UTP A 8051 Ti

cast iron

Classifications

TIG rod

EN ISO 1071

S C NiFe-2

Characteristics and field of use

UTP A 8051 Ti is particularly suited for welding of ferritic and austenitic nodular cast iron as well as for joining it with unalloyed and high-alloyed steels, copper and nickel alloys. Build-up layers on grey cast iron qualities are also possible. Special applications are construction welding of ductile centrifugal casting tubes, such as joggles and flange joints, fittings, pumps.

The deposit is tough, crack resistant and easily machinable with cutting tools.

Typical analysis of rod and wire in %

C	Mn	Ni	Ti	Fe
0.1	3.5	55.0	0.5	balance

Mechanical properties of the weld metal

Yield strength R_e	*Tensile strength R_m*	*Elongation A_5*	*Hardness*
MPa	*MPa*	*%*	*HB*
> 300	> 500	> 25	approx. 200

Welding instructions

Machine welding area to metallic bright. Preheat massive cast iron pieces to 150 – 250 °C. Weld preferably with TIG-pulsed arc, in order to reduce the dilution with the base metal.

Form of delivery and recommended welding parameters

Rod diameter x length [mm]	*Current type*	*Shielding gas (EN ISO 14175)*
1.6 x 1000*	DC (–)	I 1
2.4 x 1000*	DC (–)	I 1
*available on request		