

## Classifications

<b>EN ISO 14172</b>	<b>AWS A5.11 / SFA-5.11</b>
E Ni 6093 (NiCr15Fe8NbMo)	ENiCrFe-2

## Characteristics and typical fields of application

UTP 7015 Mo is a basic-coated stick electrode for joining similar heat-resistant NiCrFe alloys, heat-resistant austenitic steels, cryogenic Ni-steels and heat-resistant austenitic-ferritic steels. It can also be used for joining high-C-containing 25/35 CrNi cast steel to 1.4859 or 1.4876 for petrochemical applications and for industrial furnace applications with service temperatures up to 900°C. Welding dissimilar joints of low alloyed CMn steels (as e.g. S 235 JR, S 355 N, 16Mo3) with the above-mentioned alloys and steel grades is possible as well.

The weld deposit of UTP 7015 Mo is hot-crack-resistant, not prone to embrittlement, and scale- & corrosion-resistant at elevated temperatures.

## Base materials

2.4816 (NiCr 15 Fe)  
 1.4583 (X10 CrNiMoNb 18 12)  
 1.4876 (X10 NiCrTiAl 32 20)  
 1.4941 (X8 CrNiTi 18 10)


## Typical analysis

	C	Si	Mn	Cr	Ni	Mo	Nb	Fe
wt.-%	0.04	0.4	3.0	16.0	bal.	1.5	2.2	6.0

## Mechanical properties of all-weld metal - typical values (min. values)

Condition	Yield strength $R_{p0.2}$	Tensile strength $R_m$	Elongation A ( $L_0=5d_0$ )	Impact energy ISO-V KV J
	MPa	MPa	%	J
u	>380	>620	>35	>80

## Operating data

	Polarity	DC +	Dimension mm	Current A
	Redrying	2-3 h / 250 - 300 °C	2.5 × 300	50 – 70
			3.2 × 300	70 – 95
			4.0 × 350	90 – 120
			5.0 × 400	120 – 160

UTP 7015 Mo can be welded in all positions except vertical down (PG/3Gd). In PA (1G) position, the angle between the plate and the electrode should be kept between 80-90°. The electrode should be welded with a short arc, with dragging- and stringer bead technique. End craters should be filled sufficiently to avoid imperfections related to this. Keep interpass temperature below 150°C. Re-dry electrodes for 2-3 hours at 250-300°C, prior to use, unless used for the first time out of a sealed tin.

## Approvals

TÜV (05259), DNV