| Data Sheet: | | |
|---|---|---|
| **Sheets of EN1.4404 – 316L**<br>**Alumeco A/S** | **EN:** | **EN1.4404** |
| | **AISI:** | **316L** |
| | **UNS:** | **S31603** |
| | **SS:** | **2348** |
| | **Chemical Symbol:** | **X2CrNiMo17-12-2** |
| | **Alloy type:** | **Acid-resistance Austenite** |
| | **Revision Date:** | **23-03-2021** |

**Main usage:**

- Building industry.
- Construction and processing industry.
- Reinforcement structures.

**Main properties:**

- Good formability and machinability.
- Improved corrosion resistance.
- Good weldability.
- Cannot be hardened by heat treatment but can be hardened by cold working.

**Typical Alumeco products with this alloy:**

- Cold rolled sheets- 0,5-6mmx 1000/1250/1500/(2000)
- Hot rolled sheets- 3-12mmx 1000/1250/1500/(2000).

**General Standards:**

- EN 10088-1: List of stainless steels

**Rolled products:**

- EN 10088-2: Technical delivery conditions for sheet/plate and strip of corrosion resisting steels for general purposes
- EN 10029 - Hot-rolled steel plates 3 mm thick or above - Tolerances on dimensions and shape
- DIN59220 - Flat products of steel - Hot rolled patterned plate - Dimensions, mass, tolerances on dimensions, shape, and mass
- EN10028-7 -Flat products made of steels for pressure purposes - Part 7: Stainless steels
- EN9445-2 - Continuously cold-rolled stainless steel - Tolerances on dimensions and form - Part 2: Wide strip and plate/sheet
- EN9444-2 - Continuously hot-rolled stainless steel - Tolerances on dimensions and form - Part 2: Wide strip and sheet/plate

## Chemical composition. EN10088-2

| C | Cr | Ni | Mo | Mn | Si | P | S | Remarks | Rest |
|---|---|---|---|---|---|---|---|---|---|
| ≤ 0,030 | 16,5 – 18,5 | 10,0 – 13,0 | 2,0-2,50 | ≤ 2,00 | ≤ 1,00 | ≤ 0,045 | ≤ 0,015 | N ≤ 0,10 | Fe |

## Mechanical properties:

| Product Range | Temper | Rm MPa | $Rp_{0,2}$ Min. MPa | $A_{80\ mm}$ / A Min. % | Hardness* HB | | |
|---|---|---|---|---|---|---|---|
| 0,5-6mm | C | 530 - 680 | 240 | 40 | - | | |
| 3-12mm | H | 530 - 680 | 220 | 40 | | | |

thha* Information values only.
*C-Cold rolled strip, H- Hot rolled strip

## Physical properties:

| Density g/cm³ | Electrical resistivity Ω.mm² / m | Thermal conductivity W/m K | Thermal expansion (µm $m^{-1}$ $K^{-1}$) | Specific heat (J $kg^{-1}$ $K^{-1}$) | E - modulus (N / mm²) | Magnetizable |
|---|---|---|---|---|---|---|
| 8,0 | 0,75 | 15 | 16,0 | 500 | 200.000 | No |