



Material - ISO G20Mn5

Standard Specification for Steel Castings for Pressure Purposes

Group - Ferrous Mild Steel Alloys

Sub Group - ISO G20Mn5 Steel Castings for Pressure Purposes

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

Grade Belongs to the Industry - Casting

| Chemical Composition | | | Heat Treatment | |
|----------------------|------|---------------|--|-----------|
| Carbon | C % | 0.170 - 0.230 | | |
| Silicon | Si % | 0.600 max. | Normalizing or Quenching or Solution Annealing | |
| Manganese | Mn % | 1.000 - 1.600 | | |
| Phosphorus | P % | 0.020 max. | | |
| Sulphur | S % | 0.020 max. | | |
| Chromium | Cr % | 0.300 max. | | |
| Molybdenum | Mo % | 0.120 max. | | |
| Nickel | Ni % | 0.800 max. | | • |
| Copper | Cu % | 0.300 max. | Mechanical Properties | |
| Vanadium | V % | 0.030 max. | Tensile Strength in Mpa | 480 - 650 |
| Iron | Fe % | Balance | Yield Strength in Mpa | 300 min. |
| - | - | - | Elongation in % | 20 min. |
| - | - | - | Reduction of Area in % | - |
| - | - | | Hardness in BHN | - |
| - | - | - | Impac <mark>t in Joule</mark> | 50 J @ RT |

| Cross Reference Table | | | | | |
|-----------------------|----------|---------------|------------------------------|--|--|
| Material | Standard | Country | Grade Belong to the Industry | | |
| EN 10213 G20Mn5 | BS | British | Plate, Tubes and Forging | | |
| 1.6220 | ISO | International | Casting | | |
| GS-20 Mn 5 | DIN | Germany | Casting | | |
| SCC 3 | JIS | Japan | Casting | | |
| SCPH 11-CF | JIS | Japan | Casting | | |
| SCW 520-CF | JIS | Japan | Casting | | |
| SCW 550 | JIS | Japan | 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

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