



## Material - IS 4522 Grade 2

### Standard Specification for Heat Resistant Alloy Steel Castings

Group - Ferrous Stainless Steel Alloys

Sub Group - IS 4522 Grade 2 Heat Resistant Alloy Steel Castings

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

Grade Belongs to the Industry - Casting

Chemical Composition			Heat Treatment	
Carbon	C %	0.300 - 0.600	As - Cast or Annealing	
Silicon	Si %	2.000 max.		
Manganese	Mn %	1.000 max.		
Phosphorus	P %	0.050 max.		
Sulphur	S %	0.050 max.		
Chromium	Cr %	27.000 - 30.000		
Molybdenum	Mo %	0.500 max.		
Iron	Fe %	Balance		
-	-	-	Mechanical Properties	
-	-	-	Tensile Strength in Mpa	390 min.
-	-	-	Yield Strength in Mpa	-
-	-	-	Elongation in %	-
-	-	-	Reduction of Area in %	-
-	-	-	Hardness in BHN	-
-	-	-	Impact in Joule	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
J92605	UNS	USA	Casting
452 C 11	BS	British	Casting
1.4823	DIN	Germany	Casting
G X 35 Cr 28	UNI	Italy	Casting
40 CrNiSi 25-4	MSZ	Hungary	Casting
G X 40 CrNiSi 27-4	DIN	Germany	Casting
A297 Grade HD	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](mailto: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.