



Material - DIN 1.4585

Standard Specification for Stain Steels Casting

Group - Ferrous Stainless Steel Alloys
Sub Group - DIN 1.4585 Stain Steels Casting
Application - Intended for Valve, Pump, General Engineering, Automotive and Other Industries
Grade Belongs to the Industry - Casting

Chemical Composition			Heat Treatment	
Carbon	C %	0.080 max.		
Silicon	Si %	1.500 max.		
Manganese	Mn %	2.000 max.		
Phosphorus	P %	0.045 max.	Solution Annealing	
Sulphur	S %	0.030 max.		
Chromium	Cr %	16.500 - 18.500		
Nickel	Ni %	19.000 - 21.000		
Molybdenum	Mo %	2.000 - 2.500		_
Copper	Cu %	1.800 - 2.400	Mechanical Properties	
Niobium	Nb %	8 X %C - 1.000	Tensile Strength in Mpa	441.3 - 637.4
Iron	Fe %	Balance	Yield Strength in Mpa	176.5 min.
-	-	-	Elongation in %	15 min.
-	-	-	Reduction of Area in %	-
-	-	-	Hardness in HB	130-180
-	-	-	Impac <mark>t in Joule</mark>	-

Cross Reference Table				
Material	Standard	Country	Grade Belong to the Industry	
SA-351 CN3MN	ASME	USA	Casting	
J94651	UNS	USA	Casting	
Ao X 10 CrNiMoCuNb 18-18	MSZ	Hungary	Casting	
G X 7 CrNiMoCuNb 18-18	DIN	Germany	Casting	
A351 CN3MN	ASTM	USA	Casting	
A743 CN3MN	ASTM	USA	Casting	
A744 CN3MN	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.