



# CEWELD AA 310B

|                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                          |                      |                    |                         |  |
|---------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|----------------------|--------------------|-------------------------|--|
| TYPE                                        | Basic flux cored stainless steel welding wire for M21 and M20 gas. (Type 25 20)                                                                                                                                                                                                                                                                                                                                                                                                                     |                          |                      |                    |                         |  |
| APPLICATIONS                                | Common applications include industrial furnaces, annealing chambers, fused salt treatment installations and boiler parts, as well as heat exchangers Especially where rutile flux cored wire gives a to high risk for cracking this basic type is a better choice                                                                                                                                                                                                                                   |                          |                      |                    |                         |  |
| PROPERTIES                                  | For welding heat-resistant austenitic steels of the 25% Cr, 20% Ni types. AA 310B has good general oxidation resistance, especially at high temperatures, due to its high Cr content. The alloy is fully austenitic and is therefore sensitive to hot cracking. The temperature limits for use under intermittent oxidation depend on cycle frequency. In no case shall a temperature of 1000°C be exceeded. This alloy can withstand relatively severe thermic shock, and is superior to type 309L |                          |                      |                    |                         |  |
| CLASSIFICATION                              | AWS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | A 5.22: E310T0-4         |                      |                    |                         |  |
|                                             | EN ISO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 17633-A: T 25 20 B M21 3 |                      |                    |                         |  |
|                                             | W.Nr.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 1.4842                   |                      |                    |                         |  |
|                                             | F-nr                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 6                        |                      |                    |                         |  |
|                                             | FM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 5                        |                      |                    |                         |  |
| SUITABLE FOR                                | ISO 15608: 8.1 Austenitic ≤ 19 % Cr , TÜV 1000: Gr. 21-30, Type: 25% Cr, 22%Ni<br>1.4710, 1.4713, 1.4724, 1.4726, 1.4742, 1.4745, 1.4762, 1.4823, 1.4826, 1.4828, 1.4832, 1.4835,1.4837, 1.4840, 1.4841, 1.4845, 1.4846, 1.4848, 1.4849, 253MA, X15CrNiSi 25 20, G-X40CrNiSi 25 12, G-X15CrNi 25 20, X8CrNi25-21, GX40CrNiSi22-10, X15CrNiSi20-12, 310, 310S, CK20, 305, 314, 725LN, 316L ASTM A297 HF / A297HJ<br>UNS: S31000, S31008, S31050, S31603                                              |                          |                      |                    |                         |  |
| APPROVALS                                   | CE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                          |                      |                    |                         |  |
| WELDING POSITIONS                           | <div> PA</div> <div> PB</div> <div> PC</div>                                                                                                                                                                                               |                          |                      |                    |                         |  |
| TYPICAL CHEMICAL ANALYSIS OF WELD METAL (%) | C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Si                       | Mn                   | Cr                 | Ni                      |  |
|                                             | 0.1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 0.5                      | 2.5                  | 25.5               | 21                      |  |
| MECHANICAL PROPERTIES                       | Heat Treatment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | R <sub>P0,2</sub> (MPa)  | R <sub>m</sub> (MPa) | A <sub>5</sub> (%) | Impact Energy (J) ISO-V |  |
|                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                          |                      |                    | RT                      |  |
|                                             | As Welded                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 400                      | 590                  | 30                 | 80                      |  |
|                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                          |                      |                    | Hardness                |  |
|                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                          |                      |                    | HRc                     |  |
| REDRYING                                    | Not required                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                          |                      |                    |                         |  |
| GAS ACC. EN ISO 14175                       | M20, M21                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                          |                      |                    |                         |  |