



Material - EN P 420 NH

Standard Specification for Steel Forgings for Pressure Purposes

Group - Ferrous Mild Steel Alloys

Sub Group - EN P 420 NH Steel Forgings for Pressure Purposes

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

Grade Belongs to the Industry - Forging

Chemical Composition			Heat Treatment	
Carbon	C %	0.200 max.	Annealing or Normalising or Hardening + Tempering	
Silicon	Si %	0.600 Max.		
Manganese	Mn %	1.000 - 1.700		
Phosphorus	P %	0.025 max.		
Sulphur	S %	0.010 max.		
Chromium	Cr %	0.030 max.		
Nickel	Ni %	0.800 max.		
Molybdenum	Mo %	0.010 max.		
Copper	Cu %	0.300 max.		
Vanadium	V %	0.200 max.		
Niobium	Nb %	0.050 max.	Mechanical Properties	
Aluminium	Al %	0.020 Min.	Tensile Strength in Mpa	490 - 690
Nitrogen	N %	0.020 max.	Yield Strength in Mpa	340 min.
Iron	Fe %	Balance	Elongation in %	19 min.
-	-	-	Reduction of Area in %	-
			Hardness in BHN	-
			Impact in Joule	40 J @ RT

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
E 460 DD	JIS	Japan	Plate
J31200	UNS	USA	Casting
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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