



# CEWELD AlSi10Cu4

|                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |      |                 |      |     |      |      |      |
|---------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------------|------|-----|------|------|------|
| TYPE                                              | Aluminium welding wire 4145 for Tesla                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |      |                 |      |     |      |      |      |
| APPLICATIONS                                      | Filler metal for welding of AlCu alloys. Approved alloy for structural repairs of TESLA vehicles. Low melting point and excellent penetration characteristics.                                                                                                                                                                                                                                                                                                                                              |      |                 |      |     |      |      |      |
| PROPERTIES                                        | Superior resistance to stress corrosion where high temperature properties are required. It is not recommended to use this alloy for welding aluminium alloys with a high magnesium content. Low melting point: 521 - 584°C                                                                                                                                                                                                                                                                                  |      |                 |      |     |      |      |      |
| CLASSIFICATION                                    | AWS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |      | A 5.10: ER4145  |      |     |      |      |      |
|                                                   | EN ISO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |      | 18273: S Al4145 |      |     |      |      |      |
|                                                   | F-nr                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |      | 22              |      |     |      |      |      |
| SUITABLE FOR                                      | EN AW 2219 AlCu6Mn<br>EN AW 2014 AlCu4SiMg 3.1255<br>EN AW 2036 AlCu2,6Si0,5Mg0,3<br>EN AC 45000 G-AlSi5Cu3<br>EN AW 4145 AlSi10Cu4<br>Structural repairs of TESLA vehicles                                                                                                                                                                                                                                                                                                                                 |      |                 |      |     |      |      |      |
| APPROVALS                                         | CE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |      |                 |      |     |      |      |      |
| WELDING POSITIONS                                 |       |      |                 |      |     |      |      |      |
| TYPICAL CHEMICAL ANALYSIS OF THE FILLER METAL (%) | Si                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Mn   | Cr              | Fe   | Cu  | Zn   | Al   | Mg   |
|                                                   | 9.9                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 0.04 | 0.01            | 0.34 | 3.5 | 0.02 | Rem. | 0.03 |
| MECHANICAL PROPERTIES                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |      |                 |      |     |      |      |      |
| REDRYING                                          | Not required                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |      |                 |      |     |      |      |      |
| GAS ACC. EN ISO 14175                             | I1, I3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |      |                 |      |     |      |      |      |