



Material - ISO 1.4931

Standard Specification for Steel Castings for Pressure Purposes

Group - Ferrous Stainless Steel Alloys
Sub Group - ISO 1 4931 Steel Castings fo

Sub Group - ISO 1.4931 Steel Castings for Pressure Purposes

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

Grade Belongs to the Industry - Casting

Chemical Composition			Heat Treatment	
Carbon	C %	0.200 - 0.260		
Silicon	Si %	0.400 max.		
Manganese	Mn %	0.500 - 0.800	Normalizing or Quenching or Solution Annealing	
Phosphorus	P %	0.030 max.		
Sulphur	S %	0.020 max.		
Chromium	Cr %	11.300 - 12.200		
Molybdenum	Mo %	1.000 - 1.200		
Nickel	Ni %	1.000 max.		-
Copper	Cu %	0.300 max.	Mechanical Properties	
Vanadium	V %	0.250 - 0.350	Tensile Strength in Mpa	740 - 880
Tungsten	W %	0.500 max.	Yield Strength in Mpa	540 min.
Iron	Fe %	Balance	Elongation in %	15 min.
-	-	-	Reduction of Area in %	-
-	-	-	Hardness in BHN	-
-	-	-	Impact in Joule	27 J @ RT

Cross Reference Table				
Material	Standard	Country	Grade Belong to the Industry	
GX23CrMoV12-1	BS	British	Plate, Tubes and Forging	
GX23CrMoV12-1	ISO	International	Casting	
GX23CrMoV12-1	ONORM	Australia	Casting	
GX23CrMoV12-1	NBN	Belgium	Casting	
GX23CrMoV12-1	BDS	Bulgaria	Casting	
GX23CrMoV12-1	CSN	Czech Republic	Casting	
GX23CrMoV12-1	EN	European Union	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.