Pipe World Standards

API (American Petroleum Institute)

API Spec 2B Structural Steel Pipe - Steel Pipe
API Spec 2C Offshore Cranes - Offshore Cranes
API Spec 2F Mooring Chain - Flash Welded Chain; Forged Connecting Links
API Spec 2H Carbon Manganese Steel Plate for Offshore Platform Tubular Joints - Grade 42 Steel Plate; Grade 50 Steel Plate
API Spec 2MT1 As-Rolled Carbon Manganese Steel Plate with Improved Toughness for Offshore Structures - Steel Plate, Grade 2MT1
API Spec 2MT2 Rolled Shapes with Improved Notch Toughness - Steel Rolled Shapes
API Spec 2SW Steel Plates for Offshore Structures Produced by Thermo-Mechanical Control Processing (TMCP) - Grade 50 Steel Plate; Grade 60 Steel Plate
API Spec 2Y Steel Plates, Quenched-and-Tempered, for Offshore Structures - Grade 50 Steel Plate; Grade 60 Steel Plate
API Spec 4F Drilling and Well Servicing Structures - Derricks; Masts; Crown Block Assemblies; Substructures; at PSL 1 and 2
API Spec 5B Threading, Gauging, and Thread Inspection of Casing, Tubing and Line Pipe Threads - Thread Gages
API Spec 5CT Casing and Tubing - Manufacturer of Casing or Tubing Plain End; Manufacturer of Casing or Tubing Threaded and Coupled; Manufacturer of Casing or Tubing Pup Joints; Manufacturer of Casing or Tubing Couplings; Manufacturer of Accessories; Processor of Casing or Tubing Plain End; Processor of Casing or Tubing Threaded and Coupled; Threader at Groups 1, 2, 3 and 4.
API Spec 5DP Drill Pipe - Drill Pipe Body; Tool Joints; Drill Pipe (Assembly)
API Spec 5SL Line Pipe - Manufacturer of Line Pipe - Plain End at PSL 1; Manufacturer of Line Pipe - Plain End at PSL 2; Manufacturer of Line Pipe - Threaded and Coupled; Manufacturer of Line Pipe Couplings; Processor of Line Pipe - Plain End at PSL 2; Processor of Line Pipe - Threaded and Coupled; Threader.
API Spec 5LC CRA Line Pipe - Manufacturer of Alloy Pipe; Processor of Alloy Pipe
API Spec 5SCP Coiled Line Pipe - Coiled Line Pipe
API Spec 5LD CRA Clad or Lined Steel Pipe - Manufacturer of Clad Steel Pipe; Manufacturer of Lined Steel Pipe; Processor of Clad Steel Pipe; Processor of Lined Steel Pipe
API Spec 5ST Coiled Tubing - Manufacturer of Coiled Tubing
API Spec 6A Wellhead and Christmas Tree Equipment - Manufacturer of: Casing and Tubing Heads; Cross-Over Connectors; Tubing Head Adapters; Top Connectors; Tees and Crosses; Fluid-Sampling Devices; Adapter and Spacer Spools; Casing and Tubing Hangers; Valves; Chokes; Surface and Underwater Safety Valves; Surface and Underwater Safety Valve Actuators; Back Pressure Valves; Flanged Connectors; Threaded Connectors; Other End Connectors; Bull plugs; Valve Removal Plugs; Actuators; Ring Joint Gaskets at PSL 1 through 4
API Spec 6AV1 Verification Test of Wellhead Surface Safety Valves and Underwater Safety Valves for Offshore Use - Testing Agency
API Spec 6D Pipeline Valves (Steel Gate, Plug, Ball, and Check Valves) - Gate Valves; Plug Valves; Ball Valves; Check Valves
API Spec 6DS Subsea Pipeline Valves - Subsea Gate Valves; Subsea Plug Valves; Subsea Ball Valves; Subsea Check Valves
API Spec 6H End Closures, Connectors and Swivels - Pipeline Closures; Connectors; Couplings; Misalignment Devices (Swivels); Split Mechanical Fittings
API Spec 7-1 Rotary Drilling Equipment - Kelly Valves; Kelly’s; Drill Stem Subs; Drill Collars; Heavy Weight Drill Pipe; Roller Bits; Blade Drag Bits; Diamond Bits; PDC Bits; Threading for Rotary Shouldered Connections
API Spec 7-2 Threading and Gauging of Rotary Shouldered Thread Connections - Rotary Shouldered Connection Gauges
API Spec 7B-11C Internal-Combustion Reciprocating Engines for Oil Field Service
API Spec 7F Oil Field Chain and Sprockets - Roller Chain
API Spec 7K Drilling Equipment - Rotary Tables, Kelly Bushings, Master Bushings, Rotary Slips, Rotary Hoses, Slush Pump Components, Draw works Components, Spiders Not Capable of Use as Elevators, Manual Tongs, Safety Clamps Not used as Hoisting Devices, Power Tongs
API Spec 7NRV Drill String Non-return Valves - Drill String Non Return Valves, Non Return Valve Subs, Non Return Valve Landing Nipples, Non Return Valve Equalizing Heads
API Spec 8A Drilling and Production Hoisting Equipment - Hoisting Sheaves, Traveling Blocks; Block-to-Hook Adapters, Connectors and Link Adapters, Drilling Hooks, Tubing and Sucker Rod Hooks; Elevator Links, Casing, Tubing and Drill Pipe Elevators, Spiders, Sucker Rod Elevators; Rotary Swivel Bail Adapters, Rotary Swivels; Power Swivels, Power Subs; Wreweine Anchors, Heave Compensators, Kelly Spinners (when capable of being used as hoisting equipment); Pressure Vessels and Piping Mounted onto Hoisting Equipment at PSL 1 and 2
SPECIFICATION LIST FOR PIPING MATERIALS

API Spec 9A Wire Rope - Bright or Drawn-Galvanized Wire Rope; Mooring Wire Rope; Torpedo Lines; Well-Measuring Wire; Well-Measuring Strand; Wire Guy Strand; Structural Rope and Strand
API Spec 10A Well Cements - API Well Cement Class A, Type O; Class B, Type MSR, HSR; Class C, Type O, MSR, HSR; Class D, Type [MSR, HSR]; Class E, Type [MSR, HSR]; Class F, Type [MSR, HSR]; Class G, Type [MSR, HSR]; Class H, Type [MSR, HSR]
API Spec 10D Bow-Spring Casing Centralizers - Casing Centralizers
API Spec 11AX Subsurface Sucker Rods, Pumps and Fittings - Pump and Pump Parts; Pump and Pump Parts without Tubing or Sucker Rod Threads; Seating Cups
API Spec 11B Sucker Rods - Steel Sucker Rods; FRP Sucker Rods; Couplings, Sub couplings and Polished Rod Connections; Polished Rods; Polished Rod Clamps; Stuffing Box and Pumping Tees; Sinker Bars; Threads; Thread Gages
API Spec 11D1 Downhole Equipment - Packers; Bridge Plugs
API Spec 11E Pumping Units - Pumping Unit Structure; Pumping Unit Gear Reducer
API Spec 11IW Independent Wellhead Equipment - Independent Wellheads; Top Connectors; Tubing and Casing Slip Hangers; Tubing and Casing Mandrel Hangers; Packoffs; Belled Nipples; Connector Flanges; Stripper Adapters
API Spec 11V1 Gas Lift Valves, Orifices, Reverse Flow Valves and Dummy Valves - Gas Lift Valves; Reverse Flow (Check) Valves; Orifice Valves; Dummy Valves; Wireline Retrieval Valve Mandrels
API Spec 12B Bolted Tanks for Storage of Production Liquids - Storage Tanks
API Spec 12D Field Welded Tanks for Storage of Production Liquids - Storage Tanks
API Spec 12F Shop Welded Tanks for Storage and Production Liquids - Storage Tanks
API Spec 12J Oil and Gas Separators - Separators
API Spec 12K Indirect Type Oilfield Heaters - Heaters; Shells; Coils
API Spec 12L Vertical and Horizontal Emulsion Treating Systems - Treating Systems
API Spec 12P Fiberglass Reinforced Plastic Tanks - FRP Tanks
API Spec 13A Oil-Well Drilling-Fluid Materials - Barite; Barite 4,1 Hematite; Bentonite; Nontreated Bentonite; Attapulgite; Sepiolite; CMC-LVT; CMC-HVT; Starch; OCMA Grade Bentonite; PAC-LV; PAC-HV; Drilling-Grade Xanthan Gum
API Spec 14A Subsurface Safety Valve Equipment - Subsurface Safety Valves; Testing Agency
API Spec 14L Lock Mandrels and Landing Nipples - Lock Mandrels; Landing Nipples
API Spec 15HR High Pressure Fiberglass Line Pipe - Line Pipe; Couplings; Fittings; Flanges; Reducers and Adapters
API Spec 15LE Polyethylene Line Pipe (PE) - (PE) Line Pipe
API Spec 15LR Low Pressure Fiberglass Line Pipe - CC Line Pipe; FW Line Pipe
API Spec 16A Drill Through Equipment - Ram BOP; Ram Blocks, Packers, and/or Top Seals; Annular BOP; Annular Packing Units; Hydraulic Connectors; Drilling Spools; Adapters; Loose Connections; Clamps
API Spec 16C Choke and Kill Systems - Actuated Valve Control Lines; Articulated Choke & Kill Line; Drilling Choke Actuators; Drilling Choke Control Line exclusive of BOP Control Lines and Subsurface Safety Valve Control Lines; Drilling Choke Controls; Drilling Chokes; Flexible Choke and Kill Lines; Union Connections; Rigid Choke and Kill Lines; Swivel Joints; Choke and Kill Manifold Assemblies
API Spec 16D Control Systems for Drilling Well Control Equipment - Control Systems for Surface Mounted BOP Stacks; Hydraulic Control Systems for Subsea BOP Stacks; Electro-Hydraulic/Multiplex Control Systems for Subsea BOP Stacks; Diverter Control Systems; Emergency Backup BOP Control Systems; Auxiliary Equipment Control Systems and Interfaces
API Spec 16F Marine Drilling Riser Equipment
API Spec 16G Drilling through Equipment (Rotating Control Devices)
API Spec 16H Marine Drilling Riser Couplings - Marine Drilling Riser Couplings
API Spec 17D Subsea Wellhead and Christmas Tree Equipment - Subsea Tree Equipment; Subsea Wellhead Equipment; Mudline Suspension System Equipment; Other Equipment at PSL 2, 3
API Spec 17E Subsea Production Control Umbilicals - Hose Umbilicals; Electrical Umbilicals; Electro-Hydraulic Umbilicals
API Spec 17F Subsea Production Control Systems - Subsea Production Control Systems
API Spec 17G Unbonded Flexible Pipe - Unbonded Flexible Pipe
API Spec 17H Bonded Flexible Pipe - Bonded Flexible Pipe
API Standard 547 General-Purpose Form-Wound Squirrel Cage Induction Motors - 250 Horsepower and Larger
API Standard 594 Check Valves
API Standard 599 Metal Plug Valves
API Standard 600 Bolted Bonnet Steel Gate Valves - Bolted Bonnet Steel Gate Valves
API Standard 602 Compact Steel Gate Valves, Globe Valves and Check Valves
API Standard 603 Corrosion-Resistant Bolted Bonnet Gate Valves
API Standard 608 Metal Ball Valves
SPECIFICATION LIST FOR PIPING MATERIALS

BS (British Standards)

BS534 / Steel Pipes Fittings and Specials for Water and Gas and Sewage
BS778 / Steel Pipes and Joints for Hydraulic Purposes
BS879 / Steel Pipes and Joints for Hydraulic Purposes
(HFS27/HFS35/ERW27/ERW26/HFS27/HFS35/ERW27/ERW26)
BS1139 / Tubes for Use in Scaffolding
BS1387 / Steel Tubes and Tubulars Suitable for Screwing to BS21 Pipe Threads
BS1717 / Steel Tubes for Cycle and Motor Cycle Purposes
BS1864 / Stainless Steel Milk Pipes and Fittings
(Gr.1/Gr.2/Gr.3/Gr.4/Gr.5/Gr.6/Gr.7/Gr.8/Gr.9/Gr.1/Gr.2/Gr.3/Gr.4/Gr.5/Gr.6/Gr.7/Gr.8/Gr.9)
BS3059 PART1 / Steel Boiler and Superheater Tubes
(HFS320/CFS320/ERW320/CEW320/HFS320/CFS320/ERW320/CEW320)
BS3059 PART2 / Steel Boiler and Superheater Tubes
(S1 360/S2 360/ERW360/CEW360/S1440/S2 440/ERW440/CEW440/S1 243/S2 243/ERW243/CEW243/ERW620)
BS3600 / Dimensions and Masses Per Unit Length of Welded and Seamless Steel Pipes
and for Pressure Purposes
BS3601 / Steel Pipes and Tubes for Pressure Purposes Carbon Steel with Specified Room
Temperature Properties (BW320/ERW320/ERW360/ERW430/S360/S430/SAW360/BW320/ERW320)
BS3602 PART1 / Steel Pipes and Tubes for Pressure Purposes Carbon and Carbon Manganese
Steel with Specified Elevated Temperature Properties (HGS360/CFS360/CEW360/HFS430/CFS430)
BS3602 PART2 / Steel Pipes and Tubes for Pressure Purposes Carbon and Carbon Manganese
Steel with Specified Elevated Temperature Properties (SAW410/SAW460/SAW410/SAW460)
BS3603 / Steel Pipes and Tubes for Pressure Purposes Carbon and Alloy Steel with
Specified Low Temperature Properties (HFS410LT50/CFS410LT50/ERW410LT50)
BS3604 / Steel Pipes and Tubes for Pressure Purposes Ferritic Alloy Steel with Specified Elevated
BS3605 PART1 / Seamless and Welded Austenitic Stainless Steel Pipe and Tubes for
Pressure Purposes (Seamless Pipes With Specified Room Temperature Properties)
BS3605 PART2 / Seamless and Welded Austenitic Stainless Steel Pipe and Tubes for
Pressure Purposes (Welded Pipes With Specified Room Temperature Properties)
BS3606 / Steel Tubes for Heat Exchangers (ERW320/CEW320/CFS320/ERW440/CEW440/CFS440/ERW243)
BS4127 / Light Gauge Stainless Steel Tubes (Round Pipe)
BS4825 / Pipes and Fittings for the Food Industry
BS5242 PART3 / Tubes for Fluid Power Cylinder Barrels(for Mining)(HP1/HP2/HP3/HP4)
BS6323 PART2 / Seamless and Welded Steel Tubes for Automobile Mechanical and General
Engineer Purpose (Hot finished welded steel tubes)
BS6323 PART2 / Seamless and Welded Steel Tubes for Automobile Mechanical and General
Engineer Purpose(Hot finished welded steel tubes) (Square, Rectangular Pipe)
BS6323 PART3 / Seamless and Welded Steel Tubes for Automobile Mechanical and General
Engineer Purpose (Hot finished seamless steel tube)
BS6323 PART4 / Seamless and Welded Steel Tubes for Automobile Mechanical and General
Engineer Purpose (Cold finished seamless tubes)
BS6323 PART5 / Seamless and Welded Steel Tubes for Automobile Mechanical and General
Engineer Purpose (Electric resistance welded(including induction welded)steel tubes)
BS6323 PART6 / Seamless and Welded steel Tubes for Automobile Mechanical and General
Engineer Purpose (Cold finished electric resistance welded (including induction welded) steel tubes)
BS6323 PART6 / Seamless and Welded steel Tubes for Automobile Mechanical and General
Engineer Purpose (Cold finished electric resistance welded (including induction welded) steel tubes)
BS6323 PART7 / Seamless and Welded Steel Tubes for Automobile Mechanical and General
Engineer Purpose (Submerged arc welded steel tubes)
BS6323 PART8 / Seamless and Welded Steel Tubes for Automobile Mechanical and General
Engineer Purpose(Longitudinally welded stainless steel tubes)
BS6323 PART8 / Seamless and Welded Steel Tubes for Automobile Mechanical and General
Engineer Purpose(Longitudinally welded stainless steel tubes)
BS6363 / Welded Cold Formed Steel Structural Hollow(34/26 / 43/36 / 50/45 / 34/26 / 43/36 / 50/45)
BS7416 / Precision Finished Seamless Cold Drawn low Carbon Steel Tubes for Use in Hydraulic Fluid Power Systems

ASTM (ASTM International)
ASTM A53 / ASME SA53 / Pipe Steel Black and Hot Dipped Zinc Coated Welded and Seamless
ASTM A106 / ASME SA106 / Seamless Carbon Steel Pipe for High Temperature Service
ASTM A134 / ASME SA134 / Pipe Steel Electric Fusion(ARC) Welded(Sizes Nps 16 and Over)
ASTM A135 / ASME SA135 / Pipe Steel Electric Fusion(ARC) Welded
ASTM A139 / ASME SA139 / Electric Resistance Welded Steel Pipe
ASTM A161 / ASME SA161 / Seamless Low Carbon And Carbon Molybdenum Steel Still Tubes For Refinery Service
ASTM A176 / ASME SA176 / Electric Resistance Welded Carbon Steel Boiler Tubes
ASTM A179 / Seamless Cold Drawn Low Carbon Steel Heat Exchanger and Condenser Tubes
ASTM A192 / ASME SA192 / Seamless Cold Drawn Boiler Tubes for High Pressure Service
ASTM A199 / ASME SA199 / Seamless Cold Drawn Intermediate Alloy Steel Heat Exchanger and Condenser Tubes

