UTP ANTINIT DUR 300

Basic-coated CrNi stick electrode

Classifications	
DIN 8555	EN 14700
E 8-UM-300-CP (mod.)	E Z Fe10

Characteristics and field of application

UTP ANTINIT DUR 300 is used for hardfacing on parts subject to a combination of corrosion, erosion, impact and abrasion. Due to its low amount of cobalt, it is possible to weld UTP ANTINIT DUR 300 on ferritic or austenitic base materials in nuclear applications.

The weld metal deposit has a ferritic-austenitic microstructure at a ratio of approx. 45:55%. A good resistance against (inter-granular) corrosion, cavitation, erosion and abrasion characterizes it.

Hardness of the undiluted weld metal:

As welded	310 HB
After PWHT 1 h / 550° C	380 HB

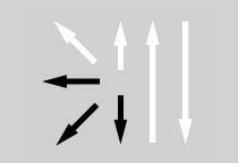
Typical analysis of all-weld-metal (wt.-%)

C	Si	Mn	Cr	Ni	P	S	Co	Fe
0,1	4,6	6,0	20,5	8,0	< 0,02	<0,015	<0,15	balance

Welding guidelines

Clean the weld area thoroughly. Weld stick electrode with slight tilt and short arc. Preheating and inter pass temperature is depending on the base material in single layer welds. For multi-layer welds, preheating and inter pass temperature is min. 300-400°C. It is recommended to use a furnace for a steady heat treatment. Multi-layer welding is required to achieve best corrosion- and wear resistance.
Redry the electrodes for 2 hours at 300°C.

Welding positions



Current type DC (+)

Recommended welding parameters

Electrodes Ø x L [mm]	3,2 x 350*	4,0 x 350*
Amperage [A]	90 – 120	110 – 130

*on request