This page is mainly introduced the X 12 Cr 13 Datasheet, including chemical information,mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of X 12 Cr 13 ,such as it is commonly used in bars, sheet,plates, steel coils, steel pipes,forged and other materials application.

## Datasheet for Steel Grades Specialsteel X12Cr13

| X12Cr13 Standard Number: |  |  |
| :---: | :---: | :---: |
| ITEM | Standard Number | Descriptions |
| 1 | NF EN 10088-1 | Stainless steels - Part 1: List of stainless steels <br> 2NF EN 10088-2 <br> Stainless steels - Part 2: Technical delivery conditions for sheet/plate and strip of <br> corrosion resisting steels for general purposes |
| 3 | NF EN 10088-3 | Stainless steels - Part 3: Technical delivery conditions for semi-finished products, <br> bars, rods, wire, sections and bright products of corrosion resisting steels for <br> general purposes |
| 4 | NF EN 10088-4 | Stainless steels - Part 4: Technical delivery conditions for sheet/plate and strip of <br> corrosion resisting steels for construction purposes |
| 5 | NF EN 10088-5 | Stainless steels - Part 5: Technical delivery conditions for bars, rods, wire, sections <br> and bright products of corrosion resisting steels for construction purposes |
| 7 | NF EN 10250-4 | Open die steel forgings for general engineering purposes - Part 4: Stainless steels |
| Steel rod, bars and steel wire for cold heading and cold extrusion - Part 5: |  |  |
| Technical delivery conditions for stainless steels |  |  |



|  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| W | N | Cu | Co | Pb | B | Nb | Al | Ti | Other |
|  |  |  |  |  |  |  |  |  |  |

Seamless circular steel tubes for mechanical and general engineering purposes - Technical
delivery conditions - Part 2: Stainless steel

| X12Cr13 Physical Properties |  |  |
| :---: | :---: | :---: |
| Tensile strength | $\frac{115-234}{}$ |  |
| Yield Strength | 23 | $\sigma \mathrm{~b} / \mathrm{MPa}$ |
| Elongation | 65 | $\sigma 0.2 \geq / \mathrm{MPa}$ |
| $\psi$ | - | $\delta 5 \geq(\%)$ |
| Akv | - | $\psi \geq(\%)$ |
| HBS | $123-321$ | Akv $\geq / \mathrm{J}$ |
| HRC | 30 | - |

## X12Cr13 Mechanical Properties

| Tensile strength | $231-231$ | $\sigma \mathrm{~b} / \mathrm{MPa}$ |
| :---: | :---: | :---: |
| Yield Strength | 154 | $\sigma 0.2 \geq / \mathrm{MPa}$ |
| Elongation | 56 | $\delta 5 \geq(\%)$ |
| $\Psi$ | - | $\Psi \geq(\%)$ |
| Akv | - | Akv $\geq / \mathrm{J}$ |
| HBS | $235-268$ | - |
| HRC | 30 | - |

Steel GradesX12Cr13 Chemical information,Mechanical properties
Physical properties, Mechanical properties, Heat treatment, and Micro structure

X12Cr13 Heat Treatment Regime

| Annealing | Quenching | Tempering | Normalizing | Q \& T |
| :---: | :---: | :---: | :---: | :---: |
| $\sqrt{ }$ | $\sqrt{ }$ | $\sqrt{ }$ | $\sqrt{ }$ | $\sqrt{ }$ |

X12Cr13 Range of products

| Product type | Products | Dimension | Processes | Deliver Status |
| :---: | :---: | :---: | :---: | :---: |
| Plates / Sheets | Plates / Sheets | $0.08-200 \mathrm{~mm}(\mathrm{~T}) * \mathrm{~W} * \mathrm{~L}$ | Forging, hot rolling and <br> cold rolling | Annealed, Solution and <br> Aging, Q+T, ACID- <br> WASHED, Shot Blasting |
| Steel Bar | Round Bar, Flat Bar, <br> Square Bar | $\Phi 8-1200 \mathrm{~mm} * \mathrm{~L}$ | Forging, hot rolling and <br> cold rolling, Cast | Black, Rough Turning, <br> Shot Blasting, |
| Coil / Strip | Steel Coil /Steel Strip | $0.03-16.0 \times 1200 \mathrm{~mm}$ | Cold-Rolled \& Hot- <br> Rolled | Annealed, Solution and <br> Aging, Q+T, ACID- <br> WASHED, Shot Blasting |
| Pipes / Tubes | Seamless Pipes/Tubes, <br> Welded Pipes/Tubes | OD:6-219mm <br> WT:0.5-20.0mm | Hot extrusion, Cold <br> Drawn, Welded | Annealed, Solution and <br> Aging, Q+T, ACID- <br> WASHED |

## We can produce Specialsteel the specifications follows:

