



# CEWELD 309LMo Tig

**TYPE** Stainless steel Tig welding wire for dissimilar welding and cladding.(Typ 309LMo, 23 12 2 L, 1.4459)

**APPLICATIONS** A continuous, solid, corrosion-resistant wire of the "309LMo" type. CEWELD 309LMo is used for the overlay welding of unalloyed and low-alloyed steels and for welding dissimilar steels, such as 316L, to unalloyed and low-alloyed steels when Mo is essential. Buffer layers before hard facing, dissimilar joints between ferritic and austenitic steels and or other stainless steel types to standard carbon steel. Recommended for cladding on low alloyed steel in case AISI 316 is required as first layer.

**PROPERTIES** Excelent corrosion resistance against oxidising air upto 950°C. Good resistance against hot cracking due to the high Mo content. During build-up welding, the weld metal already achieves approximately the composition of ASTM 316 in the 1st layer.

**CLASSIFICATION**

|        |                      |
|--------|----------------------|
| AWS    | A 5.9: ER309LMo      |
| EN ISO | 14343-A: W 23 12 2 L |
| W.Nr.  | 1.4459               |
| F-nr   | 6                    |
| FM     | 5                    |

**SUITABLE FOR** **ISO 15608: 8.1 Austenitic ≤ 19 % Cr , TÜV 1000: Gr. 21-30,**  
 1.4583, 1.4435, 1.4436, 1.4404, 1.4406, 1.4408, 1.4401, 1.4571, 1.4580, 1.4406, 1.4521, 1.4301, 1.4306,  
 X102CrNiMoNb 18 12, X2CrNiMo 18 14 3 (TP), X4CrNiMo 17 13 3, X2CrNiMo 17 12 2 (TP), X 5CrNiMo 19 11 2, X4CrNiMo 17 12 2 (TP), X6CrNiMo 17 12 2, X6CrNiMoNb 17 12 3, X2CrNiMoN 17 12 3 (TP), X2CrMoTi18-2  
 316Cb, 316L, 316L, 316LN, 316H, 316, 316Ti, 316Cb, 316LN, 444  
 S31640, S31603, S31653, S31600, S31630, S44400

**APPROVALS** CE

**WELDING POSITIONS**

**TYPICAL CHEMICAL ANALYSIS OF THE FILLER METAL (%)**

| C    | Si  | Mn  | P     | S    | Cr | Ni | Mo  | FN |
|------|-----|-----|-------|------|----|----|-----|----|
| 0.02 | 0.5 | 1.8 | 0.012 | 0.01 | 24 | 13 | 2.5 | 9  |

**MECHANICAL PROPERTIES**

| Heat Treatment | R <sub>p0,2</sub> (MPa) | R <sub>m</sub> (MPa) | A <sub>5</sub> (%) | Impact Energy (J) ISO-V |       | Hardness |
|----------------|-------------------------|----------------------|--------------------|-------------------------|-------|----------|
|                |                         |                      |                    | RT                      | -40°C |          |
| As Welded      | 400                     | 600                  | 31                 | 110                     | 60    | HRc      |

**REDRYING** Not required

**GAS ACC. EN ISO 14175** I1



# CEWELD 309LMO Tig

|                         |           |         |               |
|-------------------------|-----------|---------|---------------|
| 309LMO TIG 1,6 X 1000MM | Packaging | KG/unit | EanCode       |
|                         | Tube      | 5       | 8720663414199 |
| 309LMO TIG 2,0 X 1000MM | Packaging | KG/unit | EanCode       |
|                         | Tube      | 5       | 8720663414205 |
| 309LMO TIG 2,4 X 1000MM | Packaging | KG/unit | EanCode       |
|                         | Tube      | 5       | 8720663414212 |
| 309LMO TIG 3,2 X 1000MM | Packaging | KG/unit | EanCode       |
|                         | Tube      | 5       | 8720663414830 |
| 309LMO TIG 4,0 X 1000MM | Packaging | KG/unit | EanCode       |
|                         | Tube      | 5       | 8720663414847 |