

UTP A 759 nickel alloys

Classifications solid wire

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

Characteristics and field of use

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.

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.

Typical analysis in %

C	Si	Cr	Mo	Ni	Fe
< 0.01	0.1	22.5	15.5	balance	< 0.1

Mechanical properties of the weld metal

<i>Yield strength $R_{p0.2}$</i>	<i>Tensile strength R_m</i>	<i>Elongation A</i>	<i>Impact strength K_V</i>
MPa	MPa	%	J (RT)
> 450	> 720	> 35	> 100

Welding instructions

Welding instructions The welding area has to be free from impurities (oil, paint, grease and dust). Minimize heat input. The interpass temperature should not exceed 150 °C. Heat input < 12 kJ / cm.

Approvals

TÜV (No. 06065), GL

Form of delivery and recommended welding parameters

<i>Wire diameter [mm]</i>	<i>Current type</i>	<i>Shielding gas (EN ISO 14175)</i>
0.8*	DC (+)	Z-ArHeHC-30 / 2 / 0.05
1.0	DC (+)	Z-ArHeHC-30 / 2 / 0.05
1.2	DC (+)	Z-ArHeHC-30 / 2 / 0.05
1.6*	DC (+)	Z-ArHeHC-30 / 2 / 0.05

*available on request

GMAW – solid wires

167