

UTP A 759

Standard :

Material-No. : 2.4607
 EN ISO 18274 : S Ni 6059
 (NiCr23Mo16)
 AWS A5.14 : ER NiCrMo-13

Rods and wires for high corrosion resistant NiCrMo alloys

Application field

UTP A 759 is suitable for welding components in plants for chemical processes with highly corrosive media.

For joining materials of the same or similar natures, e. g.

2.4602	NiCr21Mo14W	UNS N06022
2.4605	NiCr23Mo16Al	UNS N06059
2.4610	NiMo16Cr16Ti	UNS N06455
2.4819	NiMo16Cr15W	UNS N10276

and these materials with low alloyed steels such as for surfacing on low alloyed steels.

Properties of the weld metal

Good corrosion resistance against acetic acid and acetic hydride, hot contaminated sulphuric and phosphoric acids and other contaminated oxidising mineral acids. Intermetallic precipitation will be largely avoided.

Mechanical properties of the weld metal

Yield strength $R_{p0,2}$ MPa	Tensile strength R_m MPa	Elongation A %	Impact strength K_v Joule
> 450	> 720	> 35	> 100

Weld metal analysis in %

C	Si	Cr	Mo	Ni	Fe
< 0,01	0,1	22,5	15,5	balance	< 1,0

Welding instruction

The welding area has to be free from impurities (oil, paint, markings). Minimize heat input. The interpass temperature should not exceed 150 °C. Linear energy input $< 12 \frac{kJ}{cm}$

Welding procedure and availability

Ø (mm)	Current type	Shielding gas EN ISO 14175		Availability	
		R I	Z-ArHeHC-30/2/0,05	Spools EN ISO 544	Rods EN ISO 544
0,8 *	DC (+)		x	x	
1,0	DC (+)		x	x	
1,2	DC (+)		x	x	
1,6 *	DC (+)		x	x	
1,6	DC (-)	x			x
2,0	DC (-)	x			x
2,4	DC (-)	x			x
3,2 *	DC (-)	x			x

* available on request

Approvals

TÜV (No. 06065; 06068), GL