ASTM A200 / ASME SA200 / Seamless Intermediate Alloy Steel Still Tubes for Refinery Service
ASTM A209 / ASME SA209 / Seamless Carbon Molybdenum Alloy Steel Boiler and Superheater Tubes
ASTM A210 / ASME SA210 / Seamless Medium Carbon Steel Boiler and Superheater Tubes
ASTM A211 / ASME SA211 / Spiral Welded Steel or Iron Pipe
ASTM A213 / ASME SA213 / Seamless Ferritic and Austenitic Alloy Steel Boiler Superheater and Heat Exchanger Tubes
ASTM A214 / ASME SA214 / Electric Resistance Welded Carbon Steel Heat Exchanger and Condenser Tubes
ASTM A216 / ASME SA216 / Carbon Steel Castings Suitable for Fusion for High Temperature Service
ASTM A226 / ASME SA226 / Electric Resistance Welded Carbon Steel Boiler and Superheater Tubes for High Pressure Service
ASTM A249 / ASME SA249 / Welded Austenitic Steel Boiler Superheater Heat Exchanger and Condenser Tubes
ASTM A250 / ASME SA250 / Electric Resistance Welded Carbon Molybdenum Alloy Steel Boiler and Superheater Tubes
ASTM A252 / ASME SA252 / Welded and Seamless Steel Pipe Piles
ASTM A254 / ASME SA254 / Copper Brazed Steel Tubing
ASTM A268 / ASME SA268 / Seamless and Welded Ferritic Stainless Steel Tubing For General Service
ASTM A269 / ASME SA269 / Seamless and Welded Austenitic Stainless Steel Tubing for General Service

ASTM A270 / ASME SA270 / Seamless and Welded Austenitic Stainless Steel Sanitary Tubing
ASTM A271 / ASME SA271 / Seamless Austenitic Chromium Nickel Steel Still Tubes for Refinery Service
ASTM A312 / ASME SA312 / Seamless and Welded Austenitic Stainless Steel Pipe
ASTM A333 / ASME SA333 / Seamless and Welded Steel Pipe for Low Temperature Service
ASTM A334 / ASME SA334 / Seamless and Welded Carbon and Alloy Steel Tubes for Low Temperature Service
ASTM A335 / ASME SA335 / Seamless Ferritic Alloy Steel Pipe for High Temperature Service
ASTM A358 / ASME SA358 / Electric Fusion Welded Austenitic Chromium Nickel Alloy Steel Pipe for High Temperature Service
ASTM A369 / ASME SA369 / Carbon and Ferritic Alloy Steel Forged and Bored Pipe for High Temperature Service
ASTM A376 / ASME SA376 / Seamless Austenitic Steel Pipe for High Temperature Central Station Service
ASTM A381 / ASME SA381 / Metal Arc Welded Steel Pipe for USE with High Pressure Transmission Systems
ASTM A405 / ASME SA405 / Seamless Ferritic Alloy Pipe Specially Heat Treated for High Temperature Service

ASTM A409 / ASME SA409 / Welded Large Diameter Austenitic Steel Pipe for Corrosive or High Temperature Service
ASTM A422 / ASME SA422 / Butt Welds in Still Tubes for Refinery Service

ASTM A423 / ASME SA423 / Seamless and Electric Welded Low Alloy Steel Tubes
ASTM A430 / ASME SA430 / Austenitic Steel Forged and Bored Pipe for High Temperature Service
ASTM A450 / ASME SA450 / General Requirements for Carbon Ferritic Alloy and Austenitic Alloy Steel Tubes
ASTM A451 / ASME SA451 / Centrifugally Cast Austenitic Steel Pipe for High Temperature Service
SPECIFICATION LIST FOR PIPING MATERIALS

ASTM A452 / ASME SA452 / Centrifugally Cast Austenitic Steel Cold Wrought Pipe for High Temperature Service
ASTM A498 / ASME SA498 / Seamless and Welded Carbon Ferritic and Austenitic Alloy Steel Heat-Exchanger Tubes With Integral Fins
ASTM A500 / ASME SA500 / Cold Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes (Round Pipe)
ASTM A500 / ASME SA500 / Cold Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes (Square, Rectangular pipe)
ASTM A501 / ASME SA501 / Hot Formed Welded and Seamless Carbon Steel Structural Tubing
ASTM A511 / ASME SA511 / Seamless Stainless Steel Mechanical Tubing
ASTM A512 / ASME SA512 / Cold Drawn Butt weld Carbon Steel Mechanical Tubing
ASTM A513 / ASME SA513 / Electric Resistance Welded Carbon and Alloy Steel Mechanical Tubing
ASTM A519 / ASME SA519 / Seamless Carbon and Alloy Steel Mechanical Tubing
ASTM A520 / ASME SA520 / Supplementary Requirements for Seamless and Electric Resistance Welded Carbon Steel Tubular Products for High-Temperature Service Conforming to ISO Recommendations for Boiler Construction
ASTM A523 / ASME SA523 / Plain end Seamless and Electric Resistance Welded Steel Pipe for High Pressure Pipe Type Cable Circuits
ASTM A524 / ASME SA524 / Seamless Carbon Steel Pipe for Atmospheric and Lower Temperatures
ASTM A530 / ASME SA530 / Standard Specification for General Requirements for Specialized Carbon and Alloy Steel Pipe
ASTM A539 / ASME SA539 / Electric Resistance Welded Coiled Steel Tubing for Gas and Fuel Oil Lines
ASTM A554 / ASME SA554 / Welded Stainless Steel Mechanical Tubing (Round Pipe)
ASTM A554 / ASME SA554 / Welded Stainless Steel Mechanical Tubing (Square, Rectangular pipe)
ASTM A556 / ASME SA556 / Seamless Cold Drawn Carbon Steel Feedwater Heater Tubes
ASTM A557 / ASME SA557 / Electric Resistance Welded Carbon Steel Feedwater Heater Tubes
ASTM A587 / ASME SA587 / Electric Welded Low Carbon Steel Pipe for the Chemical Industry
ASTM A589 / ASME SA589 / Seamless and Welded Carbon Steel Water Well Pipe
ASTM A595 / ASME SA595 / Steel Tubes Low Carbon Tapered for Structural Use
ASTM A608 / ASME SA608 / Centrifugally Cast Iron Chromium Nickel High Alloy Tubing for Pressure Application at High Temperature
ASTM A618 / ASME SA618 / Hot Formed Welded and Seamless High Strength Low Alloy Structural Tubing
ASTM A632 / ASME SA632 / Seamless and Welded Austenitic Stainless Steel Tubing (Small Diameter) for General Service
ASTM A660 / ASME SA660 / Centrifugally Cast Carbon Steel Pipe for High Temperature Service
ASTM A671 / ASME SA671 / Electric Fusion Welded Steel Pipe for Atmospheric and Lower Temperature
ASTM A672 / ASME SA672 / Electric Fusion Welded Steel Pipe for High Pressure Service at Moderate Temperatures
ASTM A688 / ASME SA688 / Welded Austenitic Stainless Steel Feedwater Heater Tube
ASTM A691 / ASME SA691 / Carbon And Alloy Steel Pipe Electric Fusion Welded for High Pressure Service at High Temperatures
ASTM A692 / ASME SA692 / Seamless Medium Strength Carbon Molybdenum
ASTM A714 / ASME SA714 / High Strength Low Alloy Welded and Seamless Steel Pipe
ASTM A727 / ASME SA727 / Forgings, Carbon Steel, for piping components with Inherent Notch Toughness
ASTM A731 / ASME SA731 / Seamless and Welded Ferritic Stainless Steel Pipe
ASTM A733 / ASME SA733 / Standard Specification for Welded and Seamless Carbon Steel and Austenitic Stainless Steel Pipe Nipples
ASTM A771 / ASME SA771 / Austenitic Stainless Steel Tubing for Breeder Reactor Core Components
ASTM A778 / ASME SA778 / Welded Un-annealed Austenitic Stainless Tubular Products
ASTM A787 / ASME SA787 / Standard Specification for Electric Resistance Welded Metallic Coated Carbon Steel Mechanical Tubing
ASTM A789 / ASME SA789 / Seamless and Welded Ferritic/Austenitic Stainless Steel Pipe for General Service
ASTM A790 / ASME SA790 / Welded Un-annealed Ferritic Stainless Steel Tubing
ASTM A791 / ASME SA791 / Welded Un-annealed Ferritic Stainless Steel Tubing
ASTM A795 / ASME SA795 / Black and Hot-Dipped Zinc Coated (Galvanized) Welded and Seamless Steel Pipe for Fire Protection Use
ASTM A803 / ASME SA803 / Welded Ferritic Stainless Steel Feed Water Heater Tubes
ASTM A813 / ASME SA813 / Single or Double Welded Austenitic Stainless Steel Pipe
ASTM A814 / ASME SA814 / Cold Worked Welded Austenitic Stainless Steel Pipe
ASTM A822 / ASME SA822 / Seamless Cold Dram Carbon Steel Tubing For Hydraulic System Service
SPECIFICATION LIST FOR PIPING MATERIALS

ASTM A826 / ASME SA826 / Austenitic and Ferritic Stainless Steel Duct Tubes for Breeder Reactor Core Components
ASTM A847 / ASME SA847 / Cold Formed Welded and Seamless High Strength Low Alloy Structural Tubing With Improved Atmospheric Corrosion Resistance
ASTM A851 / ASME SA851 / High Frequency Induction Welded Un-annealed Austenitic Steel Condenser Tubes
ASTM A865 / ASME SA865 / Threaded Couplings Steel Black or Zinc Coated (Galvanized) Welded or Seamless for Use in Steel Pipe Joints
ASTM A872 / ASME SA872 / Centrifugally Cast Ferritic/Austenitic Stainless Steel Pipe for Corrosive Environments
ASTM A908 / ASME SA908 / Stainless Steel Needle Tubing

JIS (Japan Industrial Standards)

JIS G3442 Galvanized Steel Pipes for Water Service (SGPW)
JIS G3447 Stainless Steel sanitary Pipes (SUS 304TBS/304LTBS/316TBS/316LTBS)
JIS G3448 Light Gauge Stainless Steel Pipes for Ordinary Piping (SUS304TPD/316TPD)
JIS G3452 Carbon Steel Pipes for Ordinary Piping (SGP)
JIS G3454 Carbon Steel Pipes for Pressure Service (STPG 370/STPG 410)
JIS G3455 Carbon Steel Pipes for High Pressure Service (STS 370/STS 410/STS 480)
JIS G3456 Carbon Steel Pipes for High Temperature Service (STP370/STP410/STP480)
JIS G3457 Arc Welded Carbon Steel Pipes (STPY400)
JIS G3458 Alloy Steel Pipes (STPA 12/20/22/23/24/25/26)
JIS G3459 Stainless Steel Pipes (SUS 304TP/304HTP/304LTP/309TP/309STP)
JIS G3460 Steel Pipes for Low Temperature Service (STPL380/STPL 450/STPL 690)
JIS G3468 Arc Welded Large Diameter Stainless Steel Pipes (SUS304TPY /304LTPY)
JIS G3469 Polyethylene coated Steel Pipes (P1H/P25/P1F)
JIS G3461 Carbon Steel Tubes for Boiler and Heat Exchanger (STB 340/STB 410/STB 510)
JIS G3462 Alloy Steel for Boiler and Heat Exchanger Tubes (STBA12/13/20/22)
JIS G3463 Stainless Steel for Boiler and Heat Exchanger Tubes (SUS304TB/304HTB/316TB)
JIS G3464 Steel Heat Exchanger Tubes for Low Temperature Service (STBL380/450/690)
JIS G3467 Steel Tubes for Fired Heater (STF 410/STFA 12/22/23/24/25/26)
JIS G3131 Hot-Roll mild steel plates, sheet and strip (HR Pipe SPHC/SPHD/SPHE)
JIS G3141 Cold-reduced carbon steel sheets and strip (CR Pipe SPCC/SPCD/SPEC)
JIS G3441 Alloy steel tubes for machine purposes (SCh420TK/SCM415TK/418TK/420TK)
JIS G3444 Carbon steel tubes for general structural purposes (STK290/STK400/500/490)
JIS G3445 Carbon steel tubes for machine structural purposes (STKM11A/12A/13A/14A)
JIS G3446 Stainless steel pipes for machine and structural purposes (SUS304TAKA)ROUND

JIS G3466 Carbon steel Square for general structural purposes (STKR 400/STKR 490)
JIS G3471 Corrugated steel pipes and sections (SCP1R/SCP 1 RS/SCP 2 R/SCP 3 RS/SCP 2 E)
JIS G3472 Electric Resistance Welded Carbon Steel Tubes for Automobile Structural Purposes
JIS G3473 Carbon Steel Tubes Cylinder Barrels (STC370/STC440/STC510A/STC510B/STC540)
JIS G3474 High Tensile Strength Steel Tubes for Tower Structural Purposes (STKT540/590)
JIS G4051 Carbon steel for Maching Structural Use (S45C Pipe)
JIS A5525 Steel pipes piles (SPS290/SPS400/SPS500/SPS490/SPS540)
JIS A5530 Steel pipe sheet piles (SKY 400/SKY 490)
JIS G3429 Seamless Steel Tubes for High Pressure Gas Cylinder (STH 11/STH 12/STH 21..)
JIS G3465 Seamless Steel Tubes for Drilling (STM-C 540/STM-C 640/STM-R 590/STM-R 690)
JIS G4903 Nickel-chromium-iron alloy pipes (NCF600TP/NCF625TP/NCF690TP)
JIS G4904 Nickel-chromium-iron alloy heat exchanger tubes (NCF600TB/NCF625TB)
JIS C8305 Rigid steel conduits (G 16/G 22/G 28/G 36/G 42/G 54/G 70/G 82)

JIS G3830 Plastic coated steel pipes for cable ways (G16LL/G16LT/G 22LL/G 22LT/G 28LL8LT)
JIS G4805 Seamless High Carbon Chromium Bearing Steel Pipe (SU -2)
SPECIFICATION LIST FOR PIPING MATERIALS

DIN (Deutsches Institute for Normung)

DIN1615 / Welded Circular Unalloyed Steel Tubes Not Subject To Special Requirements
(USt37.0/St37.0/St44.0/St52.0)

DIN1626 / Welded Circular Tubes of Non Alloy Steels with Special Quality Requirements
(USt37.0/St37.0/St44.0/St52.0)

DIN1628 / Welded Circular Tubes of Non Alloy Steels with Very High Quality Requirements
(USt37.4/St44.4/St52.4)

DIN1629 / Seamless Circular Tubes of Non Alloy Steels with Special Quality Requirements
(S37.0/St52.0/1.0254/1.0256/1.0421)

DIN1630 / Seamless Circular Tubes of Non Alloy Steels with Very High Quality Requirements
(S37.4/St52.4/1.0255/1.0257/1.0581)

DIN2391-1 / Seamless Precision Steel Tubes
(S305/St30A1/St35/St45/St52)

DIN2391-2 / Seamless Precision Steel Tubes
(S305/St30A1/St35/St45/St52)

DIN2393-1 / Welded Precision Steel Tubes

DIN2393-2 / Welded Precision Steel Tubes

DIN2393-4 / Welded And Sized Precision Steel Tubes

DIN2394-2 / Welded And Sized Precision Steel Tubes

DIN2395-1 / Rectangular and Square Electric Welded Precision Steel Tubes

DIN2395-2 / Rectangular and Square Electric Welded Precision Steel Tubes
(S34.2/St37.2/St52.3)

DIN2395-3 / Rectangular and Square Electric Welded Precision Steel Tubes

DIN2402 Pipelines Nominal Widths Grading Pipework; grading of nominal sizes

DIN2403 Marking of pipes according to fluid transported

DIN2413 Part1 Design of steel pressure pipes

DIN2413 Part2 Design of steel bends used in pressure pipelines

DIN2440 / Steel Tubes Medium Weight Suitable for Screwing
(S33.2)

DIN2441 / Steel Tubes Heavy Weight for Suitable for Screwing
(S33.2)

DIN2444 / Zinc Coatings on Steel Tubes

DIN2445-1 / Seamless Steel Tubes for Dynamic Loads Hot Finished Tubes Nominal Pressures 100 to 400

DIN2445-2 / Seamless Steel Tubes for Dynamic Loads Basis for Calculation of Straight Tubes
(S34.2/St52.4)

DIN2448 / Seamless Steel Pipes and Tubes

DIN2449 / Seamless Steel Pipes and Tubes

DIN2450 / Seamless Steel Tubes in St 35 Dimensions and Range of Application

DIN2458 / Welded Steel Pipes and Tubes

DIN2460 / Steel Pipes for Water Pipelines

DIN2462 / Seamless Steel Tubes Of Stainless Steel
(1.4301 / 1.4306 / 1.4311 / 1.4541 / 1.4550 / 1.4401 / 1.4404 / 1.4571)

DIN2463 / Welded Tubes of Austenitic Stainless Steel
(X5CrNi189/X2CrNi189/X5CrNiMo1810/X2CrNiMo1812/X5CrNiMo1812/X10CrNiTi189)

