

Classifications

EN ISO 3581-A	EN 14700	Material-No.
~ E 29 9 R 12	E Z Fe11	1.4337

Characteristics and field of use

UTP 65 D has been developed to satisfy the highest requirements for joining and surfacing. It is extremely crack-resistant when joining steels of difficult weldability, such as e. g. hard manganese steels, tool steels, spring steels, high speed steels as well as dissimilar metal joints. Due to the good corrosion and abrasion resistance and high tensile strength

UTP 65 D finds its application particularly in repair and maintenance of machine and drive components, such as gears, cams, shafts, hot cuts, hot trim plates and dies. Also ideally suited as an elastic cushioning layer for very hard surfacings.

UTP 65 D has outstanding welding properties. Stable arc, spatterfree. The finely rippled seam has a homogeneous structure, very good slag removal, self-lifting on parts. Good weldability in awkward positions. Stainless, creep resistant and workhardening.

Hardness of the pure weld metal: approx. 260 HB

Typical analysis in %

C	Si	Mn	Cr	Ni	Fe
0,1	1,0	1,0	30,0	9,5	balance

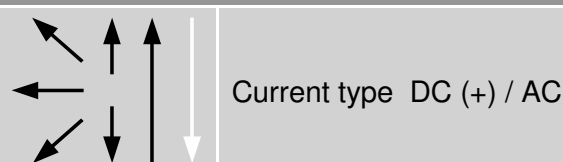
Mechanical properties of the weld metal

Yield strength $R_{p0,2}$	Tensile strength R_m	Elongation A
MPa	MPa	%
> 640	> 800	> 20

Welding instruction

Clean the welding zone thoroughly. Prepare X-, V- or U-groove on thickwalled workpieces with an angle of 60 - 80°. Preheat high-C-containing steels and solid workpieces to appr. 250° C. Keep stick electrode vertical and weld with a short arc, use stringer beads or slight weaving, as applicable. Redry stick electrodes that have got damp for 2 h / 120 – 200° C.

Welding positions



Recommended welding parameters

Electrodes $\varnothing \times L$ [mm]	1,5 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 – 45	45 – 60	55 – 75	75 – 115	100 – 145	120 – 195

*available on request