

## **UTP N 819 FN**

Low Heat Input Cast Iron Electrode

## AWS A 5.15 : E Ni Fe Cl

| Characteristics                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |  |
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| UTP N 819 FN is Ferro Nickel electrode with approx. 55 % Ni in weld metal suitable<br>for joining and surfacing lamellar grey cast iron, nodular cast iron and malleable<br>cast iron as well as for joining these materials with each other or with steel or cast<br>steel. Applicable for repair, construction and production welding.<br>It has excellent buttering characteristic on cast iron. This electrode has stable arc<br>and produces a flat seam structure without undercutting. The bead appearance is<br>smooth. The weld deposit is highly crack resistant and easily machinable with<br>cutting tools. The current carrying capacity and the deposition rate are excellent. |  |  |  |
| Applications                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |  |  |
| Nodular Iron castings, housings, foundry defects, cast iron die cladding and build-up                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |  |  |
| Mechanical properties                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |  |  |
| <ul> <li>Tensile strength : 430 MPa</li> <li>Yield strength : 380 MPa</li> <li>Hardness : 150 - 180 BHN</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |  |  |

## **Welding Instruction**

UTP N 819 FN is preferably welded in DC (Negative polarity) and AC. When welding in DC negative deep penetration can be achieved. Positional welding is possible. Prior to welding remove cracks and casting skin, use of UTP N 890 AS is recommended. Hold the electrode vertically with short arc. When welding crack susceptible cast iron grades, the deposit may be peened for the purpose of stress relief.

## Welding positions



Current type DC (-) / AC

|                          | Recommended welding parameters |            |           |  |
|--------------------------|--------------------------------|------------|-----------|--|
| Electrodes Ø x L<br>[mm] | 2.50 x 350                     | 3.15 x 350 | 4.0 x 350 |  |
| Amperage [A]             | 50 - 90                        | 90 -140    | 120 -180  |  |