



GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - ASTM A 753 Type 1

Standard Specification for Nickel-Iron Soft Magnetic Alloys

Group - Non-Ferrous Nickel Alloys

Sub Group - ASTM A 753 Type 1 Nickel-Iron Soft Magnetic Alloys

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

Grade Belongs to the Industry - Forging, Billet, Hot rolled plate, Strip, Bar and Wire

| Chemical Composition | | | Heat Treatment | | | |
|----------------------|------|-----------------|--|-----------|-----------------------|--|
| Carbon | C % | 0.050 max. | As-Cast or Annealing or Age Hardning | | | |
| Silicon | Si % | 0.500 max. | | | | |
| Manganese | Mn % | 0.800 max. | | | | |
| Chromium | Cr % | 0.300 max. | | | | |
| Sulphur | S % | 0.010 max. | | | | |
| Molybdenum | Mo % | 0.300 max. | | | | |
| Phosphorus | P % | 0.030 max. | | | | |
| Cobalt | Co % | 0.500 max. | | | | |
| Copper | Cu % | 0.300 max. | | | | |
| Nickel | Ni % | 43.500 - 46.500 | | | | |
| Iron | Fe % | Balance | <th colspan="2">Mechanical Properties</th> | | Mechanical Properties | |
| - | - | - | Tensile Strength in Mpa | 490 - 827 | | |
| - | - | - | Yield Strength in Mpa | 220 - 793 | | |
| - | - | - | Elongation in % | 2 - 38 | | |
| - | - | - | Reduction of Area in % | - | | |
| - | - | - | Hardness in HRC | 74 - 82 | | |
| - | - | - | Impact in Joule | - | | |

| Cross Reference Table | | | |
|-----------------------|----------|---------|--|
| Material | Standard | Country | Grade Belong to the Industry |
| K94490 | UNS | USA | Forging, Billet, Hot rolled plate, Strip, Bar and Wire |
| - | - | - | - |
| - | - | - | - |
| - | - | - | - |
| - | - | - | - |
| - | - | - | - |
| - | - | - | - |

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