DIN2916 Bending Radii for seamless and Welded Steel Tubes

DIN2917 Seamless steel tubes for superheated pipelines and headers

DIN17100 / Steels for General Structural Purposes

DIN17102 / Weldable Normalized Fine Grain Structural Steels

DIN17119 / Welded Cold Formed Square And Rectangular Steel Tubes for Structural Steel work

DIN17120 / Welded Circular Steel Tubes for Structural Steelwork
(USt37.2/RSt37.2/S37.2/RSt44.2/S44.2/S52-3/S52-3)

DIN17121 / Seamless Circular Steel Tubes for Structural Steelwork
(RSt37.2/SSt37.2/SSt44.2/SSt44.2/SSt52-3)
SPECIFICATION LIST FOR PIPING MATERIALS

DIN 17123 / Welded Circular Fine Grain Steel Tubes for Structural Steelwork
(StE225/StE255/StE285/StE285/StE355/StE355/StE420/StE420/StE420)

DIN 17124 / Carbon and Ferritic Alloy Steel Forged and Bored Pipe for High Temperature Service
(StE255/StE255/StE285/StE285/StE355/StE355/StE420/StE420/StE420)

DIN 17127 / Steel Pipes for Pipe Lines for the Transport of Combustible Fluids and Gases
(StE210.7/StE240.7/StE285.7/StE320.7/StE360.7/StE385.7/StE415.7/StE290.7TM/StE207.7TM/StE360.7TM)

DIN 17173 / Electrically Resistance or Induction Welded Steel Tubes for Elevated Temperature
(St35.8/St42.8/15Mo3/19Mn4/19Mn5/13CrMo910/10CrMo910/14MoV63/X20CrMoV121)

DIN 17174 / Electrically Resistance or Induction Welded Steel Tubes for Elevated Temperature
(St35.8/St42.8/15Mo3)

DIN 17178 / Seamless Circular Steel Tubes for Hydrogen Service at Elevated Temperatures and Pressures
(1.0356/1.6212/1.6217/1.5637/1.5680)

DIN 17179 / Seamless Circular Steel Tubes for Elevated Temperatures
(TTS135/TS35V/26CrMo4/11MnNi53/13MnNi63/10Ni14/12Ni19/X8Ni19)

DIN 17455 / General Purpose Welded Circular Stainless Steel Tubes (Round Pipe)
(1.4301/1.4306/1.4311/1.4541/1.4550/1.4401/1.4404/1.4571)

DIN 17455 / General Purpose Welded Circular Stainless Steel Tubes (Square. Rectangular Pipe)
(1.4301/1.4306/1.4311/1.4541/1.4550/1.4401/1.4404/1.4571)

DIN 17456 / General Purpose Seamless Circular Stainless Steel Tubes
(1.4301/1.4306/1.4311/1.4541/1.4550/1.4401/1.4404/1.4571)

DIN 17457 / Welded Circular Austenitic Stainless Steel Tubes Subject to Special Requirements
(1.4301/1.4306/1.4311/1.4541/1.4550/1.4401/1.4404/1.4571)

DIN 17458 / Seamless Circular Austenitic Stainless Steel Tubes Subject to Special Requirements
(1.4301/1.4306/1.4311/1.4541/1.4550/1.4401/1.4404/1.4571)

DIN 17671 / Wrought Copper and Copper Alloy Tubes Properties

DIN 59410 / Hollow Sections for Structural Steel Engineering of Formed Square and Rectangular Steel Tubes
Dimensions, Weights, Permissible Deviations, Static Values

DIN 59411 / Hollow Sections for Structural Steel Engineering Cold Formed Welded Square and Rectangular Steel Tubes
Dimensions, Weights, Permissible Deviations, Static Values

ISO (International organization for Standardization)

ISO 65 / Carbon Steel Tubes Suitable for Screwing in Accordance with ISO 7/1 (TS/TW)


ISO 2937 / Plain End Seamless Steel Tubes for Mechanical Application (TS1/TS4/TS9/TS18/C35)
SPECIFICATION LIST FOR PIPING MATERIALS

ISO 2938 / Hollow Steel Bars for Machining    (Gr1/Gr2)
ISO 3183 / Oil and Natural Gas Industries Steel Line Pipe    (E17/E21/E24-1/E24-2)
ISO 3304 / Plain end Seamless Precision Steel Tubes    (R28/R33/R37/R42/R50)
ISO 3305 / Plain end Welded Precision Steel Tubes    (R28/R33/R37/R44/R50)
ISO 3306 / Plain end as Welded and Sized Precision steel Tubes    (R28/R33/R37/R44/R50)
KS (Korean Standards)
KS D 3507 Carbon Steel Pipes for Ordinary Piping (SPP ZINC WATER)
KS D 3507 Carbon Steel Pipes for Ordinary Piping (SPP BLACK)
KS D 3537 Galvanized Steel Pipes for Water Service (SPPW)
KS D 3562 Carbon Steel Pipes for Pressure Service (SPPS 370/SPPS 410)
KS D 3564 Carbon Steel Pipes for High Pressure Service (SPPH 370/SPPH 410/SPPH 480)
KS D 3569 Steel Pipes for Low Temperature Service (SPLIT 380/SPLIT 450/SPLIT 690)
KS D 3570 Carbon Steel Pipes for High Temperature Service (SPTH370/SPTH410/SPTH480)
KS D 3573 Alloy Steel Pipes (SPA 12/SPA 20/SPA 22/SPA 23/SPA 24/SPA 25/SPA 26)
KS D 3576 Stainless Steel Pipes (STS304TP/STS304HTP/STS304LTP/STS309TP/STS309STP)
KS D 3583 Arc Welded Carbon Steel Pipes (SPW 400)
KS D 3585 Stainless Steel sanitary Pipes (STS 304TBS/STS 304LTBS/STS 316TBS)
KS D 3588 Arc Welded Large Diameter Stainless Steel Pipes (STS 304 TPY/STS 304 LTPY)
KS D 3589 Polyethylene coated Steel Pipes (P1H/P2S/P1F)
KS D 3595 Light Gauge Stainless Steel Pipes for Ordinary Piping (STS 304 TPD/STS 316 TPD)
KS D 3563 Carbon Steel Tubes for Boiler and Heat Exchanger (STBH 340/STBH 410/510)
KS D 3571 Steel Heat Exchanger Tubes for Low Temperature Service (STLT380/STLT450)
KS D 3572 Alloy Steel for Boiler and Heat Exchanger Tubes (STHA 12/STHA 13/STHA 20)
KS D 3577 Stainless Steel for Boiler and Heat Exchanger Tubes (STS 304TB/STS 304HTB)
KS D 3587 Steel Tubes for Fired Heater (STF410/STFA12/STFA22/STFA23/STFA24/STFA25)
KS D 3517 Carbon steel tubes for machine structural purposes (STKM 11A/STKM 12A)
KS D 3536 Stainless steel pipes for machine and structural purposes (STS430TKA/430TKC)
KS D 3536 Stainless steel pipes for machine and structural purposes (STS304TKA/304TKC)
KS D 3566 Carbon steel tubes for general structural purposes (SPS 290/SPS 400/SPS 500)
KS D 3568 Carbon steel Square for general structural purposes (SPSR 400/SPSR 490)
KS D 3574 Alloy steel tubes for machine purposes (SCR 420 TK/SCM 415 TK/SCM 418 TK)
SPECIFICATION LIST FOR PIPING MATERIALS

KS D 3590 Corrugated steel pipes and sections (SCP 1 R/SCP 1 RS/SCP 2 R/SCP 3 R S)
KS D 3598 Electric Resistance Welded Carbon Steel Tubes for Automobile Structural Purposes (STAM 290GA/STAM 290GB/STAM 340G/STAM 390G/440G/470G/500G)
KS D 3618 Carbon Steel Tubes Cylinder Barrels (STC 370/STC 440/STC 510 A/STC 510 B)
KS D 3780 High Tensile Strength Steel Tubes for Tower Structural Purposes (STKT 540)
KS F 4602 Steel pipes piles (SPS30/SPS41/SPS51/SPS50/SPS55)
KS F 4605 Steel pipe sheet piles (SKY 400/SKY 490)
KS D 3575 Seamless Steel Tubes for High Pressure Gas Cylinder (STHG11/STHG12/STHG21)
KS D 3757 Seamless nickel-chromium-iron alloy heat exchanger tubes (NCF 600 TB)
KS D 3758 Seamless nickel-chromium-iron alloy pipes (NCF600TP/NCF625TP/NCF690TP)
KS C 8401 Rigid steel conduits (G16/G22/G28/G36/G42/G54/G70/G82/G92/G104)
KS E 3114 Seamless Steel Tubes for Drilling (STM-C 540/STM-C 640/STM-R 590/R 690)
NF (Norme Francise)

NF A49-111 / Steel Tubes Plain end Seamless Tubes of Commercial Quality for General Purposes at Medium Pressure (TU37a)
NF A49-112 / Steel Tubes Plain end Seamless Hot Rolled Tubes with Special Delivery Conditions (TUE220A/TUE235A)
NF A49-115 / Steel Tubes Seamless Plain end Tubes for Pipe Lines and General Use Ferritic And Austenitic Stainless Steels (TUZ2CN18-10/TUZ6CN18-09/TUZ6CND17-11)
NF A49-141 / Steel Tubes Seamless Plain end Tubes for Pipe Lines and General Use Ferritic and Austenitic Stainless Steels (TS37a)
NF A49-142 / Steel Tubes Longitudinally Pressure Welded Plain Ended And Hot Finished Tubes (TES185A/TSE235A/TSE250A/TSE275A)
NF A49-145 / Steel Tubes Hot Finished welded Tubes Suitable for Threading (TS34-1)
NF A49-146 / Steel Tubes Unthreaded Plain Ended Welded Tubes for Liquids (TS34-a)
NF A49-148 / Steel Tubes Longitudinally Welded Tubes for Pipe Lines and General use Ferritic Stainless Steels (TSZ5CT14/TSZ6CT17/TSZ6CT17/TSZ18C17)
NF A49-150 / Steel Tubes Welded Tubes Intended to be Coated of Protected for use in Water Piping Systems (TSE235)
NF A49-175 / Steel Tubes Plain end Longitudinally Welded Tubes for Pipe Lines and General use Austenitic Stainless Steel (TSZ2CN18-10/TSZ6CN18-09/TSZ3CNT18-10)
NF A49-207 / Steel Tubes Seamless or Longitudinally Welded Stainless Steel Tubes For Exchangers in Aircraft Construction (TSZ2CN18-10/TUZ2CN8-10/TSZ6CnB18-12)
NF A49-210 / Steel Tubes Seamless Cold Drawn Tubes for Fluid Piping (TU37B/TU42B)
NF A49-211 / Steel Tubes Seamless Plain end Unalloyed Steel Tubes for Fluid piping at Elevated Temperatures (TUE220/TUE250/TUE275)
NF A49-212 / Steel Tubes Seamless Unalloyed Steel Tubes for Use At Medium Temperatures (TU37C/TU42C)
SPECIFICATION LIST FOR PIPING MATERIALS

NF A49-213 / Steel Tubes Seamless Unalloyed and Mo Crmo Alloy Steel Tubes for Use at High Temperatures  

NF A49-214 / Steel Tubes Seamless Austenitic Steel Tubes for use at High Temperatures  
(Z6CN19-10/Z3CND17-12B/Z6CNT18-12B/Z6CNNb18-12B)

NF A49-215 / Steel Tubes Seamless Tubes For Ferritic Non Alloy And Alloy Heat Exchangers  

NF A49-217 / Steel Tubes Seamless Tubes for Heat Exchangers  
(TUZ12C13/TUZ10C17/TUZ2CN1810/TUZ2CN1810AZ/TUZ3CN1809/TUZ1CNS1815)

NF A49-218 / Steel Pipes Seamless Pipes for Furnaces Austenitic Stainless Steels  
(TUZ6CN18-09/TUZ2CN18-10/TUZ6CNT18-10/TUZ6NNb18-10/TUZ6CND17-11/TUZ2CND17-12)

NF A49-230 / Steel Tubes Plain end Seamless Tubes for Pressure Vessels and Piping Systems Used at Low Temperatures  
(TU42BT/TU17N2/TU10N9/TU10N14/TUZ6N9)

NF A49-240 / Steel Tubes Longitudinally Butt welding Plain End for Pressure Vessels and Pipe Systems Used at Low Temperatures  
(TS42BT/TS17N2/TS10N9)

NF A49-241 / Steel Tubes Longitudinally Pressure Welded Tubes D 168.3mmMax in not Alloyed and Low Alloyed at Medium Elevated Temperatures(TS37C/TS42C/TSE24W3)

NF A49-242 / Steel Tubes Longitudinally Pressure Welded Tubes D 168.3mmMax in not Alloyed and Low Alloyed at Medium Elevated Temperatures  
(TS37C/TS42C/TSE24W3/TSE36W3)

NF A49-243 / Steel Tubes Longitudinally Pressure Welded Tubes D 168.3mm in not Alloyed and Ferritic Alloyed Steels Used at Elevated Temperatures  
(TS37C/TS42C/TSE48C/TSE52C/TSE15D3/TSE15CD2-05/TSE15CD4-05)

NF A49-245 / Steel Tubes Longitudinally Welded Tubes For Ferric Non Alloy and Alloy Steel Heat Exchangers  
(TS34C/TSE37C/TSE42C/TSE48C/TSE24W3)

NF A49-249 / Steel Tubes Longitudinally Welded Plain End Tubes for Food Industry Austenitic Stainless Steels  
(TSZ6CN18-09/TSS2CN18-10/TSS2CND17-12/TSS2CND17-11)

NF A49-250 / Steel Tubes Welded Plain End Tubes of Commercial Quality with or Without Special Delivery ConditionsD168.3mmMax  
(TSE24a/TSE26b)

NF A49-253 / Steel Tubes Longitudinally Fusion Welded Non Alloy and Ferrtic Alloy Steel Tubes for use at Elevated Temperatures  
(TS37CP/TS42CP/TS48CP/TSS2CP)

NF A49-310 / Steel Tubes Seamless Precision Tubes for Mechanical Application  
(TU37-b/TU52-b/TU56-b)

NF A49-311 / Steel Tubes Seamless for Mechanical Application  
(TU37-b/TU52-b/TU56-b/TUXC35)

NF A49-312 / Steel Tubes Seamless Tubes for Mechanical Application Supplementary Series  
(TU52-b/TUXC35)

NF A49-317 / Steel Tubes Seamless Plain end Tubes for Engineering Use Austenitic Stainless Steel  
(TUZ2CN18-10/TUZ2CN17-12)

NF A49-321 / Steel Tubes Jacks for Hydraulic Transmissions Cold Rolled  
(TU37b/TU52b/TU52BT/TU18/MDV5/TU17/MV5)
SPECIFICATION LIST FOR PIPING MATERIALS

NF A49-322 / Steel Tubes J acks for Hydraulic Transmissions Cold Rolled or Cold Drawn Seamless Tubes Type Suitable for Grinding in (TU37b/TU52b/TU17/MV5)

NF A49-323 / Steel Tubes J acks for Hydraulic Transmissions Clod Rolled or Cold Drawn Seamless Tubes Type Ready for Use (TU37b/TU52b/TU52BT/TU17/MV5)

NF A49-326 / Steel Tubes J acks for Pneumatic Transmissions Clod Drawn Seamless Tubes Type Suitable for Grinding in (TU37b/TU52b/TU52BT)

NF A49-327 / Steel Tubes J acks for Pneumatic Transmissions Cold Drawn Seamless Tubes Type Ready for Use (TU37b/TU52b)

NF A49-330 / Steel Tubes Seamless Cold Drawn Tubes for Hydraulic and Pneumatic Power Systems (TU37b/TU52b/TU42BT/TU17N2/TU10N14)

NF A49-341 / Steel Tubes Precision Welded Tubes for Mechanical Application (TS30a/TS30a/TS34a/TS7a/TS42a/TS47a)

NF A49-343 / Steel Tubes Longitudinally Welded Tube D 168.3mmMax for Engineering Use (TS37b/TS815M5/TS18/MDV5)

NF A49-400 / Longitudinally Electric Resistance Welded Unalloyed Steel Tubes D 17.2Min 406.4mmMax for the Transport of Pressurized Fluids (TSE220/TSE250/TSE290/TSE320/TSE360Nb/TSE360b/TSE415Nb/TSE415V)

NF A49-401 / Steel Tubes Longitudinally Fusion Welded Non Alloy and Micro Alloy Steel Tubes for Fluid Transporting Pipes and Pressure Vessels (TSE220/TSE250/TSE290/TSE320/TSE360/TSE415/TSE450/TSE480)

NF A49-402 / Steel Tubes Spiral Fusion Welded Non Alloy and Micro Alloy Steel Tubes for Fluid Transporting Pipes and Pressure Vessels (TSE220/TSE250/TSE290/TSE320/TSE360/TSE415/TSE450/TSE480)


NF A49-645 / Steel Tubes Structural Welded Tubes Circular Square Rectangular or Oval in Ferritic or Austenitic Stainless Steels (TSZ2CN18-10/TSZ6CN18-09/TSZ6CND17) (Round)

NF A49-645 / Steel Tubes Structural Welded Tubes Circular Square Rectangular or Oval in Ferritic or Austenitic Stainless Steels (TSZ2CN18-10/TSZ6CN18-09/TSZ6CND17) (Square, Rectangular)

NF A49-647 / Steel Tubes Structural Welded Tubes Circular Square Rectangular or Oval in Ferritic or Austenitic Stainless Steels (TSZ2CN18-10/TSZ6CN18-09/TSZ6CND17-11) (Round)
SPECIFICATION LIST FOR PIPING MATERIALS

NF A49-647 / Steel Tubes Structural Welded Tubes Circular Square Rectangular or Oval in Ferritic or Austenitic Stainless Steels (TSZ2CN18-10/TSZ6CN18-09/TSZ6CND17-11) (Square, Rectangular)

GOST RUSSIA STANDARD

Smooth Seamless Steel Tubes

GOST 8731-74 Seamless Hot-Deformed Steel Tubes. Technical requirements.

