



GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - ASTM A297 Grade HN

Standard Specification for Steel Castings, Iron-Chromium and Iron-Chromium-Nickel, Heat Resistant for General Application

Group - Ferrous Stainless Steel Alloys

Sub Group - ASTM A297/ A297M Steel Castings, Iron-Chromium and Iron-Chromium-Nickel, Heat Resistant 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 % | 0.200 - 0.500 | As - Cast | |
| Silicon | Si % | 2.000 max. | | |
| Manganese | Mn % | 2.000 max. | | |
| Phosphorus | P % | 0.040 max. | | |
| Sulphur | S % | 0.040 max. | | |
| Chromium | Cr % | 19.000 - 23.000 | | |
| Nickel | Ni % | 23.000 - 27.000 | | |
| Molybdenum | Mo % | 0.500 max. | | |
| Iron | Fe % | Balance | Mechanical Properties | |
| - | - | - | Tensile Strength in Mpa | 435 min. |
| - | - | - | Yield Strength in Mpa | - |
| - | - | - | Elongation in % | 8 min. |
| - | - | - | Reduction of Area in % | - |
| - | - | - | Hardness in BHN | - |
| - | - | - | Impact in Joule | - |

| Cross Reference Table | | | |
|-----------------------|----------|---------|------------------------------|
| Material | Standard | Country | Grade Belong to the Industry |
| J94213 | UNS | USA | Casting |
| A608 Grade HN 40 | ASTM | USA | Casting |
| J94214 | UNS | USA | Casting |
| SCH 19 | JIS | Japan | Casting |
| 4522 Grade 11 | IS | India | Casting |
| 13505 Grade 12 | IS | India | Casting |
| HN | NBR | Brazil | 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