

# Lincoln TIG 316LSi

## CLASSIFICATION

AWS A5.9 - ER316LSi

ISO 14343-A - W 19 12 3 LSi

## GENERAL DESCRIPTION

Solid rod with extra low carbon for welding stainless CrNiMo-steels  
With increased silicon for improved wettability

## SHIELDING GASES (ACC. ISO 14175)

I1 Inert gas Ar (100%)

## APPROVALS

CE

+

## CHEMICAL COMPOSITION (W%) TYPICAL WIRE

| C    | Mn  | Si  | Cr   | Ni | Mo  |
|------|-----|-----|------|----|-----|
| 0.03 | 1.9 | 0.8 | 18.5 | 12 | 2.7 |

## MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

|                | Shielding gas | Condition | 0.2% proof strength<br>(N/mm <sup>2</sup> ) | Tensile strength<br>(N/mm <sup>2</sup> ) | Elongation<br>(%) | Impact ISO-V(J) |        |
|----------------|---------------|-----------|---------------------------------------------|------------------------------------------|-------------------|-----------------|--------|
|                |               |           |                                             |                                          |                   | +20°C           | -196°C |
| Typical values | I1            | AW        | 484                                         | 624                                      | 32                | 100             | 82     |

## MATERIALS TO BE WELDED

| Steel grades                           | EN 10088-1/-2       | EN 10213-4       | Mat. Nr | ASTM/ACI<br>A240/A312/A351 | UNS              |
|----------------------------------------|---------------------|------------------|---------|----------------------------|------------------|
| <b>Extra low carbon (C &lt; 0.03%)</b> |                     |                  |         |                            |                  |
|                                        | X2CrNiMo17 12 2     |                  | 1.4404  | (TP)316L<br>CF-3M          | S31603<br>J92800 |
|                                        | X2CrNiMo18 14 3     |                  | 1.4435  | (TP)316L                   | S31603           |
|                                        | X2CrNiMoN 17 11 2   |                  | 1.4406  | (TP)316LN                  | S31653           |
|                                        | X2CrNiMoN 17 13 3   |                  | 1.4429  |                            |                  |
| <b>Medium carbon (C &gt; 0.03%)</b>    |                     |                  |         |                            |                  |
|                                        | X4 CrNiMo 17 12 2   |                  | 1.4401  | (TP)316                    | S31600           |
|                                        | X4 CrNiMo 17 13 3   |                  | 1.4436  |                            |                  |
|                                        | GX5 CrNiMo 19-11    |                  | 1.4408  | CF 8M                      | J92900           |
| <b>Ti-,Nb stabilized</b>               |                     |                  |         |                            |                  |
|                                        | X6 CrNiMoTi 17 12 2 |                  | 1.4571  | 316 Ti                     | S31635           |
|                                        | X6 CrNiMoNb 17 12 2 |                  | 1.4580  | 316 Cb                     | S31640           |
|                                        | X6 CrNiNb 18-10     |                  | 1.4550  | (TP)347                    | S34700           |
|                                        |                     | GX5 CrNiNb 19-10 | 1.4552  | CF-8C                      | J92710           |

## PACKAGING AND AVAILABLE SIZES

| Diameter (mm)                        | 1.2 | 1.6 | 2.0 | 2.4 | 3.2 |
|--------------------------------------|-----|-----|-----|-----|-----|
| Unit : 5 kg tube                     | X   | X   | X   | X   | X   |
| Other sizes and packaging on request |     |     |     |     |     |

Note : Cut length = 1000 mm

Lincoln TIG 316LSi: rev. EN 03