

X2CrNiMoN17-13-5 https://www.steelss.com High Quality Special Steel Supplier +86-13880247006 E-mail:sales@steelss.com

# X2CrNiMoN17-13-5

Stainless steels - Technical delivery conditions for drawn wire X2CrNiMoN17-13-5 steel chemical information, mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, We can produce round bars, forged rings, forged cakes, flat bars, tubes, sheets, plates, steel wires, steel strips, steel coils, etc. The size can be customized, the maximum order quantity is 100Kg. It also contains the use of X2CrNiMoN17-13-5, such as it is commonly used in bars, sheet, plates, steel coils, steel pipes, forged and other materials application.

## Data Table for Materials Stainless Steels Stainless steels - Technical delivery conditions for drawn wire X2CrNiMoN17-13-5

|      | X2CrN            | iMoN17-13-5 Standard Number  |
|------|------------------|--|
| ITEM | Standard Number  | Descriptions   |
| 1    | DIN 17440 (1996) | Stainless steels - Technical delivery conditions for drawn wire  |
| 2    | DIN 17441 (1997) | Stainless steels - Technical delivery conditions for cold rolled strips and slit coils strip<br>and sheets cut from such strips for pressure purposes  |
| 3    | DIN 17455 (1985) | Welded circular tubes of stainless steels for general requirements; technical delivery conditions  |
| 4    | DIN 17456 (1985) | Seamless circular tubes of stainless steels for general requirements; technical delivery conditions  |
| 5    | DIN 17457 (1985) | Welded circular tubes of austenitic stainless steels for special requirements; technical delivery conditions   |
| 6    | DIN 17458 (1985) | Seamless circular tubes of austenitic stainless steels for special requirements; technical delivery conditions   |
| 7    | DIN EN 10028-7   | Flat products made of steels for pressure purposes - Part 7: Stainless steels  |
| 8    | DIN EN 10088-1   | Stainless steels - Part 1: List of stainless steels  |
| 9    | DIN EN 10088-2   | Stainless steels - Part 2: Technical delivery conditions for sheet/plate and strip of<br>corrosion resisting steels for general purposes   |
| 10   | DIN EN 10088-3   | Stainless steels - Part 3: Technical delivery conditions for semi-finished products, bars,<br>rods, wire, sections and bright products of corrosion resisting steels for general<br>purposes |
| 11   | DIN EN 10088-4   | Stainless steels - Part 4: Technical delivery conditions for sheet/plate and strip of<br>corrosion resisting steels for construction purposes  |



### X2CrNiMoN17-13-5

https://www.steelss.com High Quality Special Steel Supplier +86-13880247006 E-mail:sales@steelss.com

| 12 | DIN EN 10088-5        | Stainless steels - Part 5: Technical delivery conditions for bars, rods, wire, sections and<br>bright products of corrosion resisting steels for construction purposes |
|----|-----------------------|--|
| 13 | DIN EN 10216-5 (2004) | Seamless steel tubes for pressure purposes - Technical delivery conditions - Part 5:<br>Stainless steel tubes  |
| 14 | DIN EN 10217-7        | Welded steel tubes for pressure purposes - Technical delivery conditions - Part 7:<br>Stainless steel tubes  |
| 15 | DIN EN 10253-3        | Butt-welding pipe fittings - Part 3: Wrought austenitic and austenitic-ferritic (duplex) stainless steels without specific inspection requirements                     |
| 16 | DIN EN 10253-4        | Butt-welding pipe fittings - Part 4: Wrought austenitic and austenitic-ferritic (duplex) stainless steels with specific inspection requirements                        |
| 17 | DIN EN 10272          | Stainless steel bars for pressure purposes   |
| 18 | DIN EN 10296-2 (2005) | Welded circular steel tubes for mechanical and general engineering purposes -<br>Technical delivery conditions - Part 2: Stainless steel                               |
| 19 | DIN EN 10297-2 (2005) | Seamless circular steel tubes for mechanical and general engineering purposes -<br>Technical delivery conditions - Part 2: Stainless steel                             |