GOST 8732-78 Seamless hot-deformed steel tubes. Range.

GOST 8733-74 Seamless cold and warm deformed steel tubes. Technical requirements.

GOST 8734-75 Seamless cold and warm deformed steel tubes. Range.

GOST 9567-75 Precision tubes steel. Range.

GOST 9940-72 Seamless hot deformed tubes made of corrosion resistant steel.

GOST 9941-72 Seamless cold and warm deformed tubes made of corrosion Resistant steel.

GOST 10498-63 Especially thin walled seamless tubes made of corrosion resistant (stainless) steel.

GOST 1060-76 Steel seamless cold-deformed tubes for shipbuilding. Technical requirements.

GOST 5654-76 Steel seamless hot-deformed tubes for shipbuilding. Technical requirements.

GOST 550-75 Steel seamless steel tubes for petroleum processing and petrochemical industry.

GOST 14162-69 Small-sizes steel tubes (capillary).

GOST 10192-62 Bimetallic seamless tubes. Range.

GOST 21945-76 Seamless hot-deformed steel tubes made of alloys on the basis of titanium. Technical requirements.

GOST 21729-76 Seamless cold-deformed and hot-deformed tubes made of structural carbon and alloyed steel.

GOST 22786-77 Bimetallic seamless tubes for shipbuilding. Technical requirements

GOST 631-75 Internal-external upset drill tubes with couplings.

GOST 632-64 Casing tubes with couplings.

GOST 8467-57 Drill tubes for geology-exploring with nipple connections.

GOST 632-64 Casing tubes with couplings.

GOST 633-63 Tubing pipes with couplings.

GOST 10704-76 Electrically welded steel tubes, line-weld. Range.

GOST 10706-76 Electrically welded steel tubes, line-weld. Technical requirements.

GOST 10707-73 Electrically welded cold-drawn and cold-rolled steel tubes. Technical requirements.

GOST 11068-64 Electrically welded stainless steel tubes

GOST 3262-75 Steel tubes for water and gas supply with couplings.

GOST 8696-74 Electrically welded steel tubes with spiral seams for general purposes

GOST 5005-65 Electrically welded steel tubes for car cardan shafts.
SPECIFICATION LIST FOR PIPING MATERIALS

GOST 11249-73 Steel rolled up soldered double-layer tubes.
GOST 12132-66 Electrically welded and seamless steel tubes for automotive and bicycle industries.
GOST 20295-74 Welded steel tubes for main oil and gas pipelines.
GOST 13663-68 Shaped steel tubes. Technical requirements.
GOST 3664-68 Steel tubes star-shaped. Range.
GOST 13665-68 Corrugated steel tubes. Range.
GOST 13666-68 Many-ribbed steel tubes. Range.
GOST 13667-68 Ribbed steel tubes. Range.
GOST 13668-68 Steel tubes with inside splines. Range.
GOST 8639-82 Square steel tubes. Range.
GOST 8642-68 Oval steel tubes. Range.
GOST 8644-68 Flat-sided oval steel tubes. Range.
GOST 8645-68 Rectangular steel tubes. Range.
GOST 11681-65 Bended stainless steel tubes. Range.
GOST 11682-65 Bended stainless steel tubes. Technical requirements.
TU 14-3-190-82 SEAMLESS STEEL TUBES FOR ELEVATED TEMPERATURES (10)
TU 14-3-460-74 SEAMLESS STEEL TUBES FOR ELEVATED TEMPERATURES (20)(12H1MF/15HM)
GOST 10192-62 Bimetallic seamless tubes. Range.
GOST 21945-76 Seamless hot-deformed steel tubes made of alloys on the basis of titanium. Technical requirements.
GOST 21729-76 Seamless cold-deformed and hot-deformed tubes made of structural carbon and alloyed steel.
GOST 22786-77 Bimetallic seamless tubes for shipbuilding. Technical requirements.
GOST 20295-74 Welded steel tubes for main oil and gas pipelines.
GOST 13663-68 Shaped steel tubes. Technical requirements.
GOST 3664-68 Steel tubes star-shaped. Range.
GOST 13665-68 Corrugated steel tubes. Range.
GOST 13666-68 Many-ribbed steel tubes. Range.
GOST 13667-68 Ribbed steel tubes. Range.
GOST 13668-68 Steel tubes with inside splines. Range.
GOST 8639-82 Square steel tubes. Range.
GOST 8642-68 Oval steel tubes. Range.
GOST 8644-68 Flat-sided oval steel tubes. Range.
SPECIFICATION LIST FOR PIPING MATERIALS

GOST 8645-68 Rectangular steel tubes. Range.
GOST 11681-65 Bended stainless steel tubes. Range.
GOST 11682-65 Bended stainless steel tubes. Technical requirements.

TU 14-3-190-82 SEAMLESS STEEL TUBES FOR ELEVATED TEMPERATURES (10)
TU 14-3-460-74 SEAMLESS STEEL TUBES FOR ELEVATED TEMPERATURES (20)(12H1MF/15HM )

AWWA (American Water Works Association)
AWWA C200-97: Steel Water Pipe-6 In. (150 mm) and Larger
AWWA C205-00: Cement-Mortar Protective Lining and Coating for Steel Water Pipe- 4 In. (100 mm) and Larger-Shop
AWWA C206-97: Field Welding of Steel Water Pipe
AWWA C207-01: Steel Pipe Flanges for Waterworks Service- Sizes 4 In. Through 144 In. (100 mm Through 3,600 mm)
AWWA C208-01: Dimensions for Fabricated Steel Water Pipe Fittings
AWWA C209-00: Cold-applied Tape Coatings for the Exterior of Special Sections, Connections, and Fittings for Steel Water Pipe
AWWA C210-97: Liquid-Epoxy Coating Systems for the Interior and Exterior of Steel Water Pipelines
AWWA C213-01: Fusion-Bonded Epoxy Coating for the Interior and Exterior of Steel Water Pipelines
AWWA C214-00: Tape Coating Systems for the Exterior of Steel Water Pipelines
AWWA C215-99: Extruded Polyolefin Coatings for the Exterior of Steel Water Pipelines
AWWA C216-00: Heat-Shrinkable Cross-Linked Polyolefin Coatings for the Exterior of Special Sections, Connections, and Fitting
AWWA C218-02: Coating the Exterior of Aboveground Steel Water Pipelines and Fittings
AWWA C219-01: Bolted, Sleeve-Type Couplings for Plain-End Pipe
AWWA C220-98: Stainless-Steel Pipe, 4 In. (100 mm) and Larger (Includes addendum C220a-99)
AWWA C221-01: Fabricated Steel Mechanical Slip-Type Expansion Joints
AWWA C222-99: Polyurethane Coatings for the Interior and Exterior of Steel Water Pipe and Fittings
AWWA C223-02: Fabricated Steel and Stainless Steel Taping Sleeves
AWWA C224-01: Two-layer Nylon-11 Based Polyamide Coating System for Interior and Exterior of Steel Water Pipe and Fittings
AWWA C225-03: Fused Polyolefin Coating Systems for the Exterior of Steel Water Pipelines

SAE (Society of Automotive Engineers)
SAE J242a Metric Thread Fuel Injection Tubing Connections
SAE J246 Spherical and Flanged Sleeve (Compression) Tube Fittings
SAE J349 Detection of Surface Imperfections in Ferrous Rods, Bars, tubes, and wires
SAE J356 Welded Flash-Controlled Low-Carbon Steel Tubing Normalized for Bending, Double Flaring, and Beading
SPECIFICATION LIST FOR PIPING MATERIALS

SAE J 371 Drain, Fill, and Level Plugs for Off-Road, Self-Propelled work machines
SAE J 398 Fuel Tank Filler Conditions Passenger Car, Multi-Purpose passenger vehicles, and Light Duty Trucks
SAE J 401 Selection and Use of Steels
SAE J 402 SAE Numbering System for Wrought or Rolled Steel
SAE J 403 Chemical Compositions of SAE Carbon Steels
SAE J 404 Chemical Compositions of SAE Alloy Steels
SAE J 405 Chemical Compositions of SAE Wrought Stainless Steels
SAE J 406 Methods of Determining Hardenability of Steels
SAE J 409 Product Analysis—Permissible Variations from Specified chemical analysis of a Heat or Cast of Steel
SAE J 411 Carbon and Alloy Steels
SAE J 412 General Characteristics and Heat Treatments of Steels
SAE J 413 Mechanical Properties of Heat Treated Wrought Steels
SAE J 422 Microscopic Determination of Inclusions in Steels
SAE J 424 Method for Determining Breakage Allowances for Sheet Steel
SAE J 463 Wrought Copper and Copper Alloys
SAE J 476a Dry seal Pipe Threads
SAE J 512 Automotive Tube Fittings
SAE J 513 Refrigeration Tube Fittings General Specifications
SAE J 514 Hydraulic Tube Fittings : Title: Hydraulic Tube Fittings
SAE J 515 Specification For Hydraulic O-Ring Materials, Properties, and Sizes For Metric and Inch Stud Ends, Face Seal Fitting and Four-Screw Flange Tube Connections
SAE J 518 Hydraulic Flanged Tube, Pipe, and Hose Connections, Four-Bolt split flange Type :
Title: Hydraulic Flanged Tube, Pipe, and Hose Connections, Four-Bolt split flange Type
SAE J 521 Fuel Injection Tubing Connections
SAE J 524 Seamless Low-Carbon Steel Tubing Annealed for Bending and flaring
SAE J 525 Welded and Cold Drawn Low-Carbon Steel Tubing Annealed for bending and Flaring
SAE J 526 Welded Low-Carbon Steel Tubing
SAE J 527 Brazed Double Wall Low-Carbon Steel Tubing
SAE J 528 Seamless Copper Tube
SAE J 529 Fuel Injection Tubing
SAE J 530 Automotive Pipe Fittings
SAE J 531 Automotive Pipe, Filler, and Drain Plugs : Title: Automotive Pipe, Filler, and Drain Plugs
SPECIFICATION LIST FOR PIPING MATERIALS

SAE J 533 Flares for Tubing
SAE J 534 Lubrication Fittings
SAE J 554 Electric Fuses (Cartridge Type)
SAE J 562 Non-metallic Loom
SAE J 830 Fuel Injection Equipment Nomenclature
SAE J 844 Non-metallic Air Brake System Tubing
SAE J 846 Coding Systems for Identification of Fluid Conductors and Connectors
SAE J 926 Hydraulic Pipe Fittings
SAE J 935 High Strength Carbon and Alloy Die Drawn Steels
SAE J 962 Formed Tube Ends for Hose Connections
SAE J 1037 Windshield Washer Tubing
SAE J 1047 Tubing-Motor Vehicle Brake System Hydraulic
SAE J 1065 Nominal Reference Working Pressures for Steel Hydraulic Tubing View Document
SAE J 1086 Numbering Metals and Alloys
SAE J 1131 Performance Requirements for SAE J 844 Non-metallic Tubing and Fitting Assemblies Used in Automotive Air Brake Systems
SAE J 1140 Filler Pipes and Openings of Motor Vehicle Fuel Tanks
SAE J 1149 Metallic Air Brake System Tubing and Pipe
SAE J 1207 Measurement Procedure for Determination of Silencer Effectiveness in Reducing Engine Intake or Exhaust Sound Level
SAE J 1231 Formed Tube Ends for Hose Connections and Hose Fittings
SAE J 1290 Automotive Hydraulic Brake System-Metric Tube Connections
SAE J 1394 Metric Non-metallic Air Brake System Tubing
SAE J 1392 Steel, High Strength, Hot Rolled Sheet and Strip, Cold Rolled Sheet, and Coated Sheet
SAE J 1418 Fuel Injection Pumps. High Pressure Pipes (Tubing) for Testing
SAE J 1442 High-Strength, Hot-Rolled Steel Bars
SAE J 1453 Fitting. O-Ring Face Seal
SAE J 1611 (R) Operator Controls. Horizontal Earth boring Machines
SAE J 1615 Thread Sealants
SAE J 1644 Metallic Tube Connections for Fluid Power and General Use-Test Methods for Threaded Hydraulic Fluid Power Connectors
SAE J 1650 Seamless Copper-Nickel 90-10 Tubing
SAE J 1659 Vehicle Testing Requirements for Replacement Refrigerants for CFC-12 (R-12) Mobile Air-Conditioning Systems
SPECIFICATION LIST FOR PIPING MATERIALS

SAE J 1677 Tests and Procedures for SAE Low-Carbon Steel and Copper nickel Tubing


SAE J 1737 Test Procedure to Determine the Hydrocarbon Losses from Fuel Tubes, Hoses, Fittings, and Fuel Line Assemblies by Recirculation

SAE J 1755 Guidelines for Usage of Stainless Steel and Bimetal for exterior automotive Bright Trim

SAE J 1781 Materials for Fluid Systems of Marine Vehicles

SAE J 1944 Truck and Bus Multipurpose Vehicle Windshield Washer System

SAE J 1949 Road Vehicles. High Pressure Fuel Injection Pipe Connections with 60 Degree Female Cone

SAE J 1958 Diesel Engine Steel Tubes for High-Pressure Fuel Injection Pipes (Tubing)

SAE J 1991 Standard of Purity for Use in Mobile Air-Conditioning Systems

SAE J 2022 Classification, Nomenclature, and Specification Definitions for Horizontal Earth boring Machines

SAE J 2027 Standard for Protective Covers for Gasoline Fuel Line Tubing

SAE J 2043 Non-metallic Fuel System Tubing

SAE J 2044 Quick Connector Specification for Liquid Fuel and Vapour/Emissions Systems

SAE J 2045 Performance Requirements for Fuel System Tubing Assemblies


SAE J 2254 Fluid Power Piping Cleaning Process

SAE J 2260 Non-metallic Fuel System Tubing with One or More Layers

SAE J 2305 Safety for Horizontal Earth boring Machines

SAE J 2405 Low-Permeation Fuel Fill and Vent Tube

SAE J 2435 Welded Flash Controlled, SAE 1021 Carbon Steel Tubing, Normalized for Bending, Double Flaring, and Beading

SAE J 2467 Welded and Cold-Drawn, SAE 1021 Carbon Steel Tubing Normalized for Bending and Flaring

SAE J 2494 Push-to-Connect Tube Fittings for Use in the Piping of Vehicular Air Brake

SAE J 2494-2 Dimensional Specifications for Non-Metallic Body Push-to-Connect Fittings Used on a Vehicular Air Brake

SAE J 2494-3 Performance Requirements for SAE J 844 Non-metallic Air Brake Tubing and Push to Connect Fitting Assemblies Used in Vehicular Air Brake Systems

SAE J 2494-4 Cartridge Cavity

SAE J 2551 Recommended Practices for Fluid Conductor Metallic Tubing Applications

SAE J 2583 Directional Drilling Planning and Mapping Nomenclature

SAE J 2599 Fuel Filler Pipe Assembly Design Practice to Meet Low Evaporative Emission Requirements
## SPECIFICATION LIST FOR PIPING MATERIALS

<table>
<thead>
<tr>
<th>Description</th>
<th>Standard/Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAE J 2613 Welded Flash Controlled, High Strength Low Alloy Steel Hydraulic</td>
<td>GB STANDARD(China Standard)</td>
</tr>
<tr>
<td>Tubing, Sub-Critically Annealed for Bending, Double Flaring, and Bending</td>
<td></td>
</tr>
<tr>
<td>SAE J 2614 Welded and Cold-Drawn, High Strength Low Alloy Steel Hydraulic</td>
<td></td>
</tr>
<tr>
<td>Tubing, Sub-Critically Annealed for Bending and Flaring</td>
<td></td>
</tr>
<tr>
<td>SAE J 2658 Metallic Tube Conductor Assemblies for Fluid Power and General</td>
<td></td>
</tr>
<tr>
<td>Use—Test Methods for Hydraulic Fluid Power Metallic Tube Assemblies</td>
<td></td>
</tr>
<tr>
<td>SAE J 24714 Fluid Systems-Connector Tubes—General Specification and Part</td>
<td></td>
</tr>
<tr>
<td>Standard</td>
<td></td>
</tr>
<tr>
<td>GB T17395 Seamless Steel Pipe</td>
<td></td>
</tr>
<tr>
<td>GB T8162 Structure Pipe</td>
<td></td>
</tr>
<tr>
<td>GB T14975 Structure for Stainless seamless Tube mechanical structure, fluid</td>
<td></td>
</tr>
<tr>
<td>pipeline, passing heat equipment of boiler heat converter, congealed</td>
<td></td>
</tr>
<tr>
<td>equipment, catalytic pipeline</td>
<td></td>
</tr>
<tr>
<td>GB T8163 Seamless Pipe For Fluid Pipe</td>
<td></td>
</tr>
<tr>
<td>GB T14976 Stainless Seamless Pipe For Fluid Pipe</td>
<td></td>
</tr>
<tr>
<td>GB T3090 Small Diameter Stainless Steel Pipe</td>
<td></td>
</tr>
<tr>
<td>GB T3089 Stainless-steel super-thin thickness and seamless steel pipe</td>
<td></td>
</tr>
<tr>
<td>GB T3639 Cold Rolled Precision Seamless Pipe</td>
<td></td>
</tr>
<tr>
<td>GB T5053 Seamless Pipe For Automotive Bushing</td>
<td></td>
</tr>
<tr>
<td>GB T5312 Carbon Steel or Carbon Manganese Steel Seamless Pipe for Ship</td>
<td></td>
</tr>
<tr>
<td>Building</td>
<td></td>
</tr>
<tr>
<td>GB T3093 High Pressure Seamless Pipe For diesel engine</td>
<td></td>
</tr>
<tr>
<td>GB T8713 Precision In Diameter Seamless Steel Pipe For Fluid Power Cylinder</td>
<td></td>
</tr>
<tr>
<td>GB T3087 Seamless Steel Pipe For Low and Medium Pressure Boiler</td>
<td></td>
</tr>
<tr>
<td>GB T5308 Seamless Steel Pipe For High Pressure Boiler</td>
<td></td>
</tr>
<tr>
<td>GB T13296 Stainless Seamless Steel for Boiler and Heat Exchanger Tubes</td>
<td></td>
</tr>
<tr>
<td>GB T6479 High Pressure Seamless Pipe For Chemical Fertilizer Equipment</td>
<td></td>
</tr>
<tr>
<td>GB T9948 Seamless steel tube for petroleum cracking</td>
<td></td>
</tr>
</tbody>
</table>
SPECIFICATION LIST FOR PIPING MATERIALS

