UTP A 8051 Ti

solid wire

Classifications

EN ISO 1071

S C NiFe-2

Characteristics and field of use

UTP A 8051 Ti is particularly suited for MIG/MAG 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 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 instruction

Welding area shall be metallic bright. UTP A 8051 Ti is usually welded by the cold-welding technique, keeping heat input < 12 kJ/cm and interpass temperature < 120°C. Massive cast iron pieces to ~150 – 200°C, depending on their geometry. Weld preferably with MIG-pulsed arc, in order to reduce the dilution with the base metal.

Wire diameter [mm]	Current type	Shielding gas (EN ISO 14175)
0.8	DC (+)	M 12
1.0	DC (+)	M 12
1.2	DC (+)	M 12