

UTP N 815 C

Low Heat Input Cast Iron Electrode

AWS A 5.15 : E Ni Cl

Characteristics

UTP N 815 is Nickel electrode suitable for welding of grey and malleable cast iron, cast steel and especially for repair and maintenance. This electrode has excellent welding properties with smooth bead, easy slag removal and minimum spatter.

Superior for thin walled grey cast iron. Excellent for building up missing sections, cladding, filing holes, repairing broken, cracked and fabrication of cast iron to other metals. Suitable for vertical and overhead work.

Outstanding features are -

- Ideal for cladding application
- Minimal base metal penetration and dilution

Applications

Engine blocks (water jacket), cast iron gears and pulleys, sliding tables for machine tools.

All weld Composition (%) :

Mechanical properties

- Tensile strength : 350 MPa
- Hardness : 150 180 BHN

Welding Instruction

Clean weld area from scale, grease and dirt. Remove cracks with chamfer electrode (UTP N 890 AS). Preheat the part to 200 °C to maximise the machinability. Use a short to medium arc at minimum amperage. Employ stringer bead or weaving technique and peen to relieve stresses. Skip weld to avoid excessive local heat. Remove slag between passes and allow to cool slowly.

Welding positions



Current type DC (-) / AC

| | Recommended welding parameters | | |
|--------------------------|--------------------------------|------------|-----------|
| Electrodes Ø x L [mm] | 2.50 x 350 | 3.15 x 350 | 4.0 x 350 |
| Amperage [A] | 50 -90 | 90 -140 | 120 -170 |