## Material - DIN 1.6783

## Standard Specification for Heat Treatable Alloyed NiCrMo Steel

Group - Ferrous Mild Steel Alloys
Sub Group - DIN 1.6783 Heat Treatable Alloyed NiCrMo Steel
Application - Intended for Valve, Pump, General Engineering, Automotive and Other Industries
Grade Belongs to the Industry - Casting

| Chemical Composition |  |  |
| :---: | :---: | :---: |
| Carbon | $\mathrm{C} \%$ | 0.220 max. |
| Silicon | $\mathrm{Si} \%$ | 0.600 max. |
| Manganese | $\mathrm{Mn} \%$ | $0.500-0.800$ |
| Phosphorus | $\mathrm{P} \%$ | 0.025 max. |
| Sulphur | $\mathrm{S} \%$ | 0.020 max. |
| Chromium | $\mathrm{Cr} \%$ | $1.350-1.850$ |
| Nickel | $\mathrm{Ni} \%$ | $2.500-3.500$ |
| Molybdenum | $\mathrm{Mo} \%$ | $0.350-0.600$ |
| Iron | $\mathrm{Fe} \%$ | Balance |
| - | - | - |
| - | - | - |
| - | - | - |
| - | - | - |
| - | - | - |
| - | - | - |


| Heat Treatment |
| :---: |
|  |
| Normalising + Tempering or Hardening + Tempering |
|  |
|  |


| Mechanical Properties |  |
| :---: | :---: |
| Tensile Strength in Mpa | $620-820$ |
| Yield Strength in Mpa | 450 min. |
| Elongation in \% | 18 min. |
| Reduction of Area in \% | - |
| Hardness in BHN | - |
| Impact in Joule | 90 J @ RT |


| Cross Reference Table |  |  |  |
| :---: | :---: | :---: | :---: |
| Material | Standard | Country | Grade Belong to the Industry |
| SA-352 Grade LC2-1 | ASME | USA | Casting |
| J42215 | UNS | USA | Casting |
| 20NCD12M | AFNOR NF | France | Casting |
| T15MoCrNi30R | STAS | Romania | Casting |
| 1.6783 | EN | European Union | Casting |
| J42015 | UNS | USA | Casting |
| A352 LC2-1 | ASTM | USA | Casting |

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