

# 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			Heat Treatment	
Carbon	C %	0.250 max.	Normalizing or Annealing or Hardening + Tempering	
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		
-	-	-	<b>Mechanical Properties</b> 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 -	
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-	-	-		
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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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