



Material - EN 1.4988

Standard Specification for Seamless Steel Tubes for Pressure Purposes

Group - Ferrous Stainless Steel Alloys

Sub Group - EN 1.4988 Seamless Steel Tubes for Pressure Purposes

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

Grade Belongs to the Industry - Steel

| Chemical Composition | | | Heat Treatment | |
|----------------------|------|-----------------|-------------------------|-----------|
| Carbon | C % | 0.040 - 0.100 | Solution Annealing | |
| Silicon | Si % | 0.300 - 0.600 | | |
| Manganese | Mn % | 1.500 max. | | |
| Phosphorus | P % | 0.035 max. | | |
| Sulphur | S % | 0.015 max. | | |
| Chromium | Cr % | 15.500 - 17.500 | | |
| Molybdenum | Mo % | 1.100 - 1.500 | | |
| Nickel | Ni % | 12.500 - 14.500 | | |
| Vanadium | V % | 0.600 - 0.850 | | |
| Niobium | Nb % | 1.200 max. | | |
| Nitrogen | N % | 0.060 - 0.140 | Mechanical Properties | |
| Iron | Fe % | Balance | Tensile Strength in Mpa | 540 - 740 |
| - | - | - | Yield Strength in Mpa | 255 min. |
| - | - | - | Elongation in % | 20 min. |
| - | - | - | Reduction of Area in % | - |
| - | - | - | Hardness in BHN | - |
| - | - | - | Impact in Joule | 40 J @ RT |

| Cross Reference Table | | | |
|-----------------------|----------|----------------|------------------------------|
| Material | Standard | Country | Grade Belong to the Industry |
| 10216-5 EN 1.4988 | BS | British | Tube |
| 1.4988 | DIN | Germany | Steel |
| X8CrNiMoVNb16-13 | EN | European Union | Steel and Flat |
| X8CrNiMoVNb16 13 | DIN | Germany | Steel and Tube |
| - | - | - | - |
| - | - | - | - |
| - | - | - | - |

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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