

Classifications

DIN 8555	EN 14700
E 6-UM-60	E Fe8

Characteristics and field of use

UTP DUR 600 is universally applicable for cladding on parts of steel, cast steel and high Mn-steel, subject simultaneously to abrasion, impact and compression. Typical application fields are the earth moving and stone treatment industry, e.g. excavator teeth, bucket knives, crusher jaws and cones, mill hammers etc., but also for cutting edges on cold cutting tools.

Hardness of the pure weld deposit	56 – 58 HRC
After soft-annealing 780 – 820°C / oven	approx. 25 HRC
After hardening 1000 – 1050°C / oil	approx. 60 HRC
1 layer on high Mn-steel	approx. 22 HRC
2 layers on high Mn-steel	approx. 40 HRC

UTP DUR 600 has excellent welding properties due to a quiet arc, an even flow and a good weld build-up, easy slag removal. Machining of the weld metal possible by grinding.

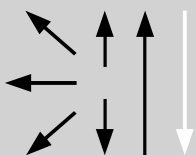
Typical analysis in %

C	Si	Mn	Cr	Fe
0.5	2.3	0.4	9.0	balance

Welding instruction

Hold stick electrode as vertically as possible and with a short arc. Preheat heavy parts and high-tensile steels to 200 – 300°C. On high Mn-steel, cold welding (max. 250°C) is recommended, if necessary, intermediate cooling. On parts tending to hardening cracks, a cushion layer with UTP 630 is welded. UTP 630 should also be used for welding cracks under hardfacings. If more than 3 – 4 layers are needed, apply the softer stick electrodes UTP DUR 250 or UTP DUR 300 for build-up. Re-dry damp stick electrodes for 2h / 300°C.

Welding positions



Current type DC (+) / AC

Approvals

DB (No. 20.014.23)

Recommended welding parameters

Electrodes Ø x L [mm]	2.5 x 300	3.2 x 350	4.0 x 450	5.0 x 450
Amperage [A]	80 – 100	100 – 130	140 – 180	180 – 210