

# CEWELD 430 Ti Tig

|                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                    |                            |                         |           |          |     |      |
|--------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|----------------------------|-------------------------|-----------|----------|-----|------|
| TYPE                                                   | Stabilized ferritic Solid Rod for welding critical applications in exhaust manufacturing.(Type 439, UNS S43035, 1.4510                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                    |                            |                         |           |          |     |      |
| APPLICATIONS                                           | CEWELD 430 Ti Tig is an excellent choice for welding exhaust systems as well as chimneys and ducts exposed to moderately high temperatures. CEWELD 430 Ti Tig can be used to weld aluminized 409 and 439 provided sufficient filler metal is added. Application: Exhaust constructions also in sulphurous environments. Structures and piping in the chemical industry and in maritime applications. Ti Stabilized ferritic stainless steels, austenitic stainless steels in homogeneous and heterogeneous condition                                                                                                   |                                    |                            |                         |           |          |     |      |
| PROPRIÉTÉS                                             | CEWELD 430 Ti Tig is a 18%Cr alloy stabilized with Ti. This alloy has improved oxidation and corrosion resistance over an ER409 alloy. Single pass welds on light gage base metal or welds with preheat do not usually require PWHT. Good corrosion resistant to seawater.                                                                                                                                                                                                                                                                                                                                             |                                    |                            |                         |           |          |     |      |
| CLASSIFICATION                                         | AWS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | A 5.9: ER439, A 5.9: ~ER 430 TI    |                            |                         |           |          |     |      |
|                                                        | EN ISO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 14343-A: G Z 18 Ti, 14343-B: SS439 |                            |                         |           |          |     |      |
|                                                        | W.Nr.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | ~1.4510, 1.4502                    |                            |                         |           |          |     |      |
|                                                        | F-nr                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 6                                  |                            |                         |           |          |     |      |
|                                                        | FM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 5                                  |                            |                         |           |          |     |      |
| CONVIENT POUR                                          | 1.4000, 1.4002, 1.4016, 1.4057, 1.4113, 1.4057, 1.4059, 1.4332, 1.4502, 1.4509, 1.4510, 1.4511, 1.4512, 1.4520, 1.4523, 1.4712, 1.4713, 1.4724, 1.4740, 1.4741, 1.4742, 1.4842, X7Cr14, X12Cr13, X17CrNi16-2, X6Cr13, X6CrAl13, X6Cr17, X 6 Cr Mo 17, X17CrNi16-2, X2CrTiNb18, X3CrTi17, X3CrNb17, X2CrTi12, X2CrTi17, X10CrSi6, X10CrAlSi7, X10CrAlSi13, X10CrAlSi18 UNS S40300, S40500, S40900, S41000, S42900, S43000, S43035, S43036, S43100, S44200 AISI 403, 405, 409, 410, 429, 430, 430Cb, 430Ti, 439, 431, 442                                                                                                |                                    |                            |                         |           |          |     |      |
| AGRÉMENTS                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                    |                            |                         |           |          |     |      |
| POSITIONS DE SOUDAGE                                   | <div>      </div> |                                    |                            |                         |           |          |     |      |
| ANALYSE CHIMIQUE<br>TYPIQUE DU MÉTAL DE<br>SOUDURE (%) | C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Si                                 | Mn                         | Cr                      | Ni        | Mo       | Ti  | Cu   |
|                                                        | 0.02                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 0.7                                | 0.6                        | 18                      | 0.2       | 0.04     | 0.5 | 0.08 |
| PROPRIÉTÉS MÉCANIQUES                                  | Heat Treatment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                    | R <sub>P0,2</sub><br>(MPa) | R <sub>m</sub><br>(MPa) | A5<br>(%) | Hardness |     |      |
|                                                        | As Welded                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                    | 320                        | 480                     | 17        | 225 HB   |     |      |
| ETUVAGE                                                | Not required                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                    |                            |                         |           |          |     |      |
| GAS ACC. EN ISO 14175                                  | I1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                    |                            |                         |           |          |     |      |