

UTP 65

stainless steels

Classifications rutile-coated austenitic-ferritic special stick electrode

EN ISO 3581-A

EN 14700

Material-No.

~ E 29 9 R 32

E Z Fe11

~ 1.4337

Characteristics and field of use

UTP 65 is particularly suitable for joinings on hardly weldable steels, when highest demands on the welding seam are made. High crack resistance when joining parent metals of difficult weldability, such as austenitic and ferritic steels, high-manganese steels with alloyed and non-alloyed steels, heat-treatable and tool steels. As cushion layer on these materials it is also ideally suited. UTP 65 finds a variety of applications in the repair and maintenance of machine and drive components as well as in tool repairing.

UTP 65 is very easily weldable with a smooth and stable arc, homogeneous, finely rippled bead appearance and gives very good slag removal, self-lifting in parts. The austenitic-ferritic weld deposit has highest strength values and high crack resistance. Workhardening, creep resistant and stainless.

Hardness of the pure weld metal: approx. 240 HB

Typical analysis in %

C	Si	Mn	Cr	Ni	Fe
0.1	1.0	1.0	29.0	9.0	balance

Mechanical properties of the weld metal

Yield strength $R_{p0.2}$	Tensile strength R_m	Elongation A
MPa	MPa	%
> 620	> 800	> 22

Welding instructions

Clean welding area thoroughly. Pre-heating of thick-walled ferritic parts to 150 – 250 °C. Keep the arc short up to medium-long. Apply string beads with little weaving. Hold stick electrode as vertically as possible. Redry stick electrodes that have got damp for 2 h / 120 – 200 °C.

Welding positions

Current type DC (+) / AC

Approvals

DB (No. 82.138.01)

Form of delivery and recommended welding parameters

Electrodes $\varnothing \times L$ [mm]	1.6 x 250*	2.0 x 250	2.5 x 250	3.2 x 350	4.0 x 350	5.0 x 350
Amperage [A]	35 – 50	45 – 65	60 – 80	80 – 130	100 – 150	120 – 200

*available on request