

Rutile coated austenitic-ferritic special stick electrode
with optimal welding and mechanical properties

Classifications

EN ISO 3581-A	EN 14700	Material-No.
E Z 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. Stainless and work-hardening.

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

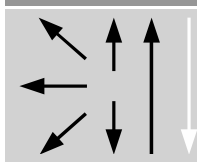
Mechanical properties of the weld metal

Yield strength $R_{P0,2}$	Tensile strength R_m	Elongation A
MPa	MPa	%
> 620	> 800	> 22

Welding instruction

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
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Approvals

DB (No. 82.138.01)

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