



# CEWELD 430 LNbTi

|                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                       |                         |                      |        |          |     |     |
|---------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-------------------------|----------------------|--------|----------|-----|-----|
| TYPE                                              | Double stabilized ferritic filler metal for welding critical applications in exhaust manufacturing.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                       |                         |                      |        |          |     |     |
| APPLICATIONS                                      | CEWELD® 430 LNbTi was developed for the automotive industry and is used in the manufacture of exhaust systems and catalytic converters. This wire should be used when good resistance to corrosion and thermal fatigue is required.<br>Suitable for use with stabilized ferritic stainless steels, austenitic stainless steels, and in both homogeneous and heterogeneous sheet configurations (sheets of different grades welded together).                                                                                                                                                                                         |                       |                         |                      |        |          |     |     |
| PROPERTIES                                        | Stabilization with niobium and titanium gives CEWELD® 430 LNbTi the advantages of these two ferritic microstructure stabilizers: Titanium minimizes grain growth in the weld zones (WM) by precipitating titanium nitride (TiN) in the still-molten metal in these zones, thus preventing the risk of embrittlement that can sometimes occur with very thick welds (> 3 mm of the sheet being welded). Niobium retains the remaining carbon and nitrogen by transferring 85 to 95% of the carbon in the welding arc under all standard welding conditions, thereby preventing the risk of intergranular corrosion in the weld metal. |                       |                         |                      |        |          |     |     |
| CLASSIFICATION                                    | AWS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | A 5.9: ~ 439 LNb      |                         |                      |        |          |     |     |
|                                                   | EN ISO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 14343-A: G 18 L Nb Ti |                         |                      |        |          |     |     |
|                                                   | W.Nr.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 1.4509                |                         |                      |        |          |     |     |
|                                                   | F-nr                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 6                     |                         |                      |        |          |     |     |
|                                                   | FM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 5                     |                         |                      |        |          |     |     |
| SUITABLE FOR                                      | 1.4509, AISI 441, UNS-Nummer: S43940<br>1.4000, 1.4002, 1.4016, 1.4057, 1.4740, 1.4742, 1.4057, 1.4059, 1.4741, 1.4509, 1.4510, 1.4511, 1.4512, 1.4520, 1.4712, 1.4713, 1.4724,<br>X7Cr14, X12Cr13, X17CrNi16-2, X6Cr13, X6CrAl13, X6Cr17, X17CrNi16-2, X2CrTiNb18, X3CrTi17, X3CrNb17, X2CrTi12, X2CrTi17, X10CrSi6, X10CrAlSi7, X10CrAlSi13, X10CrAlSi18<br>UNS S40300, S40500, S40900, S41000, S42900, S43000, S43035, S43036, S43100, S44200<br>AISI 403, 405, 409, 410, 429, 430, 430Cb, 430Ti, 439, 431, 442                                                                                                                   |                       |                         |                      |        |          |     |     |
| APPROVALS                                         | CE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                       |                         |                      |        |          |     |     |
| WELDING POSITIONS                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                       |                         |                      |        |          |     |     |
| TYPICAL CHEMICAL ANALYSIS OF THE FILLER METAL (%) | C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Si                    | Mn                      | Cr                   | Ni     | Mo       | Nb  | Ti  |
|                                                   | 0.02                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 0.5                   | 0.6                     | 18                   | 0.15   | 0.2      | 0.7 | 0.4 |
| MECHANICAL PROPERTIES                             | Heat Treatment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                       | R <sub>P0,2</sub> (MPa) | R <sub>m</sub> (MPa) | A5 (%) | Hardness |     |     |
|                                                   | As Welded                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                       | 310                     | 450                  | 25     | 140 HRc  |     |     |
| REDRYING                                          | Not required                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                       |                         |                      |        |          |     |     |
| GAS ACC. EN ISO 14175                             | M12                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                       |                         |                      |        |          |     |     |



# CEWELD 430 LNbTi

430 LNBTI 1,0MM

| Packaging | KG/unit | EanCode       |
|-----------|---------|---------------|
| BS-300    | 15      | 8720663412157 |

430 LNBTI 1,2MM

| Packaging | KG/unit | EanCode       |
|-----------|---------|---------------|
| BS-300    | 15      | 8720663412164 |