

## Classifications

EN ISO 14172	AWS A5.11	Material-No.
E Ni 6182 (NiCr15Fe6Mn)	E NiCrFe-3	2.4807

## Characteristics and field of use

UTP 7015 is employed for joining and surfacing of nickel-base materials. UTP 7015 is also recommended for welding different materials, such as austenitic to ferritic steels, as well as for weld claddings on unalloyed and low-alloyed steels, e. g. for reactor construction.

Weldable in all positions, except vertical down. Stable arc, good slag removability. The seam is finely rippled and notch-free. The weld deposit has a fully austenitic structure and is high-temperature resistant. Not prone to embrittlement either at high or low temperatures

The preheating must be matched to the parent metal. Any thermal post-treatments can be applied without regard for the weld metal.

## Typical analysis in %

C	Si	Mn	Cr	Ni	Nb	Fe
0,025	0,4	6,0	16,0	balance	2,2	6,0

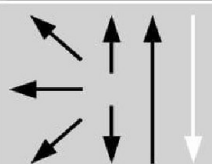
## Mechanical properties of the weld metal

Yield strength R <sub>P0,2</sub>	Tensile strength R <sub>m</sub>	Elongation A	Impact strength K <sub>V</sub>	Hardness Brinell
MPa	MPa	%	J	−196 °C
400	670	40	120	80
				HB
				approx. 170

## Welding instruction

Opening angle of the prepared seam approx. 70°, root gap approx. 2 mm. The stick electrode is welded with a slight tilt and short arc. Use string beads welding technique. The interpass temperature of 150° C and a max. weaving width 2,5 x diameter of the stick electrode core wire should not be exceeded. Redry stick electrode prior welding for 2 – 3 h at 250 – 300° C, welding out of a hot stick electrode carrier.

## Welding positions



Current type DC (+)

## Approvals

TÜV (No. 00875), GL, DNV, KTA (No. 08036)

## Recommended welding parameters

Electrodes Ø x L [mm]	2,5 x 300	3,2 x 300	4,0 x 350	5,0 x 400
Amperage [A]	50 – 70	70 – 95	90 – 120	120 – 160

