



Material - ASTM A732 Grade 31

Standard Specification for Castings, Investment, Carbon and Low Alloy Steel for General Application, and Cobalt Alloy for High Strength at Elevated Temperatures

Group - Non Ferrous Cobalt Alloys

Sub Group - ASTM A732 / A7323M Casting, Investment, Carbon and Low Alloy Steel for General Application

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

Grade Belongs to the Industry - Casting

Chemical Composition			Heat Treatment															
Carbon	C %	0.450 - 0.550	Annealing or Normalising or Hardening + Tempering															
Silicon	Si %	1.000 max.																
Manganese	Mn %	1.000 max.																
Phosphorus	P %	0.040 max.																
Sulphur	S %	0.040 max.																
Chromium	Cr %	24.500 - 26.500																
Nickel	Ni %	9.500 - 11.500																
Tungsten	W %	7.000 - 8.000																
Iron	Fe %	2.000 max.																
Boron	B %	0.005 - 0.015																
Cobalt	Co %	Balance	<table border="1"> <thead> <tr> <th colspan="2">Mechanical Properties</th> </tr> </thead> <tbody> <tr> <td>Tensile Strength in Mpa</td> <td>380 min.</td> </tr> <tr> <td>Yield Strength in Mpa</td> <td>-</td> </tr> <tr> <td>Elongation in %</td> <td>10 min.</td> </tr> <tr> <td>Reduction of Area in %</td> <td>-</td> </tr> <tr> <td>Hardness in BHN</td> <td>-</td> </tr> <tr> <td>Impact in Joule</td> <td>-</td> </tr> </tbody> </table>		Mechanical Properties		Tensile Strength in Mpa	380 min.	Yield Strength in Mpa	-	Elongation in %	10 min.	Reduction of Area in %	-	Hardness in BHN	-	Impact in Joule	-
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Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
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-	-	-	-
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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.