



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

## Material - Gravity Udimet Alloy L-605

Standard Specification for Nickel-Iron Alloy Pipe, Tube, Sheet, Strip, Plate, Round Bar, Flat Bar, Forging Stock, Hexagon and Wire

Group - Non-Ferrous Cobalt Alloys

Sub Group - Gravity Udimet Alloy L-605 Nickel-Iron Alloy Pipe, Tube, Sheet, Strip, Plate, Round Bar, Flat Bar, Forging Stock, Hexagon and Wire

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

Grade Belongs to the Industry - Pipe, Tube, Sheet, Strip, Plate, Hexagon and Wire

| Chemical Composition |      |                 | Heat Treatment   |  |
|----------------------|------|-----------------|--|--|
| Carbon               | C %  | 0.050 - 0.150   | As-Cast or Annealing or Age Hardning   |  |
| Silicon              | Si % | 0.400 max.      |  |  |
| Manganese            | Mn % | 1.000 - 2.000   |  |  |
| Chromium             | Cr % | 19.000 - 21.000 |  |  |
| Sulphur              | S %  | 0.030 max.      |  |  |
| Phosphorus           | P %  | 0.040 max.      |  |  |
| Nickel               | Ni % | 9.000 - 11.000  |  |  |
| Tungsten             | W %  | 14.000 - 16.000 |  |  |
| Iron                 | Fe % | 3.000 max.      |  |  |
| Cobalt               | Co % | Balance         |  |  |
| -                    | -    | -               | <b>Mechanical Properties</b><br>Tensile Strength in Mpa      994 - 1935.9<br>Yield Strength in Mpa      466 - 1931.2<br>Elongation in %      6.453 - 50<br>Reduction of Area in %      -<br>Hardness in BHN      -<br>Impact in Joule      - |  |
| -                    | -    | -               |  |  |
| -                    | -    | -               |  |  |
| -                    | -    | -               |  |  |
| -                    | -    | -               |  |  |
| -                    | -    | -               |  |  |
| -                    | -    | -               |  |  |

| Cross Reference Table |          |               |                              |
|-----------------------|----------|---------------|------------------------------|
| Material              | Standard | Country       | Grade Belong to the Industry |
| R30605                | UNS      | USA           | Casting                      |
| L-605                 | SAE      | USA           | Sheet, Strip, Foil and Plate |
| F2527 R30605          | ASTM     | USA           | Sheet, Strip, Foil and Plate |
| 5832-4                | ISO      | International | Casting                      |
| 5832-5                | ISO      | International | Casting                      |
| 7402-3                | JIS      | Japan         | Casting                      |
| F 90 R30605           | 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](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.

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