

## Classifications

EN ISO 1071	AWS A 5.15
E C NiFe-1 3	E NiFe-CI

## Characteristics and field of use

UTP 86 FN-5 was developed for high-quality production and construction welds of cast iron with nodular graphite (spheroidal cast iron). Dissimilar joints with steel are possible. It is mainly used in production welding of ferritic spheroidal cast iron with specific mechanical properties, such as EN-GJS-400-18-LT

The used NiFe-bimetallic core wire gives the stick electrode a high current carrying capacity and a good deposition rate. Good wetting characteristics on cast iron are achieved by the stable arc and smooth flow. The deposit is highly crack resistant with good strength and toughness. Machining is possible.

## Typical analysis in %

C	Si	Mn	Fe	Ni
1,2	0,5	0,3	45,0	balance

## Mechanical properties\* of the pure weld metal after heat treatment 2 h/ 920 °C

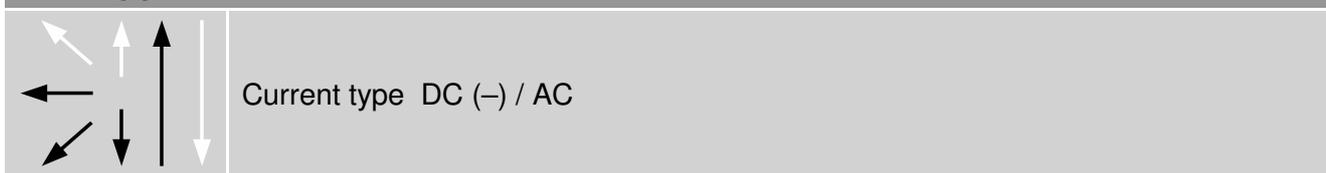
Yield strength R <sub>PO,2</sub>	Tensile strength R <sub>m</sub>	Elongation A	Impact strength K <sub>V</sub>	Hardness Brinell
MPa	MPa	%	J	HB
> 250	> 480	> 20	> 15	approx. 170

\* Mechanical properties cannot be guaranteed for diameter 2,5mm

## Welding instruction

Prior to welding, clean the weld area, remove casting skin and check for any cracks. Hold the electrode vertically and keep a short arc. Large parts can be preheated to 80°C. For the purpose of stress relieving, it is recommended to peen the deposit directly after welding.

## Welding positions



## Recommended welding parameters

Electrodes Ø x L [mm]	2,5 x 300	3,2 x 350	4,0 x 350
Amperage [A]	65 – 90	90 – 140	100 – 170