YB T5052 Geological Drilling Pipe Seamless Pipe For Diamond Core Boring  DZ65-27MnMoVB
GB T17396 Hot Rolled Seamless Pipe For Hydraulic Cylinder  20 35 45 27SiMn 30MnNbRE
BQB 232 Tubes for Perforating Gun

WELDED PIPE

GB T13793 Butt weld Electric Resistance Welded Pipe  08F 08 10F 10 15F 15 20 Q195 Q195A Q195B Q235A Q235B
GB 11258 Fluoride Resin Coated Double Wall Steel Pipes for Automobiles  08 08F 08A1
GB T3091 Welded Pipe And For the Low Pressure Fluids & Galvanized (Zinc Coated) Welded Pipe And For the Low Pressure Fluids Q195 Q215 Q235A
GB T3092 Welded Pipe And For the Low Pressure Fluids & Galvanized (Zinc Coated) Welded Pipe And For the Low Pressure Fluids Q195 Q215 Q235A
GB T14980 Large Diameter Electric Welded For the Low Pressure Fluids For the Low Pressure Fluids Q215 Q235A Q235B
GB T12771 Stainless Steel Welded Pipe For the Low Pressure Fluids 1Cr18Ni9 0Cr19Ni9 0Cr19Ni11 0Cr25Ni20 0Cr17Ni12Mo2 00Cr17Ni14Mo2 0Cr18Ni11Ti 0Cr18Ni11Nb 00Cr17 00Cr18Mo2 0Cr13
GB T4102 Welded Pipe For the Low Pressure Fluids For Low and Middle Boiler  10 20
GB 4103 Carbon Steel Tubes for Boiler and Heat Exchanger 10
GB T5209 Electric Resistance Welded Steel Pipe For Power Transmission Shaft  08Z 15TiZ 20Z 25Z
GB T12700 Stainless Steel Welded Pipe For Machine Structural Purposed 00Cr19Ni11 00Cr17Ni14Mo2 0Cr19Ni9 1Cr18Ni9 1Cr18Ni9Ti 0Cr17Ni12Mo2 0Cr18Ni11Nb 0Cr25Ni20 1Cr17 0Cr13 1Cr13
GB T13792 Electric Welded Steel Pipe For Conveyor Support Q215 Q235
GB T4028 Pump Electric Welded Steel Pipe For Deep Subsurface Water
GB T14291 Electric Welded Steel Pipe For Mining Fluid Q235A Q235B
GB T3640 General Carbon Conduits Pipe Clip
GB T3641 P 3 Zinc Coated Metal Smoke Tube
GB T3642 S type brazed Stainless Metal Smoke Tube  1Cr18Ni9Ti
SGG262 Cold Rolled Minute Steel Pipe for Automobile, and Shock Absorber of Motorcycle 10 20 35 45
Others
EDM Electrode Tubes
STAINLESS HOLLOW BAR
DUPLEX STAINLESS STEEL PIPE
AS 1074 STEEL TUBES AND TUBULARS FOR ORDINARY SERVICE
AS 1163 STRUCTURAL STEEL HOLLOW SECTIONS
UL 6 RIGID METAL CONDUIT
ANSI C80.1 RIGID METAL CONDUIT
CSA C22.2 RIGID METAL CONDUIT
SPECIFICATION LIST FOR PIPING MATERIALS

S45C PIPE (Carbon Steel for Machine Structural Use PIPE)
HR PIPE (Hot Rolled Pipe)
CR PIPE (Cold Rolled Pipe)
CGI PIPE (Cold Rolled Galvanized Iron Pipe)
HGI PIPE (Hot Rolled Galvanized Iron Pipe)
SPECIFICATION LIST FOR PIPING MATERIALS

ASTM B62-02 Standard Specification for Composition Bronze or Ounce Metal Castings
ASTM B66/B66M-06 Standard Specification for Bronze Castings for Steam Locomotive Wearing Parts
ASTM B68-02 Standard Specification for Seamless Copper Tube, Bright Annealed
ASTM B75-02 Standard Specification for Seamless Copper Tube
ASTM B84-07 Standard Test Method for Temperature-Resistance Constants of Alloy Wires for Precision Resistors
ASTM B85-03 Standard Specification for Aluminium-Alloy Die Castings
ASTM B86-06 Standard Specification for Zinc and Zinc-Aluminium (ZA) Alloy Foundry and Die Castings
ASTM B88-03 Standard Specification for Seamless Copper Water Tube
ASTM B88M-05 Standard Specification for Seamless Copper Water Tube [Metric]
ASTM B90/B90M-07 Standard Specification for Magnesium-Alloy Sheet and Plate
ASTM B91-07 Standard Specification for Magnesium-Alloy Forgings
ASTM B92/B92M-07 Standard Specification for Unalloyed Magnesium Ingot and Stick For Remelting
ASTM B93/B93M-07 Standard Specification for Magnesium Alloys in Ingot Form for Sand Castings, Permanent Mould Castings, and Die Castings
ASTM B96/B96M-06 Standard Specification for Copper-Silicon Alloy Plate, Sheet, Strip, and Rolled Bar for General Purposes and Pressure Vessels
ASTM B98/B98M-03 Standard Specification for Copper-Silicon Alloy Rod, Bar and Shapes
ASTM B99/B99M-06 Standard Specification for Copper-Silicon Alloy Wire for General Applications
ASTM B100-03a Standard Specification for Wrought Copper-Alloy Bearing and Expansion Plates and Sheets for Bridge and Other Structural Use
ASTM B101-07 Standard Specification for Lead-Coated Copper Sheet and Strip for Building Construction
ASTM B103/B103M-07 Standard Specification for Phosphor Bronze Plate, Sheet, Strip, and Rolled Bar
ASTM B105-05 Standard Specification for Hard-Drawn Copper Alloy Wires for Electric Conductors
SPECIFICATION LIST FOR PIPING MATERIALS

ASTM B107/B107M-07 Standard Specification for Magnesium-Alloy Extruded Bars, Rods, Profiles, Tubes, and Wire
ASTM B111/B111M-04 Standard Specification for Copper and Copper-Alloy Seamless Condenser Tubes and Ferrule Stock
ASTM B116-95(2007) Standard Specification for Figure-9 Deep-Grooved and Figure-8 Copper Trolley Wire for Industrial Haulage
ASTM B117-07 Standard Practice for Operating Salt Spray (Fog) Apparatus
ASTM B122/B122M-06 Standard Specification for Copper-Nickel-Tin Alloy, Copper-Nickel-Zinc Alloy (Nickel Silver), and Copper-Nickel Alloy Plate, Sheet, Strip, and Rolled Bar
ASTM B124/B124M-06 Standard Specification for Copper and Copper Alloy Forging Rod, Bar, and Shapes
ASTM B127-05 Standard Specification for Nickel-Copper Alloy (UNS N04400) Plate, Sheet, and Strip
ASTM B129-07 Standard Specification for Cartridge Brass Cartridge Case Cups
ASTM B130-02 Standard Specification for Commercial Bronze Strip for Bullet Jackets
ASTM B131-07 Standard Specification for Copper Alloy Bullet Jacket Cups
ASTM B134/B134M-05 Standard Specification for Brass Wire
ASTM B135-02 Standard Specification for Seamless Brass Tube
ASTM B138/B138M-06 Standard Specification for Manganese Bronze Rod, Bar, and Shapes
ASTM B139/B139M-07 Standard Specification for Phosphor Bronze Rod, Bar, and Shapes
ASTM B140/B140M-07 Standard Specification for Copper-Zinc-Lead (Red Brass or Hardware Bronze) Rod, Bar, and Shapes
ASTM B150/B150M-03 Standard Specification for Aluminium Bronze Rod, Bar, and Shapes
ASTM B151/B151M-05 Standard Specification for Copper-Nickel-Zinc Alloy (Nickel Silver) and Copper-Nickel Rod and Bar
ASTM B152/B152M-06a Standard Specification for Copper Sheet, Strip, Plate, and Rolled Bar
ASTM B153-05 Standard Test Method for Expansion (Pin Test) of Copper and Copper-Alloy Pipe and Tubing
ASTM B154-05 Standard Test Method for Mercurox Nitrate Test for Copper Alloys
ASTM B159/B159M-05 Standard Specification for Phosphor Bronze Wire
ASTM B160-05 Standard Specification for Nickel Rod and Bar
ASTM B161-05 Standard Specification for Nickel Seamless Pipe and Tube
SPECIFICATION LIST FOR PIPING MATERIALS

ASTM B164-03 Standard Specification for Nickel-Copper Alloy Rod, Bar, and Wire
ASTM B165-05 Standard Specification for Nickel-Copper Alloy (UNS N04400)* Seamless Pipe and Tube
ASTM B169/B169M-05 Standard Specification for Aluminium Bronze Sheet, Strip, and Rolled Bar
ASTM B171/B171M-04e1 Standard Specification for Copper-Alloy Plate and Sheet for Pressure Vessels, Condensers, and Heat Exchangers
ASTM B172-01a(2007)e1 Standard Specification for Rope-Lay-Stranded Copper Conductors Having Bunch-Stranded Members, for Electrical Conductors
ASTM B173-01a(2007)e1 Standard Specification for Rope-Lay-Stranded Copper Conductors Having Concentric-Stranded Members, for Electrical Conductors
ASTM B174-02(2007)e1 Standard Specification for Bunch-Stranded Copper Conductors for Electrical Conductors
ASTM B176-04 Standard Specification for Copper-Alloy Die Castings
ASTM B179-06 Standard Specification for Aluminium Alloys in Ingot and Molten Forms for Castings from All Casting Processes
ASTM B187/B187M-06 Standard Specification for Copper, Bus Bar, Rod, and Shapes and General Purpose Rod, Bar, and Shapes
ASTM B188-02 Standard Specification for Seamless Copper Bus Pipe and Tube
ASTM B194-01e1 Standard Specification for Copper-Beryllium Alloy Plate, Sheet, Strip, and Rolled Bar
ASTM B196/B196M-07 Standard Specification for Copper-Beryllium Alloy Rod and Bar
ASTM B197/B197M-07 Standard Specification for Copper-Beryllium Alloy Wire
ASTM B208-06 Standard Practice for Preparing Tension Test Specimens for Copper Alloy Sand, Permanent Mould, Centrifugal, and Continuous Castings
ASTM B209-07 Standard Specification for Aluminium and Aluminium-Alloy Sheet and Plate
ASTM B209M-07 Standard Specification for Aluminium and Aluminium-Alloy Sheet and Plate [Metric]
SPECIFICATION LIST FOR PIPING MATERIALS

ASTM B210-04 Standard Specification for Aluminium and Aluminium-Alloy Drawn Seamless Tubes
ASTM B210M-05 Standard Specification for Aluminium and Aluminium-Alloy Drawn Seamless Tubes [Metric]
ASTM B211-03 Standard Specification for Aluminium and Aluminium-Alloy Bar, Rod, and Wire
ASTM B211M-03 Standard Specification for Aluminium and Aluminium-Alloy Bar, Rod, and Wire [Metric]
ASTM B213-03 Standard Test Method for Flow Rate of Metal Powders
ASTM B214-07 Standard Test Method for Sieve Analysis of Metal Powders
ASTM B221-06 Standard Specification for Aluminium and Aluminium-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes
ASTM B221M-07 Standard Specification for Aluminium and Aluminium-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes [Metric]
ASTM B223-03 Standard Test Method for Modulus of Elasticity of Thermostat Metals (Cantilever Beam Method)
ASTM B224-04 Standard Classification of Coppers
ASTM B226-04 Standard Specification for Cored, Annular, Concentric-Lay-Stranded Copper Conductors
ASTM B227-04 Standard Specification for Hard-Drawn Copper-Clad Steel Wire
ASTM B228-04 Standard Specification for Concentric-Lay-Stranded Copper-Clad Steel Conductors
ASTM B229-04 Standard Specification for Concentric-Lay-Stranded Copper and Copper-Clad Steel Composite Conductors
ASTM B231/B231M-04 Standard Specification for Concentric-Lay-Stranded Aluminium 1350 Conductors
ASTM B232/B232M-01e1 Standard Specification for Concentric-Lay-Stranded Aluminium Conductors, Coated-Steel Reinforced (ACSR)
ASTM B236M-07 Standard Specification for Aluminium Bars for Electrical Purposes (Bus Bars) [Metric]
ASTM B236-07 Standard Specification for Aluminium Bars for Electrical Purposes (Bus Bars)
ASTM B240-07 Standard Specification for Zinc and Zinc-Aluminium (ZA) Alloys in Ingot Form for Foundry and Die Castings
ASTM B241/B241M-02 Standard Specification for Aluminium and Aluminium-Alloy Seamless Pipe and Seamless Extruded Tube
ASTM B243-06 Standard Terminology of Powder Metallurgy
ASTM B247-02a Standard Specification for Aluminium and Aluminium-Alloy Die Forgings, Hand Forgings, and Rolled Ring Forgings
SPECIFICATION LIST FOR PIPING MATERIALS

ASTM B247M-02a Standard Specification for Aluminium and Aluminium-Alloy Die Forgings, Hand Forgings, and Rolled Ring Forgings
[Metric]
ASTM B248-07 Standard Specification for General Requirements for Wrought Copper and Copper-Alloy Plate, Sheet, Strip, and Rolled Bar
ASTM B248M-07 Standard Specification for General Requirements for Wrought Copper and Copper-Alloy Plate, Sheet, Strip, and Rolled Bar
[Metric]
ASTM B249/B249M-06 Standard Specification for General Requirements for Wrought Copper and Copper-Alloy Rod, Bar, Shapes and Forgings
ASTM B250/B250M-07 Standard Specification for General Requirements for Wrought Copper Alloy Wire
ASTM B251-02e1 Standard Specification for General Requirements for Wrought Seamless Copper and Copper-Alloy Tube
ASTM B253-87(2005)e1 Standard Guide for Preparation of Aluminium Alloys for Electroplating
ASTM B254-92(2004)e1 Standard Practice for Preparation of and Electroplating on Stainless Steel
ASTM B258-02 Standard Specification for Standard Nominal Diameters and Cross-Sectional Areas of A WG Sizes of Solid Round Wires Used as Electrical Conductors
ASTM B265-06b Standard Specification for Titanium and Titanium Alloy Strip, Sheet, and Plate
ASTM B267-07 Standard Specification for Wire for Use In Wire-Wound Resistors
ASTM B271-06 Standard Specification for Copper-Base Alloy Centrifugal Castings
ASTM B272-07 Standard Specification for Copper Flat Products with Finished (Rolled or Drawn) Edges (Flat Wire and Strip)
ASTM B275-05 Standard Practice for Codification of Certain Nonferrous Metals and Alloys, Cast and Wrought
ASTM B276-05e1 Standard Test Method for Apparent Porosity in Cemented Carbides
ASTM B279-04 Standard Test Method for Stiffness of Bare Soft Square and Rectangular Copper and Aluminium Wire for Magnet Wire Fabrication
ASTM B280-03 Standard Specification for Seamless Copper Tube for Air Conditioning and Refrigeration Field Service
ASTM B283-06 Standard Specification for Copper and Copper-Alloy Die Forgings (Hot-Pressed)
ASTM B286-07 Standard Specification for Copper Conductors for Use in Hook-up Wire for Electronic Equipment
ASTM B296-03 Standard Practice for Temper Designations of Magnesium Alloys, Cast and Wrought
ASTM B298-07 Standard Specification for Silver-Coated Soft or Annealed Copper Wire
ASTM B299-01 Standard Specification for Titanium Sponge
ASTM B301/B301M-04 Standard Specification for Free-Cutting Copper Rod, Bar, Wire and Shapes
ASTM B302-07 Standard Specification for Threadless Copper Pipe, Standard Sizes
SPECIFICATION LIST FOR PIPING MATERIALS

