainless Steel Pipe
A1005/A1005M-00e1 Standard Specification for Steel Line Pipe, Black, Plain End, Longitudinal and Helical Seam, Double Submerged-Arc Welded
A1006/A1006M-00 Standard Specification for Steel Line Pipe, Black, Plain End, Laser Beam Welded
A1012-00 Standard Specification for Seamless and Welded Ferritic, Austenitic and Duplex Alloy Steel Condenser and Heat Exchanger Tubes With Integral Fins
A1014-00 Standard Specification for Precipitation-Hardening Bolting Material (UNS N07718) for High Temperature Service
A1015-01 Standard Guide for Videoborescoping of Tubular Products for Sanitary Applications
A1016/A1016M-01 Standard Specification for General Requirements for Ferritic Alloy Steel, Austenitic Alloy Steel, and Stainless Steel Tubes
A1020/A1020M-01 Standard Specification for Steel Tubes, Carbon and Carbon Manganese, Fusion Welded, for Boiler, Superheater, Heat Exchanger and Condenser Applications
E527-83(1997)e1 Standard Practice for Numbering Metals and Alloys (UNS)