GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - ASTM A470 Grade D Class 8

Standard Specification for Vacuum-Treated Carbon and Alloy Steel Forgings for Turbine Rotors and Shafts

Group - Ferrous Mild Steel Alloys

Sub Group - ASTM A470 Grade D Class 8 Vacuum-Treated Carbon and Alloy Steel Forgings for Turbine Rotors and Shafts

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

Grade Belongs to the Industry - Forging

Chemical Composition		
Carbon	C %	0.250 - 0.350
Manganese	Mn %	1.000 max.
Phosphorus	P %	0.012 max.
Sulphur	S %	0.015 max.
Silicon	Si %	0.100 - 0.300
Nickel	Ni %	0.750 max.
Chromium	Cr %	1.050 - 1.500
Molybdenum	Mo %	1.000 - 1.500
Vanadium	V %	0.200 - 0.300
Aluminium	Al %	0.015 max.
Iron	Fe %	Balance
-	-	-
-	-	-
-	-	-
-	-	-

Heat Treatment
As-Raw or Double-Normalizing or Tempering

Mechanical Properties	
Tensile Strength in Mpa	725 - 860
Yield Strength in Mpa	620 min.
Elongation in %	17 min.
Reduction of Area in %	43 min.
Hardness in HB	-
Impact in Joule	8.2 @ RT

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Cross Reference Table			
Material	**Standard**	**Country**	**Grade Belong to the Industry**
SEW 555 1.6946	DIN	Germany	Forging
SEW 555 30 CrMoNiV 5 11	DIN	Germany	Forging
1.8070	DIN	Germany	Steel
21 CrMoV 5-11	DIN	Germany	Steel
M 3108 24 CrMoV 511 SW	ONORM	Australia	Steel
84024 21 HMF	PN	Poland	Steel
6431	AMS	USA	Bars, Forging and Tubing

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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