

# Material: UNS J12523

## Standard Specification for Alloy Steel Casting

**Group:** Ferrous Mild Steel Alloys

**Sub Group:** UNS J12523 Alloy Steel Casting

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

**Grade Belongs to the Industry:** Casting

Chemical Composition		
Carbon	C %	0.250 max.
Silicon	Si %	0.060 max.
Manganese	Mn %	0.700 max.
Phosphorus	P %	0.035 max.
Sulphur	S %	0.030 max.
Molybdenum	Mo %	0.450 - 0.650
Iron	Fe %	Balance
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

Heat Treatment
Normalizing or Annealing or Hardening + Tempering

Mechanical Properties	
Tensile Strength in Mpa	450 min.
Yield Strength in Mpa	240 min.
Elongation in %	22 min.
Reduction of Area in %	35 min.
Hardness in BHN	-
Impact in Joule	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
1.8872	DIN	Germany	Steel
16 Mo 5	STAS	Romania	Plate
245	BS	British	Casting
C 1	MSZ	Hungary	Steel
FS 12 MD 4	AFNOR NF	France	Wire, Rod and Coil
G18Mo5	UNI	Italy	Casting
A356 2	ASTM	USA	Casting

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