

Standards :

DIN 8555 : E 20-UM-250 CKTZ
 DIN 14700 : EZ Co I

UTP 7010

Basic coated stick electrode for heat resistant and thermal shock resistant claddings, core wire alloyed

Application field

UTP 7010 is suited for the repair and new production of hot working tools subject to highest heat, thermal shock, compression, impact and abrasion. Main applications are hot dies, hot pressing blades, hot trimming tools, roll mandrils. Special applications are between-layer buildups on workpieces in nuclear reactor engineering.

Welding properties and special properties of the weld deposit

UTP 7010 has excellent welding properties, good weld pool control, regular bead appearance and easy slag removal. The weld deposit is highly corrosion and scaling resistant, has a high workhardenability and is heat resistant up to 900° C. Machinable with cutting tools.

Hardness of the pure weld deposit:

untreated : approx. 230 HB
 workhardened : approx. 450 HB

Weld metal analysis in %

C	Si	Mn	Cr	Ni	W	Co	Fe
0,1	0,5	1,2	21,0	11,0	14,0	balance	2,0

Welding instruction

Clean welding area, preheat tools to 350 - 400° C and maintain this temperature during the whole welding process. Slow cooling in an oven. Hold stick electrode vertically and with a short arc. Select lowest possible amperage, in order to reduce dilution with the base metal. Re-dry stick electrodes that have got damp for 2h/300° C.

Current type DC (+) / AC

Welding positions


Availability / Current adjustments

Stick electrodes	Ø mm x L	3,2 x 300*	4,0 x 350*	5,0 x 450*
Amperage	A	70 - 110	110 - 150	120 - 180

* available on request

Approvals

KTA (No. 08117)

