

Classifications

DIN 8555	EN 14700
E 3-UM-50-CTZ	E Z Fe6

Characteristics and field of use

UTP 750 is suited for heat resistant buildups on hot working steels particularly exposed to metallic gliding wear and elevated thermal shock stress, such as diecast moulds for brass, aluminium and magnesium, hot-pressed mandrils, trimming tools, hot-shear blades, extruding tools, forging dies and hot flow pressing tools for steel. Due to the excellent metal-to-metal gliding properties, also suitable for buildups on guiding and gliding surfaces. Tempering resistant up to 650° C, scale-resisting up to 900° C, it can be nitrided and is stainless.

UTP 750 has excellent welding properties, a homogeneous, finely rippled seam and a self-lifting slag, good bead appearance.

Hardness of the pure weld deposit:

untreated	48 – 52 HRC
soft annealed 850 – 900° C	approx. 35 HRC
hardened 1000 – 1150° C /air	48 – 52 HRC
tempered 700° C	approx. 40 HRC

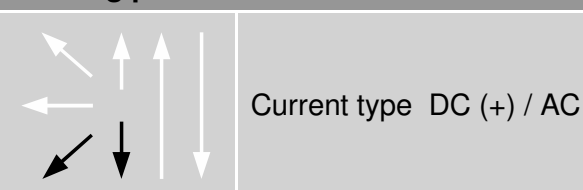
Typical analysis in %

C	Si	Mn	Cr	Mo	Ni	Co	Fe
0,2	0,5	0,2	11,5	4,5	1,0	12,5	balance

Welding instruction

Clean welding area to metallic bright. Preheating temperature depends on the welding application (150 – 400° C). On low-alloy steels at least 3 – 4 layers should be applied.

Welding positions



Recommended welding parameters

Electrodes Ø x L [mm]	2,5 x 250*	3,2 x 350*	4,0 x 350*
Amperage [A]	60 – 90	80 – 120	120 – 160

*available on request