

**Classifications** basic-coated complex aluminiumbronze stick electrode

DIN 8555	EN 14700	AWS A5.13
E 31-UM-200-CN	E Cu1	E CuMnNiAl

### Characteristics and field of use

UTP 34 N is suitable for joinings and surfacings on copper-aluminium alloys, specially with high Mn-content as well as for claddings on cast iron materials and steel. Main application fields are in the shipbuilding (propeller, pumps, armatures) and in the chemical industry. The good friction coefficient permits claddings on shafts, bearings, stamps, drawing tools and all kind of gliding surface.

UTP 34 N has excellent welding properties, spatterfree welding, good slag removal. The weld deposit has high mechanical values, a good corrosion resistance in oxidizing media, best gliding properties and a very good machinability. Crack resistant and pore-free.

### Typical analysis in %

Mn	Ni	Cu	Al	Fe
13.0	2.5	balance	7.0	2.5

### Mechanical properties of the weld metal

Yield strength $R_{p0.2}$	Tensile strength $R_m$	Elongation $A$	Hardness
MPa	MPa	%	HB
400	650	15	220

### Welding instructions

Clean welding area thoroughly. Pre-heating of thick-walled parts to 150 – 250 °C. Hold electrode as vertically as possible and weld with slight weaving. Weld with dry stick electrodes only! Re-drying: 2 – 3 h / 150 °C.

### Welding positions



Current type DC (+)

### Form of delivery and recommended welding parameters

Electrodes $\varnothing \times L$ [mm]	2.5 x 350	3.2 x 350	4.0 x 350
Amperage [A]	50 – 70	70 – 90	90 – 110