



GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - UNS J13345

Standard Specification for Alloy Steel Casting

Group - Ferrous Mild Steel Alloys

Sub Group - UNS J13345 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 %	0.330 max.	Annealing or Normalising or Hardening + Tempering															
Silicon	Si %	0.800 max.																
Manganese	Mn %	0.600 - 0.900																
Phosphorus	P %	0.035 max.																
Sulphur	S %	0.035 max.																
Chromium	Cr %	0.750 - 1.100																
Nickel	Ni %	0.500 max.																
Molybdenum	Mo %	0.150 - 0.300																
Tungsten	W %	0.100 max.																
Copper	Cu %	0.500 max.																
Vanadium	V %	0.030 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>620 min.</td> </tr> <tr> <td>Yield Strength in Mpa</td> <td>415 min.</td> </tr> <tr> <td>Elongation in %</td> <td>18 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	620 min.	Yield Strength in Mpa	415 min.	Elongation in %	18 min.	Reduction of Area in %	35 min.	Hardness in BHN	-
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Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
SA 487 Grade 9A	ASME	USA	Casting
SA 487 Grade 9B	ASME	USA	Casting
A487 9B	ASTM	USA	Casting
A487 9C	ASTM	USA	Casting
A487 9D	ASTM	USA	Casting
A487 9E	ASTM	USA	Casting
A487 9A	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