



GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - ASTM A579 Grade 13

Standard Specification for Superstrength Alloy Steel Forgings

Group - Ferrous Mild Steel Alloys

Sub Group - ASTM A579 Grade 13 Superstrength Alloy Steel Forgings

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

Grade Belongs to the Industry - Forging

Chemical Composition			Heat Treatment	
Carbon	C %	0.270 - 0.330	Annealing or Normalising or Hardening + Tempering	
Silicon	Si %	0.200 - 0.356		
Manganese	Mn %	0.400 - 0.600		
Phosphorus	P %	0.025 max.		
Sulphur	S %	0.025 max.		
Chromium	Cr %	0.800 - 1.100		
Molybdenum	Mo %	0.150 - 0.250		
Vanadium	V %	0.050 - 0.100		
Iron	Fe %	Balance	Mechanical Properties	
-	-	-	Tensile Strength in Mpa	1035 min.
-	-	-	Yield Strength in Mpa	965 min.
-	-	-	Elongation in %	13 min.
-	-	-	Reduction of Area in %	-
-	-	-	Hardness in HB	229 max.
-	-	-	Impact in Joule	79.1 J @ RT

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
J13045	UNS	USA	Casting
4130	SAE	USA	Bar, Tube, Sheet, Strip and Forging
AISI 4130	AISI	USA	Forging, Bar, Wire, and Shape
J13048	UNS	USA	Casting
K13247	UNS	USA	Steel
AMS 4130	AMS	USA	Bar and Forging
A732 7Q	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

All information in our data sheets and website is indicative only and is not intended to be a substitute for the full specification from which it is extracted. It is intended to provide typical values to allow comparison between metal alloy option rather than a definitive statement of mechanical performance or suitability for a particular application as these will vary with temperature, product type and product application. It is presented apart from contractual obligations and does not constitute any guarantee of properties or of processing or application possibilities in individual cases. Our warranties and liabilities are stated exclusively in our terms of business.

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