

Classifications

DIN 8555	EN 14700
E 5-UM-250-CKZT	EZ Fe9

Characteristics and field of use

UTP HydroCav is suitable for wear-resistant surfacings on weldments where high resistance to cavitation pitting, corrosion, pressure and impact is required, as for example in water turbine construction and pump construction. Due to the strong ability of work-hardening the weld deposit hardness under impact stress can be doubled. The main application field are surfacing on soft martensitic 13/4 CrNi-steels on Kaplan turbine blades.

UTP HydroCav has good welding properties and is weldable in all positions, except vertical-down. It has a stable arc, even weld build-up, and good slag removability.

Hardness of the pure weld deposit	
as-welding condition	approx. 21 HRC
After cold hardening	approx. 50 HRC

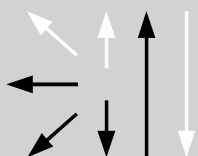
Typical analysis in %

C	Si	Mn	Cr	Ni	Co	Fe
0,2	0,7	10,0	20,0	0,15	13,0	balance

Welding instruction

Clean welding area thoroughly to metallic bright. The interpass temperature should not exceed 250°C. Preheating of solid work pieces to 80 – 100°C is advantageous. Weld stick electrode with short arc and steep guidance. Redrying: 2h/300° C

Welding positions



Current type DC (+) / AC

Recommended welding parameters

Electrodes Ø x L [mm]	2,5 x 350	3,2 x 350	4,0 x 350
Amperage [A]	70 – 90	90 – 120	120 – 150