ASTM B 306-02 Standard Specification for Copper Drainage Tube (DWV)
ASTM B 313/B 313M-02e1 Standard Specification for Aluminium and Aluminium-Alloy Round Welded Tubes
ASTM B 315-06 Standard Specification for Seamless Copper Alloy Pipe and Tube
ASTM B 316/B 316M-02 Standard Specification for Aluminium and Aluminium-Alloy Rivet and Cold-Heading Wire and Rods
ASTM B 317/B 317M-07 Standard Specification for Aluminium-Alloy Extruded Bar, Rod, Tube, Pipe, Structural Profiles, and Profiles for Electrical Purposes (Bus Conductor)
ASTM B 320-60(2003)e1 Standard Practice for Preparation of Iron Castings for Electroplating
ASTM B 328-96(2003)e1 Standard Test Method for Density, Oil Content, and Interconnected Porosity of Sintered Metal Structural Parts and Oil-Impregnated Bearings
ASTM B 329-06 Standard Test Method for Apparent Density of Metal Powders and Compounds Using the Scott Volumeter
ASTM B 330-07 Standard Test Method for Fisher Number of Metal Powders and Related Compounds
ASTM B 333-03 Standard Specification for Nickel-Molybdenum Alloy Rod
ASTM B 338-06a Standard Specification for Seamless and Welded Titanium and Titanium Alloy Tubes for Condensers and Heat Exchangers
ASTM B 339-00(2005) Standard Specification for Pig Tin
ASTM B 343-92a(2004)e1 Standard Practice for Preparation of Nickel for Electroplating with Nickel
ASTM B 345/B 345M-02 Standard Specification for Aluminium and Aluminium-Alloy Seamless Pipe and Seamless Extruded Tube for Gas and Oil Transmission and Distribution Piping Systems
ASTM B 348-06a Standard Specification for Titanium and Titanium Alloy Bars and Billets
ASTM B 349/B 349M-03 Standard Specification for Zirconium Sponge and Other Forms of Virgin Metal for Nuclear Application
ASTM B 351/B 351M-07 Standard Specification for Hot-Rolled and Cold-Finished Zirconium and Zirconium Alloy Bars, Rod, and Wire for Nuclear Application
SPECIFICATION LIST FOR PIPING MATERIALS


ASTM B354-05 Standard Terminology Relating to Uninsulated Metallic Electrical Conductors

ASTM B355-06 Standard Specification for Nickel-Coated Soft or Annealed Copper Wire


ASTM B360-01 Standard Specification for Hard-Drawn Copper Capillary Tube for Restrictor Applications


ASTM B363-06a Standard Specification for Seamless and Welded Unalloyed Titanium and Titanium Alloy Welding Fittings


ASTM B366-04be1 Standard Specification for Factory-Made Wrought Nickel and Nickel Alloy Fittings

ASTM B367-06 Standard Specification for Titanium and Titanium Alloy Castings


ASTM B369-06 Standard Specification for Copper-Nickel Alloy Castings

ASTM B370-03 Standard Specification for Copper Sheet and Strip for Building Construction

ASTM B371/B371M-06 Standard Specification for Copper-Zinc-Silicon Alloy Rod


ASTM B374-06 Standard Terminology Relating to Electroplating

ASTM B379-04 Standard Specification for Phosphorized Coppers—Refinery Shapes


ASTM B381-06a Standard Specification for Titanium and Titanium Alloy Forgings

ASTM B386-03 Standard Specification for Molybdenum and Molybdenum Alloy Plate, Sheet, Strip, and Foil


ASTM B388-06 Standard Specification for Thermostat Metal Sheet and Strip


ASTM B391-03 Standard Specification for Niobium and Niobium Alloy Ingots

ASTM B392-03 Standard Specification for Niobium and Niobium Alloy Bar, Rod, and Wire

ASTM B393-05 Standard Specification for Niobium and Niobium Alloy Strip, Sheet, and Plate

ASTM B394-03 Standard Specification for Niobium and Niobium Alloy Seamless and Welded Tubes


<table>
<thead>
<tr>
<th>Specification</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTM B 399/B 399M-04</td>
<td>Standard Specification for Concentric-Lay-Stranded Aluminium-Alloy 6201-T81 Conductors</td>
</tr>
<tr>
<td>ASTM B 400-04</td>
<td>Standard Specification for Compact Round Concentric-Lay-Stranded Aluminium 1350 Conductors</td>
</tr>
<tr>
<td>ASTM B 401-04</td>
<td>Standard Specification for Compact Round Concentric-Lay-Stranded Aluminium Conductors, Steel-Reinforced (ACSR/COMP)</td>
</tr>
<tr>
<td>ASTM B 403-07</td>
<td>Standard Specification for Magnesium-Alloy Investment Castings</td>
</tr>
<tr>
<td>ASTM B 408-06</td>
<td>Standard Specification for Nickel-Iron-Chromium Alloy Rod and Bar</td>
</tr>
<tr>
<td>ASTM B 411/B 411M-06</td>
<td>Standard Specification for Copper-Nickel-Silicon Alloy Rod and Bar</td>
</tr>
<tr>
<td>ASTM B 418-06</td>
<td>Standard Specification for Cast and Wrought Galvanic Zinc Anodes</td>
</tr>
<tr>
<td>ASTM B 422-06</td>
<td>Standard Specification for Copper-Aluminium-Silicon-Cobalt Alloy, Copper-Nickel-Silicon-Magnesium Alloy, Copper-Nickel-Silicon Alloy, Copper-Nickel-Aluminium-Magnesium Alloy, and Copper-Nickel-Tin Alloy Sheet and Strip</td>
</tr>
<tr>
<td>ASTM B 424-05</td>
<td>Standard Specification for Ni-Fe-Cr-Mo-Cu Alloy (UNS N08825 and UNS N08221)* Plate, Sheet, and Strip</td>
</tr>
<tr>
<td>ASTM B 427-02</td>
<td>Standard Specification for Gear Bronze Alloy Castings</td>
</tr>
<tr>
<td>ASTM B 429/B 429M-06</td>
<td>Standard Specification for Aluminium-Alloy Extruded Structural Pipe and Tube</td>
</tr>
<tr>
<td>ASTM B 430-97(2006)e1</td>
<td>Standard Test Method for Particle Size Distribution of Refractory Metal Powders and Related Compounds by Turbidity</td>
</tr>
<tr>
<td>ASTM B 432-04</td>
<td>Standard Specification for Copper and Copper Alloy Clad Steel Plate</td>
</tr>
<tr>
<td>ASTM B 435-06</td>
<td>Standard Specification for UNS N06002, UNS N06230, UNS N12160, and UNS R30556 Plate, Sheet, and Strip</td>
</tr>
<tr>
<td>ASTM B 438/B 438M-05</td>
<td>Specification for Bronze Powder Metallurgy (P/M) Bearing (Oil-Impregnated)</td>
</tr>
<tr>
<td>ASTM B 441-04</td>
<td>Standard Specification for Copper-Cobalt-Beryllium, Copper-Nickel-Beryllium, and Copper-Nickel-Lead-Beryllium Rod and Bar (UNS Nos. C17500, C17510, and C17465)</td>
</tr>
</tbody>
</table>
SPECIFICATION LIST FOR PIPING MATERIALS


ASTM B446-03 Standard Specification for Nickel-Chromium-Molybdenum-Columbium Alloy (UNS N06625), Nickel-Chromium-Molybdenum-Silicon Alloy (UNS N06219), and Nickel-Chromium-Molybdenum-Tungsten Alloy (UNS N06650)* Rod and Bar

ASTM B447-07 Standard Specification for Welded Copper Tube


ASTM B452-02 Standard Specification for Copper-Clad Steel Wire for Electronic Application

ASTM B453/B453M-05 Standard Specification for Copper-Zinc-Lead Alloy (Lead-Brass) Rod, Bar, and Shapes

ASTM B455-05 Standard Specification for Copper-Zinc-Lead Alloy (Lead-Brass) Extruded Shapes


ASTM B463-04 Standard Specification for UNS N08020, UNS N08026, and UNS N08024 Alloy Plate, Sheet, and Strip

ASTM B464-05 Standard Specification for Welded UNS N08020, N08024, and N08026 Alloy Pipe

ASTM B465-04 Standard Specification for Copper-Iron Alloy Plate, Sheet, Strip, and Rolled Bar

ASTM B466/B466M-07 Standard Specification for Seamless Copper-Nickel Pipe and Tube


ASTM B468-04 Standard Specification for Welded UNS N08020, N08024, and N08026 Alloy Tubes


ASTM B472-04a Standard Specification for Nickel Alloy Billets and Bars for Reforging


ASTM B475-07 Standard Specification for UNS N08020, UNS N08024, and UNS N08026 Nickel Alloy Round Weaving Wire


ASTM B479-06 Standard Specification for Annealed Aluminium and Aluminium-Alloy Foil for Flexible Barrier, Food Contact, and Other Applications


ASTM B481-68(2003)e1 Standard Practice for Preparation of Titanium and Titanium Alloys for Electroplating


ASTM B483/B483M-03 Standard Specification for Aluminium and Aluminium-Alloy Drawn Tubes for General Purpose Applications

SPECIFICATION LIST FOR PIPING MATERIALS

Cross Section
ASTM B489-85(2003) Standard Practice for Bend Test for Ductility of Electrodeposited and Auto catalytically Deposited Metal Coatings on Metals
ASTM B491/B491M-06 Standard Specification for Aluminium and Aluminium-Alloy Extruded Round Tubes for General-Purpose Applications
ASTM B494/B494M-03 Standard Specification for Primary Zirconium
ASTM B495-05 Standard Specification for Zirconium and Zirconium Alloy Ingots
ASTM B496-04 Standard Specification for Compact Round Concentric-Lay-Stranded Copper Conductors
ASTM B501-04 Standard Specification for Silver-Coated, Copper-Clad Steel Wire for Electronic Application
ASTM B505/B505M-07 Standard Specification for Copper Alloy Continuous Castings
ASTM B508-07 Standard Specification for Copper Alloy Strip for Flexible Metal Hose
ASTM B512-04 Standard Specification for Nickel-Chromium-Silicon Alloy (UNS N08330) Billets and Bars
SPECIFICATION LIST FOR PIPING MATERIALS


ASTM B 527-06 Standard Test Method for Determination of Tap Density of Metallic Powders and Compounds

ASTM B 528-05 Standard Test Method for Transverse Rupture Strength of Metal Powder Specimens


ASTM B 534-07 Standard Specification for Copper-Cobalt-Beryllium Alloy and Copper-Nickel-Beryllium Alloy Plate, Sheet, and Rolled Bar


ASTM B 539-02e1 Standard Test Methods for Measuring Resistance of Electrical Connections (Static Contacts)


ASTM B 542-07 Standard Terminology Relating to Electrical Contacts and Their Use

ASTM B 543-07 Standard Specification for Welded Copper and Copper-Alloy Heat Exchanger Tube

ASTM B 545-97(2004)e1 Standard Specification for Electrodeposited Coatings of Tin

ASTM B 546-04 Standard Specification for Electric Fusion-Welded Ni-Cr-Co-Mo Alloy (UNS N06617), Ni-Fe-Cr-Si Alloys (UNS N08330 and UNS N08332), Ni-Cr-Fe-Al Alloy (UNS N06603), Ni-Cr-Fe Alloy (UNS N06025), and Ni-Cr-Fe-Si Alloy (UNS N06045) Pipe

ASTM B 547/B 547M -02 Standard Specification for Aluminium and Aluminium-Alloy Formed and Arc-Welded Round Tube

ASTM B 548-03 Standard Test Method for Ultrasonic Inspection of Aluminium-Alloy Plate for Pressure Vessels

ASTM B 549-04 Standard Specification for Concentric-Lay-Stranded Aluminium Conductors, Aluminium-Clad Steel Reinforced (ACSR/AW)


ASTM B 551/B 551M -07 Standard Specification for Zirconium and Zirconium Alloy Strip, Sheet, and Plate


ASTM B 557-06 Standard Test Methods for Tension Testing Wrought and Cast Aluminium- and Magnesium-Alloy Products

ASTM B 557M -07 Standard Test Methods for Tension Testing Wrought and Cast Aluminium- and Magnesium-Alloy Products (Metric)


SPECIFICATION LIST FOR PIPING MATERIALS

ASTM B564-06a Standard Specification for Nickel Alloy Forgings
ASTM B566-04a Standard Specification for Copper-Clad Aluminium Wire
ASTM B569-04 Standard Specification for Brass Strip in Narrow Widths and Light Gage for Heat-Exchanger Tubing
ASTM B570-06 Standard Specification for Copper-Beryllium Alloy (UNS Nos. C17000 and C17200) Forgings and Extrusions
ASTM B572-06 Standard Specification for UNS N06002, UNS N06230, UNS N12160, and UNS R30556 Rod
ASTM B584-06a Standard Specification for Copper Alloy Sand Castings for General Applications
ASTM B587-06 Standard Specification for Welded Brass Tube
ASTM B594-06 Standard Practice for Ultrasonic Inspection of Aluminium-Alloy Wrought Products for Aerospace Applications
SPECIFICATION LIST FOR PIPING MATERIALS

ASTM B601-07 Standard Classification for Temper Designations for Copper and Copper Alloys—Wrought and Cast
ASTM B606-02 Standard Specification for High-Strength Zinc-Coated (Galvanized) Steel Core Wire for Aluminium and Aluminium-Alloy Conductors, Steel Reinforced
ASTM B608-07 Standard Specification for Welded Copper-Alloy Pipe
ASTM B610-00e1 Standard Test Method for Measuring Dimensional Changes of Metal Powder Specimens
ASTM B613-75 Standard Practice for Descaling and Cleaning Zirconium and Zirconium Alloy Surfaces
ASTM B619-06 Standard Specification for Welded Nickel and Nickel-Cobalt Alloy Pipe
ASTM B622-06 Standard Specification for Seamless Nickel and Nickel-Cobalt Alloy Pipe and Tube
ASTM B625-05 Standard Specification for UNS N08925, N08031, N08932, N08926, N08354, and UNS R20033 Plate, Sheet, and Strip
ASTM B626-06 Standard Specification for Welded Nickel and Nickel-Cobalt Alloy Tube
SPECIFICATION LIST FOR PIPING MATERIALS

ASTM B632/B632M-02 Standard Specification for Aluminium-Alloy Rolled Tread Plate
ASTM B635-00(2004)e1 Standard Specification for Coatings of Cadmium-Tin Mechanically Deposited
ASTM B637-06 Standard Specification for Precipitation-Hardening Nickel Alloy Bars, Forgings, and Forging Stock for High-Temperature Service
ASTM B639-02 Standard Specification for Precipitation Hardening Cobalt-Containing Alloys (UNS R30155 and UNS R30816) Rod, Bar, Forgings, and Forging Stock for High-Temperature Service
ASTM B640-07 Standard Specification for Welded Copper Tube for Air Conditioning and Refrigeration Service
ASTM B644-05 Standard Specification for Copper Alloy Addition Agents
ASTM B646-06a Standard Practice for Fracture Toughness Testing of Aluminium Alloys
ASTM B649-06 Standard Specification for Ni-Fe-Cr-Mo-Cu-N Low-Carbon Alloys (UNS N08925, UNS N08031, UNS N08354, and UNS N08926), and Cr-Ni-Fe-N Low-Carbon Alloy (UNS R20033) Bar and Wire, and Ni-Cr-Fe-Mo-N Alloy (UNS N08936) Wire
ASTM B655/B655M-04 Standard Specification for Niobium-Hafnium Alloy Bar, Rod, and Wire
ASTM B657-05 Guide for Metallographic Identification of Microstructure in Cemented Carbides
ASTM B660-02 Standard Practices for Packaging/Packing of Aluminium and Magnesium Products
ASTM B661-06 Standard Practice for Heat Treatment of Magnesium Alloys
SPECIFICATION LIST FOR PIPING MATERIALS

