

# Material: MSZ 10 CrMo 9-10

## Standard Specification for Steels for High-Pressure Hydrogenation Vessels

**Group:** Ferrous Mild Steel Alloys

**Sub Group:** MSZ 10 CrMo 9-10 Steels for High-Pressure Hydrogenation Vessels

**Application:** Intended for Valve, Pump, General Engineering, Automotive and Other Industries

**Grade Belongs to the Industry:** Bar, Tube and Forging

Chemical Composition		
Carbon	C %	0.080 - 0.140
Silicon	Si %	0.500 Max.
Manganese	Mn %	0.300 - 0.700
Phosphorus	P %	0.020 max.
Sulphur	S %	0.010 max.
Chromium	Cr %	2.000 - 2.500
Molybdenum	Mo %	0.900 - 1.100
Iron	Fe %	Balance
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

Heat Treatment
Normalizing or Annealing or Hardening + Tempering

Mechanical Properties	
Tensile Strength in Mpa	450 - 630
Yield Strength in Mpa	250 min.
Elongation in %	17 min.
Reduction of Area in %	-
Hardness in BHN	-
Impact in Joule	27 J @ RT

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
1.7375	DIN	Germany	Tube
1.7380	EN	European Union	Bar, Plate and Forging
10 CD 9-10	AFNOR NF	France	Plate
10 CrMo 10	STAS	Romania	Tube
J22090	UNS	USA	Casting
10 CrMo 9-10	BS	British	Steel
A356 10	ASTM	USA	Casting

**Disclaimer:** All information displayed in our data sheets are for reference purpose only and are sole property of their respective owners. Information and or material are used for educational purposes only. Data at actual may vary at actual and case to case basis. ICAST Alloys LLP does not guarantee validity of these parameters. Warranties and liabilities are exclusive to our terms and conditions of business.

Customer Care: +91-99090 45075 Email: [info@icastllp.com](mailto:info@icastllp.com)



+91-99090 45075



[info@icastllp.com](mailto:info@icastllp.com)



ICAST ALLOYS LLP, Plot 2527, Road H1, Kranti Gate, GIDC Metoda, Lodhika, Rajkot-360021, Gujarat, India