UTP 63

rutile coated, fully austenitic CrNiMnstick electrode

Classifications

EN ISO 3581-A	EN 14700	Material-No
E 18 8 Mn R 32	E Fe10	1.4370

Characteristics and field of use

With the fully austenitic UTP 63, non-alloy structural and heat-treatable steels can be welded, also in combination with austenitic CrNi steels. Furthermore scale-resisting steels for operating temperatures up to 850° C as well as higher carbon materials and high manganese steel can be joined, also in combination with other steels, with UTP 63. For surfacing on workpieces exposed to impact, pressure and rolling wear, such as curved rails, points, crusher and excavator teeth. Moreover it provides crack-proof buffer layers under hard alloys.

UTP 63 has good welding properties, stable arc, finely rippled bead appearance. The weld deposit resists to scaling, rust and cracks, work-hardened.

Hardness of the pure weld metal
untreated: approx. 200 HB
work-hardened: approx. 350 HB

Typical analysis in %

C	Si	Mn	Cr	Ni	Fe
0,1	0,5	5,5	19,0	8,5	balance

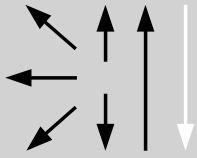
Mechanical properties of the weld metal

Yield strength $R_{P0,2}$	Tensile strength R_m	Elongation A	Impact strength K_V
MPa	MPa	%	J
> 350	> 600	> 40	> 60

Welding instruction

Clean welding area thoroughly. Preheating of thick-walled ferritic parts to 150 – 250° C.
Hold stick electrode vertically with a short arc. Redry stick electrodes that have got damp for 2 h / 250 – 300° C.

Welding positions



Current type DC (+) / AC

Recommended welding parameters

Electrodes Ø x L [mm]	2,5 x 250	3,2 x 350	4,0 x 400	5,0 x 450
Amperage [A]	50 – 70	70 – 100	100 – 130	150 – 180