

# Material: BS BW10

## Standard Specification for Mn Alloy Steel; Steel Castings for General Engineering Purposes

**Group:** Ferrous Austenitic Manganese Steel Alloy

**Sub Group:** BS BW10 Mn Alloy Steel; Steel Castings for General Engineering Purposes

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

**Grade Belongs to the Industry:** Casting

Chemical Composition		
Carbon	C %	1.000 - 1.350
Silicon	Si %	1.000 max.
Manganese	Mn %	11.000 min.
Phosphorus	P %	0.050 max.
Sulphur	S %	0.050 max.
Iron	Fe %	Balance
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

Heat Treatment
Annealing or Normalizing or Hardening + Tempering

Mechanical Properties	
Tensile Strength in Mpa	880 min.
Yield Strength in Mpa	315 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
Z 120 M 12	AFNOR NF	France	Steel
X 120 Mn 12	DIN	Germany	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

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