ASTM B665-03 Standard Guide for Metallographic Sample Preparation of Cemented Tungsten Carbides
ASTM B666/B666M-01 Standard Practice for Identification Marking of Aluminium and Magnesium Products
ASTM B668-05 Standard Specification for UNS N08028 Seamless Pipe and Tube
ASTM B670-02 Standard Specification for Precipitation-Hardening Nickel Alloy (UNS N07718) Plate, Sheet, and Strip for High-Temperature Service
ASTM B673-05e1 Standard Specification for UNS N08925, UNS N08354, and UNS N08926 Welded Pipe
ASTM B674-05 Standard Specification for UNS N08925, UNS N08354, and UNS N08926 Welded Tube
ASTM B676-03 Standard Specification for UNS N08367 Welded Tube
ASTM B677-05 Standard Specification for UNS N08925, UNS N08354, and UNS N08926 Seamless Pipe and Tube
ASTM B686/B686M-07 Standard Specification for Aluminium Alloy Castings, High-Strength
ASTM B694-03 Standard Specification for Copper, Copper-Alloy, Copper-Clad Bronze (CCB), Copper-Clad Stainless Steel (CCS), and Copper-Clad Alloy Steel (CAS) Sheet and Strip for Electrical Cable Shielding
ASTM B695-04 Standard Specification for Coatings of Zinc Mechanically Deposited on Iron and Steel
<table>
<thead>
<tr>
<th>Specification List for Piping Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ASTM B698-02</strong> Standard Classification for Seamless Copper and Copper Alloy Plumbing Pipe and Tube</td>
</tr>
<tr>
<td><strong>ASTM B701/B701M-06</strong> Standard Specification for Concentric-Lay-Stranded Self-Damping Aluminium Conductors, Steel Reinforced (ACSR/SD)</td>
</tr>
<tr>
<td><strong>ASTM B702-93(2004)</strong> Standard Specification for Copper-Tungsten Electrical Contact Material</td>
</tr>
<tr>
<td><strong>ASTM B703-05</strong> Standard Test Method for Apparent Density of Powders Using Arnold Meter</td>
</tr>
<tr>
<td><strong>ASTM B704-03</strong> Standard Specification for Welded UNS N06625, UNS N06219 and UNS N08825 Alloy Tubes</td>
</tr>
<tr>
<td><strong>ASTM B706-00(2006)</strong> Standard Specification for Seamless Copper Alloy (UNS No. C69100) Pipe and Tube</td>
</tr>
<tr>
<td><strong>ASTM B708-05</strong> Standard Specification for Tantalum and Tantalum Alloy Plate, Sheet, and Strip</td>
</tr>
<tr>
<td><strong>ASTM B711-05</strong> Standard Specification for Concentric-Lay-Stranded Aluminium-Alloy Conductors, Steel Reinforced (ACSR) (6201)</td>
</tr>
<tr>
<td><strong>ASTM B712-93(2006)</strong> Standard Guide for Determination of Sodium and Potassium Content For Silver-Cadmium Oxide Contact Materials</td>
</tr>
<tr>
<td><strong>ASTM B715-96(2001)</strong> Standard Specification for Sintered Copper Structural Parts for Electrical Conductivity Applications</td>
</tr>
<tr>
<td><strong>ASTM B724-00(2006)</strong> Standard Test Method for Indentation Hardness of Aluminium Alloys by Means of a Newage, Portable, Non-Calliper-Type Instrument</td>
</tr>
<tr>
<td><strong>ASTM B725-05</strong> Standard Specification for Welded Nickel (UNS N02200/UNS N02201) and Nickel Copper Alloy (UNS N04400) Pipe</td>
</tr>
<tr>
<td><strong>ASTM B727-04</strong> Standard Practice for Preparation of Plastics Materials for Electroplating</td>
</tr>
<tr>
<td><strong>ASTM B729-05</strong> Standard Specification for Seamless UNS N08020, UNS N08026, and UNS N08024 Nickel-Alloy Pipe and Tube</td>
</tr>
<tr>
<td><strong>ASTM B731-96(2006)</strong> Standard Specification for 60 % Palladium-40 % Silver Electrical Contact Material</td>
</tr>
<tr>
<td><strong>ASTM B733-04</strong> Standard Specification for Autocatalytic (Electroless) Nickel-Phosphorus Coatings on Metal</td>
</tr>
<tr>
<td><strong>ASTM B734-97(2003)e1</strong> Standard Specification for Electrodeposited Copper for Engineering Uses</td>
</tr>
<tr>
<td><strong>ASTM B735-06</strong> Standard Test Method for Porosity in Gold Coatings on Metal Substrates by Nitric Acid Vapour</td>
</tr>
</tbody>
</table>

**Note:** Some specifications are marked with an asterisk (*), indicating they are specific to certain materials or applications. The abbreviations (e.g., ASTM) refer to the American Society for Testing and Materials standards.
SPECIFICATION LIST FOR PIPING MATERIALS


ASTM B737-05 Standard Specification for Hot-Rolled and/or Cold-Finished Hafnium Rod and Wire

ASTM B738-03 Standard Specification for Fine-Wire Bunch-Stranded and Rope-Lay Bunch-Stranded Copper Conductors for Use as Electrical Conductors


ASTM B740-02 Standard Specification for Copper-Nickel-Tin Spinodal Alloy Strip


ASTM B743-06 Standard Specification for Seamless Copper Tube in Coils

ASTM B744/B744M-05 Standard Specification for Aluminium Alloy Sheet for Corrugated Aluminium Pipe


ASTM B747-07 Standard Specification for Copper-Zirconium Alloy Sheet and Strip


ASTM B749-03 Standard Specification for Lead and Lead Alloy Strip, Sheet, and Plate Products

ASTM B750-07 Standard Specification for GALFAN (Zinc-5 % Aluminium-Mischmetal) Alloy in Ingot Form for Hot-Dip Coatings

ASTM B751-03 Standard Specification for General Requirements for Nickel and Nickel Alloy Welded Tube

ASTM B752-06 Standard Specification for Castings, Zirconium-Base, Corrosion Resistant, for General Application

ASTM B753-07 Standard Specification for Thermostat Component Alloys


ASTM B761-06 Standard Test Method for Particle Size Distribution of Metal Powders and Related Compounds by X-Ray Monitoring of Gravity Sedimentation


ASTM B763-04 Standard Specification for Copper Alloy Sand Castings for Valve Applications


ASTM B765-03 Standard Guide for Selection of Porosity and Gross Defect Tests for Electrodeposits and Related Metallic Coatings

SPECIFICATION LIST FOR PIPING MATERIALS

ASTM B 770-05 Standard Specification for Copper-Beryllium Alloy Sand Castings for General Applications
ASTM B 773-96(2002)e1 Standard Guide for Ultrasonic C-Scan Bond Evaluation of Brazed or Welded Electrical Contact Assemblies
ASTM B 775-02 Standard Specification for General Requirements for Nickel and Nickel Alloy Welded Pipe
ASTM B 776-07 Standard Specification for Hafnium and Hafnium Alloy Strip, Sheet, and Plate
ASTM B 777-99 Standard Specification for Tungsten Base, High-Density Metal
ASTM B 779-03 Standard Specification for Shaped Wire Compact Concentric-Lay-Stranded Aluminium Conductors, Steel-Reinforced (ACSR/TW)
ASTM B 780-98(2004) Standard Specification for 75% Silver, 24.5% Copper, 0.5% Nickel Electrical Contact Alloy
ASTM B 783-04 Standard Specification for Materials for Ferrous Powder Metallurgy (P/M) Structural Parts
ASTM B 786-02a Standard Specification for 19 Wire Combination Unilay-Stranded Aluminium Conductors for Subsequent Insulation
ASTM B 787/B 787M-04 Standard Specification for 19 Wire Combination Unilay-Stranded Copper Conductors for Subsequent Insulation
ASTM B 788/B 788M-04 Standard Practice for Installing Factory-Made Corrugated Aluminium Culverts and Storm Sewer Pipe
ASTM B 790/B 790M-00(2006) Standard Practice for Structural Design of Corrugated Aluminium Pipe, Pipe-Arches, and Arches for Culverts, Storm Sewers, and Other Buried Conduits
ASTM B 792-01(2005)e1 Standard Specification for Zinc Alloys in Ingot Form for Slush Casting
ASTM B 796-02 Standard Test Method for Non-metallic Inclusion Content of Powders Intended for Powder Forging (P/F) Applications
ASTM B 798-95(2005) Standard Test Method for Porosity in Gold or Palladium Coatings on Metal Substrates by Gel-Bulk Electrograph
<table>
<thead>
<tr>
<th>Specification</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTM B 801-07</td>
<td>Standard Specification for Concentric-Lay-Stranded Conductors of 8000 Series Aluminium Alloy for Subsequent Covering or Insulation</td>
</tr>
<tr>
<td>ASTM B 802/B 802M-02</td>
<td>Standard Specification for Zinc-5% Aluminium-Mischmetal Alloy-Coated Steel Core Wire for Aluminium Conductors, Steel Reinforced (ACSR)</td>
</tr>
<tr>
<td>ASTM B 803-02</td>
<td>Standard Specification for High-Strength Zinc-5% Aluminium-Mischmetal Alloy-Coated Steel Core Wire for Aluminium and Aluminium-Alloy Conductors, Steel Reinforced</td>
</tr>
<tr>
<td>ASTM B 805-06</td>
<td>Standard Specification for Precipitation Hardening Nickel Alloys Bar and Wire</td>
</tr>
<tr>
<td>ASTM B 806-06</td>
<td>Standard Specification for Copper Alloy Permanent Mould Castings for General Applications</td>
</tr>
<tr>
<td>ASTM B 807/B 807M-06</td>
<td>Standard Practice for Extrusion Press Solution Heat Treatment for Aluminium Alloys</td>
</tr>
<tr>
<td>ASTM B 808-05</td>
<td>Standard Test Method for Monitoring of Atmospheric Corrosion Chambers by Quartz Crystal Microbalances</td>
</tr>
<tr>
<td>ASTM B 813-00e1</td>
<td>Standard Specification for Liquid and Paste Fluxes for Soldering of Copper and Copper Alloy Tube</td>
</tr>
<tr>
<td>ASTM B 816-00(e)1</td>
<td>Standard Specification for Coatings of Cadmium-Zinc Mechanically Deposited</td>
</tr>
<tr>
<td>ASTM B 817-03</td>
<td>Standard Specification for Powder Metallurgy (P/M) Titanium Alloy Structural Components</td>
</tr>
<tr>
<td>ASTM B 819-00(2006)</td>
<td>Standard Specification for Seamless Copper Tube for Medical Gas Systems</td>
</tr>
<tr>
<td>ASTM B 820-04e1</td>
<td>Standard Test Method for Bend Test for Determining the Formability of Copper and Copper Alloy Strip</td>
</tr>
<tr>
<td>ASTM B 822-02</td>
<td>Standard Test Method for Particle Size Distribution of Metal Powders and Related Compounds by Light Scattering</td>
</tr>
<tr>
<td>ASTM B 823-01</td>
<td>Standard Specification for Materials for Nonferrous Powder Metallurgy (P/M) Structural Parts</td>
</tr>
<tr>
<td>ASTM B 824-04</td>
<td>Standard Specification for General Requirements for Copper Alloy Castings</td>
</tr>
<tr>
<td>ASTM B 825-02</td>
<td>Standard Test Method for Coulometric Reduction of Surface Films on Metallic Test Samples</td>
</tr>
<tr>
<td>ASTM B 827-05</td>
<td>Standard Practice for Conducting Mixed Flowing Gas (MFG) Environmental Tests</td>
</tr>
<tr>
<td>ASTM B 828-02</td>
<td>Standard Practice for Making Capillary Joints by Soldering of Copper and Copper Alloy Tube and Fittings</td>
</tr>
<tr>
<td>ASTM B 829-04a</td>
<td>Standard Specification for General Requirements for Nickel and Nickel Alloys Seamless Pipe and Tube</td>
</tr>
</tbody>
</table>
SPECIFICATION LIST FOR PIPING MATERIALS

ASTM B831-05 Standard Test Method for Shear Testing of Thin Aluminium Alloy Products
ASTM B833-06 Standard Specification for Zinc and Zinc Alloy Wire for Thermal Spraying (Metallizing) for the Corrosion Protection of Steel
ASTM B839-04 Standard Test Method for Residual Embrittlement in Metallic Coated, Externally Threaded Articles, Fasteners, and Rod—Inclined Wedge Method
ASTM B843-07 Standard Specification for Magnesium Alloy Anodes for Cathodic Protection
ASTM B846-06a Standard Terminology for Copper and Copper Alloys
ASTM B848-05 Specification for Powder Forged (P/F) Ferrous Materials
ASTM B851-04 Standard Specification for Automated Controlled Shot Peening of Metallic Articles Prior to Nickel, Autocatalytic Nickel, or Chromium Plating, or as Final Finish
ASTM B852-07 Standard Specification for Continuous Galvanizing Grade (CGG) Zinc Alloys for Hot-Dip Galvanizing of Sheet Steel
ASTM B853-07 Standard Specification for Powder Metallurgy (PM) Boron Stainless Steel Structural Components
ASTM B855-06 Standard Test Method for Volumetric Flow Rate of Metal Powders Using Arnold Meter and Hall Funnel
ASTM B856-03 Standard Specification for Concentric-Lay-Stranded Aluminium Conductors, Coated Steel Supported (ACSS)
ASTM B857-02 Standard Specification for Shaped Wire Compact Concentric-Lay-Stranded Aluminium Conductors, Coated-Steel Supported (ACSS/TW)
ASTM B858-06 Standard Test Method for Ammonia Vapour Test for Determining Susceptibility to Stress Corrosion Cracking in Copper Alloys
ASTM B859-03 Standard Practice for De-Agglomeration of Refractory Metal Powders and Their Compounds Prior to Particle Size Analysis
ASTM B860-07 Standard Specification for Zinc Master Alloys for Use in Hot Dip Galvanizing
ASTM B861-06a Standard Specification for Titanium and Titanium Alloy Seamless Pipe
ASTM B862-06be1 Standard Specification for Titanium and Titanium Alloy Welded Pipe
SPECIFICATION LIST FOR PIPING MATERIALS

ASTM B863-06a Standard Specification for Titanium and Titanium Alloy Wire
ASTM B865-04 Standard Specification for Precipitation Hardening Nickel-Copper-Aluminium Alloy (UNS N05500) Bar, Rod, Wire, Forgings, and Forging Stock
ASTM B868-96(2002)e3 Standard Practice for Contact Performance Classification of Electrical Connection Systems
ASTM B869-07 Standard Specification for Copper-Clad Steel Electrical Conductor for CATV Drop Wire
ASTM B870-02 Standard Specification for Copper-Beryllium Alloy Forgings and Extrusions Alloys (UNS Nos. C17500 and C17510)
ASTM B872-06 Standard Specification for Precipitation-Hardening Nickel Alloys Plate, Sheet, and Strip
ASTM B879-97(2003)e1 Standard Practice for Applying Non-Electrolytic Conversion Coatings on Magnesium and Magnesium Alloys
ASTM B880-03 Standard Specification for General Requirements for Chemical Check Analysis Limits for Nickel, Nickel Alloys, and Cobalt Alloys
ASTM B881-05 Standard Terminology Relating to Aluminium- and Magnesium- Alloy Products
ASTM B882-05 Specification for Pre-Paginated Copper for Architectural Applications
ASTM B884-05 Standard Specification for Niobium-Titanium Alloy Billets, Bar, and Rod for Superconducting Applications
ASTM B886-03 Standard Test Methods for Determination of Magnetic Saturation (Ms) of Cemented Carbides
ASTM B887-03 Standard Test Method for Determination of Coercivity (Hc) of Cemented Carbides
ASTM B888-06 Standard Specification for Copper Alloy Strip for Use in Manufacture of Electrical Connectors or Spring Contacts
ASTM B892-03 Standard Specification for ACuZinc5 (Zinc-Copper-Aluminium) Alloy in Ingot Form for Die Castings
SPECIFICATION LIST FOR PIPING MATERIALS

ASTM B894-03 Standard Specification for A CuZinc5 (Zinc-Copper-Aluminium) Alloy Die Castings
ASTM B895-05 Test Methods for Evaluating the Corrosion Resistance of Stainless Steel Powder Metallurgy (P/M) Parts/Specimens by Immersion in a Sodium Chloride Solution
ASTM B897-03 Standard Specification for Configuration of Zinc and Zinc Alloy Jumbo and Block Ingot
ASTM B898-05e1 Standard Specification for Reactive and Refractory Metal Clad Plate
ASTM B899-06 Standard Terminology Relating to Non-ferrous Metals and Alloys
ASTM B900-04 Standard Practice for Packaging of Copper and Copper Alloy Mill Products for U.S. Government Agencies
ASTM B905-00(2005) Standard Test Methods for Assessing the Adhesion of Metallic and Inorganic Coatings by the Mechanized Tape Test
ASTM B907-05 Standard Specification for Zinc, Tin and Cadmium Base Alloys Used as Solders
ASTM B908-03 Standard Practice for the Use of Colour Codes for Zinc Casting Alloy Ingot
ASTM B910/B910M-07 Standard Specification for Annealed Copper-Clad Steel Wire
ASTM B911/B911M-05 Standard Specification for ACSR Twisted Pair Conductor (ACSR/TP)
ASTM B912-02 Standard Specification for Passivation of Stainless Steels Using Electro polishing
ASTM B913-05 Standard Test Method for Evaluation of Crimped Electrical Connections to 16-Gauge and Smaller Diameter Stranded and Solid Conductors
ASTM B914-03e2 Standard Practice for Colour Codes on Zinc and Zinc Alloy Ingot for Use in Hot-Dip Galvanizing of Steel
ASTM B917/B917M-07 Standard Practice for Heat Treatment of Aluminium-Alloy Castings from All Processes
ASTM B918-01 Standard Practice for Heat Treatment of Wrought Aluminium Alloys
ASTM B920-01(2006)e1 Standard Practice for Porosity in Gold and Palladium Alloy Coatings on Metal Substrates by Vapours of Sodium Hypochlorite Solution
ASTM B921-02 Standard Specification for Non-hexavalent Chromium Conversion Coatings on Aluminium and Aluminium Alloys
ASTM B922-02 Standard Test Method for Metal Powder Specific Surface Area by Physical Adsorption
ASTM B923-02 Standard Test Method for Metal Powder Skeletal Density by Helium or Nitrogen Pycnometry
SPECIFICATION LIST FOR PIPING MATERIALS

ASTM B926-03 Standard Method for Pinhole Determination in Aluminium and Aluminium Alloy Plain Foil by Means of a Light Table
ASTM B927-03 Standard Specification for Brass Rod, Bar, and Shapes
ASTM B928/B928M-07 Standard Specification for High Magnesium Aluminium-Alloy Sheet and Plate for Marine Service and Similar Environments
ASTM B929-05 Standard Specification for Copper-Nickel-Tin Spinodal Alloy Rod and Bar
ASTM B930-03 Standard Test Method for Rating Grain Size and Frequency of Abnormally Large Grains in Cemented Tungsten Carbides (Hard metals)
ASTM B936-04e1 Standard Specification for Copper-Chromium-Iron-Titanium Alloy Plate, Sheet, Strip and Rolled Bar
ASTM B937-04 Standard Specification for Copper-Beryllium Seamless Tube (UNS Nos. C17500 and C17510)
ASTM B938-04 Standard Specification for Copper-Beryllium Alloy Forgings and Extrusions (UNS Nos. C17500 and C17510)
ASTM B940-05 Standard Practice for Testing Non-Chromate Coatings on Zinc and Cadmium Surfaces
ASTM B944-06 Standard Specification for Copper-Beryllium Welded Heat Exchanger and Condenser Tube (UNS No. C17510)
ASTM B945-06 Standard Practice for Aluminium Alloy Extrusions Press Cooled from an Elevated Temperature Shaping Process for Production of T1, T2, T5 and T10-Type Tempers
ASTM B946-06 Standard Test Method for Surface Finish of Powder Metallurgy (P/M) Products
ASTM B947-06 Standard Practice for Hot Rolling Mill Solution Heat Treatment for Aluminium Alloy Plate
ASTM B949-06 Standard Specification for General Requirements for Zinc and Zinc Alloy Products
ASTM B950-06 Standard Guide for Editorial Procedures and Form of Product Specifications for Copper and Copper Alloys
ASTM B951-07 Standard Practice for Codification of Unalloyed Magnesium and Magnesium-Alloys, Cast and Wrought
ASTM B952-07 Standard Specification for Zinc Alloys in Ingot Form for Spin Casting
ASTM B953-07 Standard Practice for Sampling Magnesium and Magnesium Alloys for Spectrochemical Analysis
ASTM B954-07 Standard Test Method for Analysis of Magnesium and Magnesium Alloys by Atomic Emission Spectrometry
ASTM B956-07 Standard Specification for Welded Copper and Copper-Alloy Condenser and Heat Exchanger Tubes with Integral Fins

Standards of Pipes and Fittings
The American Society of Mechanical Engineers (ASME) through the ASME/ANSI B16 Standards, covers pipes and fittings in cast iron, cast bronze, wrought copper and steel.