| X2CrNiMoN17-13-5 Chemical composition(mass fraction)(wt.%) |          |    |    |           |    |    |         |       |       |
|--|----------|----|----|-----------|----|----|---------|-------|-------|
|  | Chemical |    |    | Min.(%)   |    |    | Max.(%) |       |       |
|  | С        |    |    |           |    |    | 0.030   |       |       |
|  | Si       |    |    |           |    |    | 1.00    |       |       |
|  | Mn       |    |    |           |    |    | 2.00    |       |       |
|  | Р        |    |    |           |    |    | 0.045   |       |       |
|  | S        |    |    |           |    |    |         | 0.015 |       |
|  | Cr       |    |    | 16.5      |    |    | 18.5    |       |       |
|  | Ni       |    |    | 12.5      |    |    | 14.5    |       |       |
|  | Мо       |    |    | 4.00 5.00 |    |    |         |       |       |
|  | Ν        |    |    | 0.12      |    |    |         | 0.22  |       |
| С  | Si       | Mn | Р  | S         | Cr | Ni | Мо      | V     | Та    |
|  |          |    |    |           |    |    |         |       |       |
| W  | Ν        | Cu | Со | Pb        | В  | Nb | AI      | Ti    | Other |
|  |          |    |    |           |    |    |         |       |       |

X2CrNiMoN17-13-5 Physical Properties



X2CrNiMoN17-13-5https://www.steelss.comHigh Quality Special Steel Supplier+86-13880247006 E-mail:sales@steelss.com

| Tensile strength | 115-234 | b/MPa    |
|------------------|---------|----------|
| Yield Strength   | 23      | 0.2 /MPa |
| Elongation       | 65      | 5 (%)    |
|                  | -       | (%)      |
| Akv              | -       | Akv /J   |
| HBS              | 123-321 |          |
| HRC              | 30      |          |

| X2CrNiMoN17-13-5 Mechanical Properties |         |          |  |  |
|--|---------|----------|--|--|
| Tensile strength                       | 231-231 | b/MPa    |  |  |
| Yield Strength                         | 154     | 0.2 /MPa |  |  |
| Elongation                             | 56      | 5 (%)    |  |  |
|  | -       | (%)      |  |  |
| Akv                                    | -       | Akv /J   |  |  |
| HBS                                    | 235-268 |          |  |  |
| HRC                                    | 30      |          |  |  |

|           | X2CrNiMo  | N17-13-5 Heat Treatmen | t Regime    |       |
|-----------|-----------|------------------------|-------------|-------|
| Annealing | Quenching | Tempering              | Normalizing | Q & T |
| ?         | ?         | ?                      | ?           | ?     |

|                 | X2CrNi                             | MoN17-13-5 Range of pro | oducts                                      |  |
|-----------------|------------------------------------|-------------------------|---|--|
| Product type    | Products                           | Dimension               | Processes                                   | Deliver Status   |
| Plates / Sheets | Plates / Sheets                    | 0.08-200mm(T)*W*L       | Forging, hot rolling and cold rolling       | Annealed, Solution and<br>Aging, Q+T, ACID-<br>WASHED, Shot Blasting |
| Steel Bar       | Round Bar, Flat Bar,<br>Square Bar | 8-1200mm*L              | Forging, hot rolling and cold rolling, Cast | Black, Rough Turning,<br>Shot Blasting,                              |
| Coil / Strip    | Steel Coil /Steel Strip            | 0.03-16.0x1200mm        | Cold-Rolled & Hot-<br>Rolled                | Annealed, Solution and Aging, Q+T, ACID-                             |



### X2CrNiMoN17-13-5

https://www.steelss.com High Quality Special Steel Supplier **Ionghai** +86-13880247006 E-mail:sales@steelss.com

Pipes / Tubes

Seamless Pipes/Tubes, Welded Pipes/Tubes

OD:6-219mm x WT:0.5-20.0mm Hot extrusion, Cold Drawn, Welded

Annealed, Solution and Aging, Q+T, ACID-WASHED

WASHED, Shot Blasting

### We can produce Stainless Steels 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: 50mm * 50mm-600mm *600mm  |
| Plate steel/flat bar:   |
| Size: Thickness: 0.1mm-800mm Width: 10mm to 1500mm  |
| Tube/pipe:  |
| Size: OD: 6-219mm WT: 1-35 mm.  |
| Cold-rolled sheet: Thickness: 2-5mm Width:1000mm Length: 2000mm   |
| 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.  |
|   |