UTP 65

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

Standards :

Material-No.	:	~ 1.4337
DIN 8555	:	~ E 9-UM-250-KR
EN 1600	:	~ E 29 9 R 32
EN 14700	:	E Z Fe11

Application field

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.

Welding properties and special properties of the weld metal

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

Mechanical properties of the weld metal

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

Weld metal analysis in %

C	Si	Mn	Cr	Ni	Fe
0,1	1,0	1,0	29,0	9,0	balance

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. Re-dry stick electrodes that have got damp for 2 h / 120 – 200° C.

Current type DC (+) / AC   **Welding positions**   PA   PB   PC   PE   PF

Availability / Current adjustment

Electrodes	Ø x L (mm)	1.5mm (1/16") x 250*	2.0mm (5/64") x 250	2.5mm (3/32") x 250	3.2mm (1/8") x 250	4.0mm (5/32") x 350	5.0mm (3/16") x 350
Amperage	(A)	35-50	45-65	60-80	80-130	110-150	120-200

* available on request

Approvals

DB (No. 82.138.01)