



## Material - JIS E 460 DD

### Standard Specification for High Yield Strength Steel Plates for Structure

Group - Ferrous Mild Steel Alloys

Sub Group - JIS E 460 DD High Yield Strength Steel Plates for Structure

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

Grade Belongs to the Industry - Plate

Chemical Composition			Heat Treatment	
Carbon	C %	0.200 max.	Annealing or Normalising or Hardening + Tempering	
Silicon	Si %	0.500 max.		
Manganese	Mn %	1.000 - 1.700		
Phosphorus	P %	0.040 max.		
Sulphur	S %	0.030 max.		
Chromium	Cr %	0.030 max.		
Nickel	Ni %	1.000 max.		
Molybdenum	Mo %	0.400 max.		
Copper	Cu %	0.700 max.		
Vanadium	V %	0.020 - 0.200		
Niobium	Nb %	0.015 - 0.060	Mechanical Properties	
Aluminium	Al %	0.020 min.	Tensile Strength in Mpa	510 - 720
Titanium	Ti %	0.020 - 0.200	Yield Strength in Mpa	380 min.
Iron	Fe %	Balance	Elongation in %	17 min.
-	-	-	Reduction of Area in %	-
			Hardness in BHN	-
			Impact in Joule	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
SA-487 Garde 16A	ASME	USA	Casting
1.6222	DIN	Germany	Steel
1.8932	EN	European Union	Forging
J31200	UNS	USA	Casting
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](mailto:marketing@gravitycastindia.com)**

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