



GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - UNS J13005

Standard Specification for Alloy Steel Casting

Group - Ferrous Mild Steel Alloys

Sub Group - UNS J13005 Alloy Steel Casting

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

Grade Belongs to the Industry - Casting

Chemical Composition			Heat Treatment															
Carbon	C %	0.300 max.	Annealing or Normalising or Hardening + Tempering															
Silicon	Si %	0.800 max.																
Manganese	Mn %	1.000 - 1.400																
Phosphorus	P %	0.035 max.																
Sulphur	S %	0.035 max.																
Chromium	Cr %	0.350 max.																
Nickel	Ni %	0.500 max.																
Molybdenum	Mo %	0.100 - 0.300																
Copper	Cu %	0.500 max.																
Tungsten	W %	0.100 max.																
Iron	Fe %	Balance	<table border="1"> <thead> <tr> <th colspan="2">Mechanical Properties</th> </tr> </thead> <tbody> <tr> <td>Tensile Strength in Mpa</td> <td>585 - 760</td> </tr> <tr> <td>Yield Strength in Mpa</td> <td>365 min.</td> </tr> <tr> <td>Elongation in %</td> <td>22 min.</td> </tr> <tr> <td>Reduction of Area in %</td> <td>35 min.</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	585 - 760	Yield Strength in Mpa	365 min.	Elongation in %	22 min.	Reduction of Area in %	35 min.	Hardness in BHN	-	Impact in Joule	-
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Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
1.0457	EN	European Union	Pipes
1.0484	DIN	Germany	Pipes
13030	CSN	Czech Republic	Steel
20MB5	AFNOR NF	France	Cold Rolled, Strip
230 - 450 W	JIS	Japan	Casting
3	AS	Australia	Hot Rolled Bar
A487 2A	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.

ONE STOP SOLUTION FOR METAL PARTS