This page is mainly introduced the $\mathrm{X} 8 \mathrm{CrNiMoAI15-7-2}$ chemical information,mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of X8CrNiMoAI15-7-2,such as it is commonly used in bars, sheet,plates, steel coils, steel pipes,forged and other materials application.

## Data Table for Grades Special Alloy X8CrNiMoAl15-7-2

| X8CrNiMoAl15-7-2 Standard Number: |  |  |
| :--- | :--- | :--- |
| TTEM | Standard Number | Descriptions |


| X8CrNiMoAl15-7-2 Chemical composition(mass fraction)(wt.\%) |  |  |
| :---: | :---: | :---: |
| Chemical | Mi..(\%) | Max.(\%) |


| X8CrNiMoAl15-7-2 Physical Properties |  |  |
| :---: | :---: | :---: |
| Tensile strength | 115-234 | $\sigma \mathrm{M} / \mathrm{MPa}$ |
| Yield Strength | 23 | $\sigma 0.2 \geq / \mathrm{MPa}$ |
| Elongation | 65 | $\delta 5 \geq$ (\%) |
| $\Psi$ | - | $\psi \geq$ (\%) |
| Akv | - | Akv $\geq$ / J |
| HBS | 123-321 | - |
| HRC | 30 | - |


| X8CrNiMoAl15-7-2 Mechanical Properties |  |  |
| :---: | :---: | :---: |
| Tensile strength | $231-231$ | $\sigma \mathrm{~m} / \mathrm{MPa}$ |
| 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 | - |

X8CrNiMoAl15-7-2 Heat Treatment Regime

| Annealing | Quenching | Tempering | Normalizing | Q \& T |
| :---: | :---: | :---: | :---: | :---: |
| $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |

## X8CrNiMoAl15-7-2 Range of products

| Product type | Products | Dimension | Processes | Deliver Status |
| :---: | :---: | :---: | :---: | :---: |
| Plates / Sheets | Plates / Sheets | $0.08-200 \mathrm{~mm}(\mathrm{~T}) * \mathrm{~W} *$ 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 | $\Phi 8-1200 \mathrm{~mm} *$ 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 $\times$ <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 Special Alloy the specifications follows:

Note:
(1) listed in the table apex diameter (d), to steel thickness (a) multiples said.
(2) in the ASTM A6 standard specified scope can meet any additional conditions.
(3) from the standard for 50 mm (2 in).

Mechanical properties
Mechanische Eigenschaften
Caracteristiques mecaniques
ReH Minimum yield strength / Mindestwert der oberen Streckgrenze / Limite d'elasticite minimale
Rm Tensile strength / Zugfestigkeit / Resistance a la traction
A Minimum elongation / Mindestwert der Bruchdehnung / Allongement minimal
J Notch impact test / Kerbschlagbiegeversuch / Essai de flexion par choc

Round bar:
Diameter: 1mm-2000mm
Square bar:
Size: $50 \mathrm{~mm} * 50 \mathrm{~mm}-600 \mathrm{~mm} * 600 \mathrm{~mm}$
Plate steel/flat bar:
Size: Thickness: $0.1 \mathrm{~mm}-800 \mathrm{~mm}$ Width: 10 mm to 1500 mm
Tube/pipe:
Size: OD: 6-219mm WT: 1-35 mm.
Cold-rolled sheet: Thickness: $2-5 \mathrm{~mm}$ Width: 1000 mm Length: 2000 mm
Hot-rolled sheet: Thickness:6-80mm Width: 210-610mm
Length: We can supply any length based on the customer's requirement.
Forging/hot rolling/ extrusion of steel.
Forging: Shafts with flanks/pipes/tubes/slugs/donuts/cubes/other shapes
Finished goods condition: hot forging/hot rolling + annealing/normalizing + tempering/quenching + tempering/any
conditions based on the customer's requirement

Surface conditions: scaled (hot working finish)/ground/rough machining/fine machining/based on the customer's requirement Furnaces for metallurgical processing: electrode arc + LF/VD/VOD/ESR/Vacuum consumable electrode.
Ultrasonic inspection: $100 \%$ ultrasonic inspection for any inperfections or based on the customer's requirement.
UTS according to SEP 1921 C/c,D/d,E/e;A388 or GB/T 6402
Excellent service for all kinds of industries, with advantages of technologies, equipment and price.
We serve you with our honesty, integrity, and professionality.

