UTP 86 FN

graphite-basic coated FeNi stick electrode

Classifications	
EN ISO 1071	AWS A5.15
E C NiFe-13	E NiFe-CI

Characteristics and field of use

UTP 86 FN is suitable for joining and surfacing of lamellar grey cast iron EN GJL 100 - EN GJL 400, nodular cast iron (spheroidal cast iron) EN GJS 400 - EN GJS 700 and malleable cast iron grades EN GJMB 350 - EN GJMB 650 as well as for joining these materials with each other or with steel and cast steel. Universally applicable for repair, construction and production welding.

UTP 86 FN has excellent buttering characteristics on cast iron. The stick electrode has a stable arc and produces a flat seam structure without undercutting. Particularly for fillet welds an optimal seam structure is achieved (e.g. welding GJS-flanges or sockets to GJS-tubes). Due to the bimetallic core wire, the current carrying capacity and the deposition rate are excellent. The bead appearance is smooth. The weld deposit is highly crack resistant and easily machinable with cutting tools.

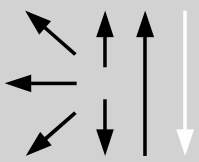
Typical analysis in %		
C	Ni	Fe
1,2	balance	45,0

Mechanical properties of the weld metal	
Yield strength $R_{P0,2}$	Hardness
MPa	HB
approx. 340	approx. 220

Welding instruction

UTP 86 FN is preferably welded on DC (negative polarity) or on AC. When welding on DC (neg. polarity), a deep penetration is reached (advantage for fillet welds). Positional weldings are easier with AC. Prior to welding, remove the casting skin. Hold stick electrode vertically and with short arc. When welding cracksuscepible cast iron grades, the deposit may be peened for the purpose of stress relief.

Welding positions



Current type DC (–) / AC

Approvals

DB (No. 62.138.05)

Recommended welding parameters			
Electrodes Ø x L [mm]	2,5 x 300	3,2 x 350	4,0 x 350
Amperage [A]	60 – 90	90 – 140	100 – 170