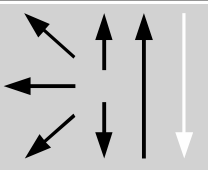


Classifications						
EN ISO 3581-A		EN 14700		Material-No.		
E Z 29 9 R 12		E Z Fe11		1.4337		
Characteristics and field of use						
<p>UTP 65 D has been developed to meet the highest requirements for repair and surfacing. It is extremely crack-resistant when joining steels of difficult weldability, 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 surfacing.</p> <p>UTP 65 D has outstanding welding properties. Stable arc, spatter-free. The finely rippled seam has a homogeneous structure, very good slag removal, self-lifting on parts. Stainless and work-hardening. Good weldability in all positions.</p> <p>Hardness of the pure weld metal: approx. 260 HB</p>						
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 instructions						
<p>Clean the welding zone thoroughly. Prepare X-, V- or U-groove on thick-walled workpieces with an angle of 60 - 80°. Preheat high-C-containing steels and solid workpieces to approx. 250° C. Hold stick electrode vertically and weld with a short arc, use stringer beads or slight weaving, as applicable. Re-dry damp stick electrodes for 2 h / 120 – 200° C.</p>						
Welding positions						
						
Recommended welding parameters						
Electrodes $\varnothing \times L$ [mm]	1.6 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						