

## Material - ASTM A757 Grade E1Q

Standard Specification for Steel Castings, Ferritic and Martensitic, for Pressure-Containing and Other Applications, for Low-Temperature Service

**Group - Ferrous Mild Steel Alloys** 

Sub Group - ASTM A757 / A757M Ferritic and Martensitic Steel Castings for Pressure-Containing and Low-Temperature Service

Application - Intended for Valve, Pump, General Engineering, Automotive and Other Industries Grade Belongs to the Industry - Casting

Chemical Composition			Heat Treatment	
Carbon	C %	0.220 max.		
Silicon	Si %	0.600 max.		
Manganese	Mn %	0.500 - 0.800		
Phosphorus	P %	0.025 max.	Normalising or Annealing or Hardening + Tempering	
Sulphur	S %	0.025 max.		
Chromium	Cr %	1.350 - 1.850		
Nickel	Ni %	2.500 - 3.500		
Molybdenum	Mo %	0.350 - 0.600		
Vanadium	V %	0.030 max.	Mechanical Properties	
Copper	Cu %	0.500 max.	Tensile Strength in Mpa	620 min.
Other	%	0.700 max.	Yield Strength in Mpa	450 min.
Iron	Fe %	Balance	Elongation in %	22 min.
-	-	-	Reduction of Area in %	40 min.
-	-	-	Hardness in BHN	-
-	-	-	Impac <mark>t in Joule</mark>	41 min. @ -73°C

Cross Reference Table					
Material	Standard	Country	Grade Belong to the Industry		
J42220	UNS	USA	Casting		
1.6783	EN	European Union	Casting		
1.6783	DIN	Germany	Casting		
G 19 NiCrMo 12 6	EN	European Union	Casting		
G 19 NiCrMo 12 6	DIN	Germany	Casting		
A757 Grade E2N1, E2Q1	ASTM	USA	Casting		
A757 Grade E2N2, E2Q2	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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