Standards :
EN ISO 1071 : S C NiFe-2

UTP A 8051 Ti

Ferro-nickel rods and wires for joining and surfacing on cast iron

Application field

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 non-alloy and high-alloy steel, copper and nickel alloys. Buildups 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, and for corrosion resistant claddings.

Properties of the weld metal

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

Mechanical properties of the pure weld metal

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

Weld metal analysis in %

C	Mn	Ni	Ti	Fe
0,1	3,5	55,0	0,5	balance

Welding instruction

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

Welding procedure and availability

Ø (mm)	Current type	Shielding gas EN ISO 14175		Availability	
				Spools	Rods
		I 1	M12	EN ISO 544	EN ISO 544
0,8	DC (+)		x	x	
1,0	DC (+)		x	x	
1,2	DC (+)		x	x	
1,6 *	DC (-)	x			x
2,4 *	DC (-)	x			x

* available on request