



**GRAVITY CAST PVT. LTD.**  
GRAVITY GROUP OF COMPANIES

## Material - UNE GP 280 GH

### Standard Specification for Steel Castings for Pressure Purposes

Group - Ferrous Mild Steel Alloys

Sub Group - UNE GP 280 GH Steel Castings for Pressure Purposes

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

Grade Belongs to the Industry - Plate, Tubes and Forging

Chemical Composition			Heat Treatment															
Carbon	C %	0.180 - 0.250	Normalizing or Quenching or Solution Annealing															
Silicon	Si %	0.600 max.																
Manganese	Mn %	0.800 - 1.200																
Phosphorus	P %	0.030 max.																
Sulphur	S %	0.020 max.																
Chromium	Cr %	0.300 max.																
Molybdenum	Mo %	0.120 max.																
Nickel	Ni %	0.400 max.																
Copper	Cu %	0.300 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>480 - 640</td> </tr> <tr> <td>Yield Strength in Mpa</td> <td>280 min.</td> </tr> <tr> <td>Elongation in %</td> <td>22 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>27 J @ RT</td> </tr> </tbody> </table>		Mechanical Properties		Tensile Strength in Mpa	480 - 640	Yield Strength in Mpa	280 min.	Elongation in %	22 min.	Reduction of Area in %	-	Hardness in BHN	-	Impact in Joule	27 J @ RT
Mechanical Properties																		
Tensile Strength in Mpa	480 - 640																	
Yield Strength in Mpa	280 min.																	
Elongation in %	22 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
EN 10213 GP280GH	BS	British	Plate, Tubes and Forging
SCPH 2	JIS	Japan	Plate, Tubes and Forging
SCPL 1	JIS	Japan	Plate, Tubes and Forging
A 216 Grade WCC	ASTM	USA	Casting
GP 280 GH	DIN	Germany	Plate, Tubes and Forging
GP 280 GH	MSZ	Hungary	Plate, Tubes and Forging
GP 280 GH	UNI	Italy	Plate, Tubes and Forging

**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.

**ONE STOP SOLUTION FOR METAL PARTS**