

Classifications

EN ISO 3581-A	AWS A5.4 / SFA-5.4	Material-No.
E 18 8 Mn R 73	E307-26 (mod.)	1.4370

Characteristics and typical fields of application

UTP 630 is suited for particularly tough, crack resistant joints and surfacings on high strength steels, hard-manganese steels and heterogeneous joints. Suitable for surfacings on parts subjected to impact, pressure and rolling wear, such as rails, curved rails, switches, rolls etc. and for tough buffer layers under hard alloys. A main application field is for repair and maintenance in the constructional industry.

UTP 630 is easily weldable with stable arc, homogeneous, finely rippled bead appearance and gives good slag removal. The fully austenitic weld metal is resistant to corrosion and to scale up to 850 °C. The weld metal is work-hardenable.

Hardness of the pure weld metal:

untreated: approx. 200 HB

work-hardened: approx. 350 HB

Typical analysis

	C	Si	Mn	Cr	Ni	Fe
wt.-%	0.1	0.8	6.0	19.0	9.0	Bal.

Mechanical properties of all-weld metal - typical values (min. values)

Yield strength $R_{p0.2}$	Tensile strength R_m	Elongation A ($L_0=5d_0$)	Impact energy ISO-V KV J
MPa	MPa	%	
350	600	40	> 60

Operating data

	Polarity	DC + / AC	Dimension mm	Current A	
				2.5 × 350	80 – 100
				3.2 × 450	100 – 130
				4.0 × 450	130 – 180
				5.0 × 450	150 – 200

Clean welding area thoroughly. Pre-heating of thick-walled ferritic parts to 150 - 250 °C. Hold stick electrode vertically with a short arc. Re-dry stick electrodes that have got damp for 2 h / 250 - 300 °C.

Approvals

-