

## Classifications

EN ISO 14172	Material-No.
E Ni 8165 (NiCr25Fe30Mo)	2.4652

## Characteristics and field of use

UTP 4225 is suitable for joining and surfacing of alloys of similar nature, such as e. g. NiCr21Mo, furthermore for welding of CrNiMoCu-alloyed austenitic steels used for high quality tank and apparatus construction in the chemical industry, corrosion resistance in media of sulphuric- and phosphoric acid.

The stick electrode can be welded in all positions except vertical-down. Stable arc, easy slag removal. The seam is finely rippled and notch-free. The weld metal UTP 4225 is resistant against pitting and stress corrosion cracking in media containing chloride ions. High resistance against reducing acids due to the combination of nickel, molybdenum and copper. Resistant in oxidising acids.

UTP 4225 results in a fully austenitic weld metal.

## Typical analysis in %

C	Si	Mn	Cr	Mo	Ni	Cu	Fe
0,03	0,4	2,5	26,0	6,0	40	1,8	balance

## Mechanical properties of the weld metal

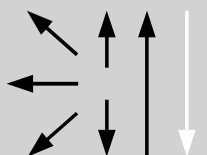
Yield strength $R_{P0,2}$	Tensile strength $R_m$	Elongation A	Impact strength $K_V$
MPa	MPa	%	J
> 350	> 550	30	> 80

## Welding instruction

The welding zone must be free from residues. Opening angle of the prepared seam 70 - 80°, root gap approx. 2 mm. Weld stick electrode with a slight tilt and with short arc. String beads are welded, if necessary, with little weaving, max. weaving width 2,5 x diameter of the stick electrode core wire. Weldable with very low current adjustment. The end crater should be filled thoroughly and the arc must be drawn away to the side. Interpass temperature should not exceed 120°C.

Re-dry the stick electrodes for 2 - 3 hours at 250 - 300° C before use and weld them out of a warm electrode carrier.

## Welding positions



Current type DC (+)

## Approvals

TÜV (Nr. 06680)

## Recommended welding parameters

Electrodes $\varnothing \times L$ [mm]	3,2 x 300	4,0 x 350
Amperage [A]	70 – 95	90 – 120