This Standard for Classes 25, 125, and 250 Cast Iron Pipe Flanges and Flanged Fittings covers:

- (a) pressure-temperature ratings,
- (b) sizes and method of designating openings of reducing fittings,
- (c) marking,
- (d) minimum requirements for materials,
- (e) dimensions and tolerances,
- (f) bolt, nut, and gasket dimensions and
- (g) Tests.

**ASME/ANSI B16.3 - 1998 - Malleable Iron Threaded Fittings**
This Standard for threaded malleable iron fittings Classes 150, and 300 provides requirements for:

- (a) pressure-temperature ratings
- (b) size and method of designating openings of reducing fittings
- (c) marking
- (d) materials
- (e) dimensions and tolerances
- (f) threading
- (g) coatings

**ASME/ANSI B16.4 - 1998 - Cast Iron Threaded Fittings**
This Standard for gray iron threaded fittings, Classes 125 and 250 covers:

- (a) pressure-temperature ratings
- (b) size and method of designating openings of reducing fittings
- (c) marking
- (d) material
- (e) dimensions and tolerances
- (f) threading, and
- (g) coatings

**ASME/ANSI B16.5 - 1996 - Pipe Flanges and Flanged Fittings**
The ASME B16.5 - 1996 Pipe Flanges and Flange Fittings standard covers pressure-temperature ratings, materials, dimensions, tolerances, marking, testing, and methods of designating openings for pipe flanges and flanged fittings. The standard includes flanges with rating class designations 150, 300, 400, 600, 900, 1500, and 2500 in sizes NPS 1/2 through NPS 24, with requirements given in both metric and U.S. units. The standard is limited to flanges and flanged fittings made from cast or forged materials, and includes blind flanges and certain reducing flanges made from cast, forged, or plate materials. Also included in this Standard are requirements and recommendations regarding flange bolting, flange gaskets, and flange joints.

**ASME/ANSI B16.9 - 2001 - Factory-Made Wrought Steel Butt-welding Fittings**
This Standard covers overall dimensions, tolerances, ratings, testing, and markings for wrought factory-made butt-welding fittings in sizes NPS 1/2 through 48 (DN 15 through 1200).

**ASME/ANSI B16.10 - 2000 - Face-to-Face and End-to-End Dimensions of Valves**
This Standard covers face-to-face and end-to-end dimensions of straightway valves, and centre-to face and centre-to-end dimensions of angle valves. Its purpose is to assure installation interchangeability for valves of a given material, type size, rating class, and end connection.

**ASME/ANSI B16.11 - 2001 - Forged Steel Fittings, Socket-Welding and Threaded**
This Standard covers ratings, dimensions, tolerances, marking and material requirements for forged fittings, both socket-welding and threaded.

This Standard for cast iron threaded drainage fittings covers:

- (a) size and method of designating openings in reducing fittings
- (b) marking
- (c) materials
- (d) dimensions and tolerances
SPECIFICATION LIST FOR PIPING MATERIALS

- (e) threading
- (f) ribs
- (g) coatings
- (h) Face bevel discharge nozzles, input shafts, base plates, and foundation bolt holes (see Tables 1 and 2).

This Standard for Ferrous Pipe Plugs, Bushings, and Locknuts with Pipe Threads covers:

- (a) pressure-temperature ratings;
- (b) size;
- (c) marking;
- (d) materials;
- (e) dimensions and tolerances;
- (f) threading; and
- (g) Pattern taper.

ASME/ANSI B16.15 - 1985 (R1994) - Cast Bronze Threaded Fittings
This Standard pertains primarily to cast Class 125 and Class 250 bronze threaded pipe fittings. Certain requirements also pertain to wrought or cast plugs, bushings, couplings, and caps. This Standard covers:

- (a) pressure-temperature ratings;
- (b) size and method of designating openings of reducing pipe fittings;
- (c) marking;
- (d) minimum requirements for casting quality and materials;
- (e) dimensions and tolerances in U.S. customary and metric (SI) units;
- (f) Threading.

ASME/ANSI B16.18 - 1984 (R1994) - Cast Copper Alloy Solder Joint Pressure Fittings
This Standard for cast copper alloy solder joint pressure fittings designed for use with copper water tube, establishes requirements for:

- (a) Pressure-temperature ratings;
- (b) Abbreviations for end connections;
- (c) Sizes and method of designating openings of fittings;
- (d) Marking;
- (e) Material;
- (f) Dimensions and tolerances; and
- (g) Tests.

This standard covers materials, dimensions, tolerances, and markings for metal ring-joint gaskets, spiral-wound metal gaskets, and metal jacketed gaskets and filler material. These gaskets are dimensionally suitable for use with flanges described in the reference flange standards ASME/ANSI B16.5, ASME B16.47, and API-6A. This standard covers spiral-wound metal gaskets and metal jacketed gaskets for use with raised face and flat face flanges. Replaces API-601 or API-601.

ASME/ANSI B16.21 - 1992 - Non-metallic Flat Gaskets for Pipe Flanges
This Standard for non-metallic flat gaskets for bolted flanged joints in piping includes:

- (a) types and sizes;
- (b) materials;
- (c) Dimensions and allowable tolerances.

ASME/ANSI B16.22 - 1995 - Wrought Copper and Copper Alloy Solder Joint Pressure Fittings
The Standard establishes specifications for wrought copper and wrought copper alloy, solder-joint, seamless fittings, designed for use with seamless copper tube conforming to ASTM B 88 (water and general plumbing systems), B 280 (air conditioning and refrigeration service), and B 819 (medical gas systems), as well as fittings intended to be assembled with soldering materials conforming to ASTM B 32, brazing materials conforming to AWS A5.8, or with tapered pipe thread conforming to ASTM B 120.1. This Standard is allied with ASME B16.18, which covers cast copper alloy pressure fittings. It provides requirements for fitting ends suitable for soldering. This Standard covers:
SPECIFICATION LIST FOR PIPING MATERIALS

- (a) pressure temperature ratings;
- (b) abbreviations for end connections;
- (c) size and method of designating openings of fittings;
- (d) marking;
- (e) material;
- (f) dimension and tolerances; and
- (g) Tests.

ASME/ANSI B16.23 - 1992 - Cast Copper Alloy Solder Joint Drainage Fittings (DWV)
The Standard establishes specifications for cast copper alloy solder joint drainage fittings, designed for use in drain, waste, and vent (DWV) systems. These fittings are designed for use with seamless copper tube conforming to ASTM B 306, Copper Drainage Tube (DWV), as well as fittings intended to be assembled with soldering materials conforming to ASTM B 32, or tapered pipe thread conforming to ASME B1.20.1. This standard is allied with ASME B16.29, Wrought Copper and Wrought Copper Alloy Solder Joint Drainage Fittings - DWV. It provides requirements for fitting ends suitable for soldering. This standard covers:

- (a) description;
- (b) pitch (slope);
- (c) abbreviations for end connections;
- (d) sizes and methods for designing openings for reducing fittings;
- (e) marking;
- (f) material; and
- (g) Dimensions and tolerances.

This Standard for Classes 25, 125, 250, and 800 Cast Iron Pipe Flanges and Flanged Fittings covers:

- (a) pressure temperature ratings,
- (b) sizes and methods of designating openings for reduced fittings,
- (c) marking,
- (d) minimum requirements for materials,
- (e) dimensions and tolerances,
- (f) bolt, nut, and gasket dimensions, and
- (g) Tests.

ASME/ANSI B16.25 - 1997 - Butt-welding Ends
The Standard covers the preparation of butt welding ends of piping components to be joined into a piping system by welding. It includes requirements for welding bevels, for external and internal shaping of heavy-wall components, and for preparation of internal ends (including dimensions and tolerances). Coverage includes preparation for joints with the following.

- (a) no backing rings;
- (b) split or non-continuous backing rings;
- (c) solid or continuous backing rings;
- (d) consumable insert rings;
- (e) Gas tungsten are welding (GTAW) of the root pass. Details of preparation for any backing ring must be specified in ordering the component.

ASME/ANSI B16.26 - 1988 - Cast Copper Alloy Fittings for Flared Copper Tubes
This standard for Cast Copper Alloy Fitting for Flared Copper Tubes covers:

- (a) pressure rating;
- (b) material;
- (c) size;
- (d) threading;
SPECIFICATION LIST FOR PIPING MATERIALS

- (e) Marking.

**ASME/ANSI B16.28 - 1994 - Wrought Steel Butt-welding Short Radius Elbows and Returns**
This Standard covers ratings, overall dimensions, testing, tolerances, and markings for wrought carbon and alloy steel butt-welding short radius elbows and returns. The term wrought denotes fittings made of pipe, tubing, plate, or forgings.

**ASME/ANSI B16.29 - 1994 - Wrought Copper and Wrought Copper Alloy Solder Joint Drainage Fittings (DWV)**
The standard for wrought copper and wrought copper alloy solder joint drainage fittings, designed for use with copper drainage tube, covers:

- (a) Description,
- (b) Pitch (slope),
- (c) Abbreviations for End Connections,
- (d) Sizes and Method of Designating Openings for Reducing Fittings,
- (e) Marking,
- (f) Material,
- (g) Dimensions and Tolerances.

**ASME/ANSI B16.33 - 1990 - Manually Operated Metallic Gas Valves for Use in Gas Piping Systems Up to 125 psig**
General This Standard covers requirements for manually operated metallic valves sizes NPS 1.2 through NPS 2, for outdoor installation as gas shut-off valves at the end of the gas service line and before the gas regulator and meter where the designated gauge pressure of the gas piping system does not exceed 125 psi (8.6 bar). The Standard applies to valves operated in a temperature environment between 20 degrees F and 150 degrees F (.29 degrees C and 66 degrees C). Design This Standard sets forth the minimum capabilities, characteristics, and properties, which a valve at the time of manufacture must possess, in order to be considered suitable for use in gas piping systems.

**ASME/ANSI B16.34 - 1996 - Valves - Flanged, Threaded, and Welding End**
This standard applies to new valve construction and covers pressure-temperature ratings, dimensions, tolerances, materials, non-destructive examination requirements, testing, and marking for cast, forged, and fabricated flanged, threaded, and welding end, and wafer or flangeless valves of steel, nickel-base alloys, and other alloys shown in Table 1. Wafer or flangeless valves, bolted or through-bolt types, that are installed between flanges or against a flange shall be treated as flanged end valves.

**ASME/ANSI B16.36 - 1996 - Orifice Flanges**
This Standard covers flanges (similar to those covered in ASME B16.5) that have orifice pressure differential connections. Coverage is limited to the following:

- (a) welding neck flanges Classes 300, 400, 600, 900, 1500, and 2500
- (b) slip-on and threaded Class 300

- Orifice, Nozzle and Venturi Flow Rate Meters

**ASME/ANSI B16.38 - 1985 (R1994) - Large Metallic Valves for Gas Distribution**
The standard covers only manually operated metallic valves in nominal pipe sizes 2 1/2 through 12 having the inlet and outlet on a common centre line, which are suitable for controlling the flow of gas from open to fully closed, for use in distribution and service lines where the maximum gage pressure at which such distribution piping systems may be operated in accordance with the code of federal regulations (cfr), title 49, part 192, transportation of natural and other gas by pipeline; minimum safety standard, does not exceed 125 psi (8.6 bar). Valve seats, seals and stem packing may be non-metallic.

This Standard for threaded malleable iron unions, classes 150, 250, and 300, provides requirements for the following:

- (a) design
- (b) pressure-temperature ratings
- (c) size
- (d) marking
- (e) materials
- (f) joints and seats
- (g) threads
- (h) hydrostatic strength
- (i) tensile strength
- (j) air pressure test
- (k) sampling
- (l) coatings
SPECIFICATION LIST FOR PIPING MATERIALS

- (m) dimensions

**ASME/ANSI B16.40 - 1985 (R1994) - Manually Operated Thermoplastic Gas**
The Standard covers manually operated thermoplastic valves in nominal sizes 1.2 through 6 (as shown in Table 5). These valves are suitable for use below ground in thermoplastic distribution mains and service lines. The maximum pressure at which such distribution piping systems may be operated is in accordance with the Code of Federal Regulation (CFR) Title 49, Part 192, Transportation of Natural and Other Gas by Pipeline; Minimum Safety Standards, for temperature ranges of .20 deg. F to 100 deg. F (.29 deg. C to 38 deg. C). This Standard sets qualification requirements for each nominal valve size for each valve design as a necessary condition for demonstrating conformance to this Standard. This Standard sets requirements for newly manufactured valves for use in below ground piping systems for natural gas (includes synthetic natural gas (SNG)), and liquefied petroleum (LP) gases (distributed as a vapour, with or without the admixture of air) or mixtures thereof.

**ASME/ANSIB16.42 - 1998 - Ductile Iron Pipe Flanges and Flanged Fittings, Classes 150 and 300**
The Standard covers minimum requirements for Class 150 and 300 cast ductile iron pipe flanges and flanged fittings. The requirements covered are as follows:

- (a) pressure-temperature ratings
- (b) sizes and method of designating openings
- (c) marking
- (d) materials
- (e) dimensions and tolerances
- (f) bolts, nuts, and gaskets
- (g) tests

This Standard applies to new valve construction and covers quarter turn manually operated metallic valves in sizes NPS 1/2-2 which are intended for indoor installation as gas shutoff valves when installed in indoor gas piping between a gas meter outlet & the inlet connection to a gas appliance.

**ASME/ANSI B16.45 - 1998 - Steel Line Blanks**
The Standard covers pressure-temperature ratings, materials, dimensions, tolerances, marking, and testing for operating line blanks in sizes NPS 1/2 through NPS 24 for installation between ASME B16.5 flanges in the 150, 300, 600, 900, 1500, and 2500 pressure classes.

**ASME/ANSI B16.47 - 1996 - Large Diameter Steel Flanges: NPS 26 through NPS 60**
This Standard covers pressure-temperature ratings, materials, dimensions, tolerances, marking, and testing for pipe flanges in sizes NPS 26 through NPS 60 and in ratings Classes 75, 150,0300, 400, 600, and 900. Flanges may be cast, forged, or plate (for blind flanges only) materials. Requirements and recommendations regarding bolting and gaskets are also included.

**ASME/ANSI B16.48 - 1997 - Steel Line Blanks**
The Standard covers pressure-temperature ratings, materials, dimensions, tolerances, marking, and testing for operating line blanks in sizes NPS 1/2 through NPS 24 for installation between ASME B16.5 flanges in the 150, 300, 600, 900, 1500, and 2500 pressure classes.

This Standard covers design, material, manufacturing, testing, marking, and inspection requirements for factory-made pipeline bends of carbon steel materials having controlled chemistry and mechanical properties, produced by the induction bending process, with or without tangents. This Standard covers induction bends for transportation and distribution piping applications (e.g., ASME B31.4, B31.8, and B31.11) Process and power piping have differing requirements and materials that may not be appropriate for the restrictions and examinations described herein, and therefore are not included in this Standard.