



Material - UNS J31200

Standard Specification for Alloy Steel Casting

Group - Ferrous Mild Steel Alloys

Sub Group - UNS J31200 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 %	0.120 max.	Annealing or Normalising or Hardening + Tempering	
Silicon	Si %	0.500 max.		
Manganese	Mn %	2.100 max.		
Phosphorus	P %	0.020 max.		
Sulphur	S %	0.020 max.		
Chromium	Cr %	0.200 max.		
Nickel	Ni %	1.000 - 1.400		
Molybdenum	Mo %	0.100 max.		
Tungsten	W %	0.100 max.		
Copper	Cu %	0.200 max.		
Vanadium	V %	0.020 max.	Mechanical Properties	
Iron	Fe %	Balance	Tensile Strength in Mpa	485 - 655
-	-	-	Yield Strength in Mpa	275 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
SA-487 Grade 16A	ASME	USA	Casting
1.6222	DIN	Germany	Steel
1.8932	EN	European Union	Forging
E 460 DD	JIS	Japan	Plate
P 420 NH	EN	European Union	Forging
9 NiMn 5	DIN	Germany	Steel
A487 16A	ASTM	USA	Casting

Further any inquiry to discuss with Gravity Cast Pvt. Ltd. – Gravity Group of Companies team member Call on +918469160029, or email marketing@gravitycastindia.com

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