



Material - GOST 110G13L

Standard Specification for Rails type P65,P50, P43

Group - Ferrous Austenitic Manganese Steel Alloy

Sub Group - GOST 110G13L Rails type P65,P50, P43

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

Grade Belongs to the Industry - Casting

Chemical Composition			Heat Treatment	
Carbon	C %	1.100 - 1.300	Annealing or Normalising or Hardening + Tempering	
Silicon	Si %	0.300 - 0.900		
Manganese	Mn %	11.500 - 16.500		
Phosphorus	P %	0.090 max.		
Sulphur	S %	0.020 max.		
Chromium	Cr %	1.000 max.		
Iron	Fe %	Balance		
-	-	-	Mechanical Properties Tensile Strength in Mpa 654 - 830 Yield Strength in Mpa 360 - 380 Elongation in % 34 - 53 Reduction of Area in % - Hardness in HB 186-229 Impact in Joule 300 J @ RT	
-	-	-		
-	-	-		
-	-	-		
-	-	-		
-	-	-		
-	-	-		
-	-	-		
-	-	-		

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
BW10	BS	British	Casting
X 120 Mn 12	DIN	Germany	Steel
Z 120 M 12	AFNOR NF	France	Steel
SCMnH 1	JIS	Japan	Casting
G X 120 Mn 12	UNI	Italy	Casting
J91109	UNS	USA	Casting
A128 Grade A	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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