

# Material: DIN X20CrMoV 121

## Standard Specification for Seamless Steel Tubes for Pressure Purposes

**Group:** Ferrous Stainless Steel Alloys

**Sub Group:** DIN X20CrMoV 121 Seamless Steel Tubes for Pressure Purposes

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

**Grade Belongs to the Industry:** Forging, Rolling, Steel and Bar

| Chemical Composition |      |                 | Heat Treatment          |           |
|----------------------|------|-----------------|-------------------------|-----------|
| Carbon               | C %  | 0.170 - 0.230   | Normalizing + Tempering |           |
| Silicon              | Si % | 0.400 max.      |                         |           |
| Manganese            | Mn % | 1.000 max.      |                         |           |
| Phosphorus           | P %  | 0.030 max.      |                         |           |
| Sulphur              | S %  | 0.030 max.      |                         |           |
| Chromium             | Cr % | 10.000 - 12.500 |                         |           |
| Molybdenum           | Mo % | 0.800 - 1.200   |                         |           |
| Nickel               | Ni % | 0.300 - 0.800   |                         |           |
| Vanadium             | V %  | 0.250 - 0.350   |                         |           |
| Iron                 | Fe % | Balance         | Mechanical Properties   |           |
| -                    | -    | -               | Tensile Strength in Mpa | 700 - 850 |
| -                    | -    | -               | Yield Strength in Mpa   | 500 min.  |
| -                    | -    | -               | Elongation in %         | 16 min.   |
| -                    | -    | -               | Reduction of Area in %  | -         |
| -                    | -    | -               | Hardness in BHN         | -         |
| -                    | -    | -               | Impact in Joule         | 14 J @ RT |

| Cross Reference Table |          |                |                                 |
|-----------------------|----------|----------------|---------------------------------|
| Material              | Standard | Country        | Grade Belong to the Industry    |
| 1.4922                | EN       | European Union | Forging, Rolling, Steel and Bar |
| 1.4922                | DIN      | Germany        | Forging, Rolling, Steel and Bar |
| 1.4922                | DIN      | Germany        | Forging, Rolling, Steel and Bar |
| X20CrMoV121           | ISO      | International  | Forging, Rolling, Steel and Bar |
| 12Cr10MoVN170.47      | MSZ      | Hungary        | Steel and Tube                  |
| 762                   | BS       | British        | Steel and Tube                  |
| X20CrMoNiV11 11       | ISO      | International  | Steel and Tube                  |

**Disclaimer:** All information displayed in our data sheets are for reference purpose only and are sole property of their respective owners. Information and or material are used for educational purposes only. Data at actual may vary at actual and case to case basis. ICAST Alloys LLP does not guarantee validity of these parameters. Warranties and liabilities are exclusive to our terms and conditions of business.

Customer Care: +91-99090 45075 Email: [info@icastllp.com](mailto:info@icastllp.com)