



GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - DIN X 120 Mn 12

Standard Specification for Wear Resisting High Alloyed Mn Steel

Group - Ferrous Austenitic Manganese Steel Alloy

Sub Group - DIN X 120 Mn 12 Wear Resisting High Alloyed Mn Steel

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

Grade Belongs to the Industry - steel

Chemical Composition			Heat Treatment			
Carbon	C %	1.100 - 1.300	Annealing or Normalising or Hardening + Tempering			
Silicon	Si %	0.300 - 0.500				
Manganese	Mn %	12.000 - 13.000				
Phosphorus	P %	0.100 max.				
Sulphur	S %	0.040 max.				
Chromium	Cr %	1.500 max.				
Iron	Fe %	Balance				
-	-	-	Mechanical Properties			
-	-	-				
-	-	-			Tensile Strength in Mpa	800 - 1000
-	-	-			Yield Strength in Mpa	350 min.
-	-	-			Elongation in %	40 min.
-	-	-			Reduction of Area in %	-
-	-	-			Hardness in BHN	-
-	-	-			Impact in Joule	-
-	-	-				
-	-	-				

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
BW10	BS	British	Casting
Z 120 M 12	AFNOR NF	France	Steel
110G13L	GOST	Russia	Casting
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

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.

ONE STOP SOLUTION FOR METAL PARTS