



**Gear Teeth Buildup**

## Very low heat input electrode for joining, built-up of dissimilar & difficult to weld steels

### Typical Applications:

Joining and buttering of thin, difficult-to-weld Steels including cast steels, high carbon steels, high alloy steels, tool steels and steels of unknown composition. e.g. Bearing areas of shafts, edge build-up of gears, keyways, bellows etc.

### Outstanding Features:

- Low dilution, lowest thermal stresses.
- Easy arc strike even at very low amperages.
- High strength and ductility of weld deposit due to refined grain structure.
- Superior crack resistance, even when diluted with high Carbon Steels.

### Recommendation:

A special Cr-Ni alloy giving high strength joints with excellent resistance to cracking. Low amperage enables welding of thin cross sections. Proprietary formulation of flux coating permits low-heat input welding in

all positions. “Cool arc” flux coating plus high alloy core wire generates highly ionized arc for “spray type” transfer of weld metal for welder comfort. Weld deposits with refined grain structure ensures high strength, high toughness and ductility.

### Procedure:

Clean weld area. Deposit with electrode tilted 10°-15° in direction of travel. Burn-off rate is rapid and uniform, permitting rapid advance with no “sticking” or “drifting”. Weld with short arc length and minimal weaving. Remove slag between passes.

### Recommended Amperages:

Size (mm)	Amperages
1.6	25 - 35

**Tensile Strength:** 840 MPa (1,20,000 psi)