

Classifications

EN ISO 18274	AWS A5.14
S Ni 6686 (NiCr21Mo16W4)	ER NiCrMo-14

Characteristics and field of use

UTP A 786 is suitable for joining and surfacing of high corrosion resistant NiCrMo alloys for chemical processes in highly corrosive reducing and oxidizing environments.

UTP A 786 is particularly designed for claddings of desulphurization and waste incineration components such as pipes and finned tubes made of heat resistant steels.

Joining of similar or dissimilar base materials:

Nickel base alloys	2.4602 NiCr21Mo14W
	2.4605 NiCr23Mo16Al
	2.4606 NiCr21Mo16W
	2.4610 NiMo16Cr16Ti
	2.4819 NiMo16Cr15W
Low alloyed steels	16Mo3, ASTM A 312 Gr. T11/T12

Typical analysis in %

C	Si	Mn	Cr	Mo	W	Al	Fe	Ni
0,01	0,08	< 0,5	22,8	16,0	3,8	0,3	< 1,0	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 [RT]
> 450	> 760	> 30	> 50

Welding instruction

Clean the welding area thoroughly. Preheating of large parts at approx. 80°C, interpass temperature max. 150°C. Use MIG pulse welding process with a low heat input (< 10 kJ/cm).

Wire diameter [mm]	Current type	Shielding gas (EN ISO 14175)
1,0	DC (+)	Z-ArHeH ₂ Co ₂ -30/2/0,05
1,2	DC (+)	Z-ArHeH ₂ Co ₂ -30/2/0,05