## General Requirements Standards For Metallic Materials

ASTM



- 1991 1996 Shiraz University B.Sc., Materials Engineering - Metal Forming
- 1998 2001 🛛 Shiraz University

M.Sc., Materials Engineering - Characterization and Selection of Materials

### Career Timeline

□ Sistan & Balouchestan University

Laboratory Expert and Instructor, 1996 - 1998

#### Niroo Research Institute

Researcher, Test Engineer and Laboratory Manager, 2002 - 2005

#### Moshanir Consultants

Senior Materials and Welding Engineer, 2005 - 2016

#### **Nargan Co.**

Senior Materials and Corrosion Engineer, 2016 – Present







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This presentation covers a group of common requirements that, unless covered by the individual product specification in another ASTM document, applies for general use.

Due to the widespread use of metallic materials in the oil, gas and petrochemical industries, this presentation addresses the general requirements of these materials.



This file is presented based on subject classification as following:

Steel Piping, Tubing, Fittings Ferrous Castings; Ferroalloys Steel Plate, Sheet, Strip, Wire; Stainless Steel Bar Steel Structural, Reinforcing, Pressure Vessel, Railway Steel Bars, Forgings, Bearing, Chain, Tool Coated Steel Products

## Steel Piping, Tubing, Fittings

- A 450 Carbon and Low Alloy Steel Tubes
- A 530 Specialized Carbon and Alloy Steel Pipe
- A 999 Alloy and Stainless Steel Pipe
- A 1016 Ferritic Alloy Steel, Austenitic Alloy Steel, and SS Tubes



## Ferrous Castings; Ferroalloys

- A 703 Steel Castings for Pressure-Containing Parts
- A 985 Steel Investment Castings for Pressure-Containing Parts
- A 1025 Ferroalloys and Other Alloying Materials



# Steel Plate, Sheet, Strip, Wire; Stainless Steel Bar

A 480 Flat- Rolled Stainless and Heat-Resisting Steel Plate, Sheet, and Strip

- A 484 Stainless Steel Bars, Billets, and Forgings
- A 505 Steel, Sheet and Strip, Alloy, Hot-Rolled and Cold-Rolled
- A 510 Wire Rods and Coarse Round Wire, Carbon and alloy Steel
- A 555 Stainless Steel Wire and Wire Rods

A 568 Steel, Sheet, Carbon, Structural, and High-Strength, Low-Alloy, Hot-Rolled and Cold-Rolled

A 635 Steel, Sheet and Strip, Heavy- Thickness Coils, Hot-Rolled, Alloy, Carbon, Structural, High-Strength Low- Alloy

A 749 Steel, Strip, Carbon and High- Strength, Low-Alloy, Hot-Rolled

# Steel Structural, Reinforcing, Pressure Vessel, Railway

- A 6 Rolled Structural Steel Bars, Plates, Shapes, and Sheet Piling
- A 20 Steel Plates for Pressure Vessels



# Steel Bars, Forgings, Bearing, Chain, Tool

A 29 Steel Bars, Carbon and Alloy, Hot-WroughtA 788 Steel Forgings

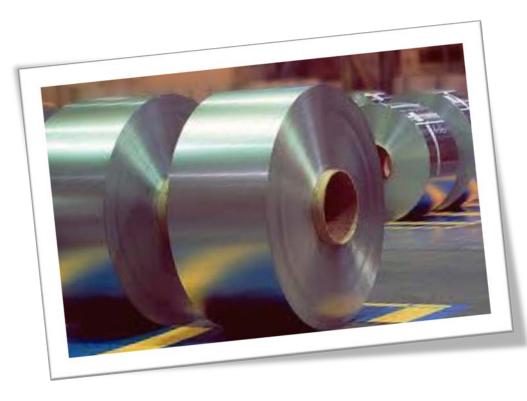


### **Coated Steel Products**

#### A 623 Tin Mill Products

A 917 Steel Sheet, Coated by the Electrolytic Process for Applications Requiring Designation of the Coating Mass on Surface

A 924 Steel Sheet, Metallic-Coated by the Hot-Dip Process



This presentation was developed by Kamran Khodaparasti.

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**<u>Reference</u>**: ASTM standards