

Classifications

EN ISO 18274	AWS A5.14	Material-No.
S Ni 6617 (NiCr22Co12Mo9)	ER NiCrCoMo-1	2.4627

Characteristics and field of use

UTP A 6170 Co is particularly used for joining heat resistant and creep resistant nickel base alloys of identical and similar nature, high temperature austenitic and cast alloys, such as

1.4958	X5NiCrAlTi 31 20	UNS N08810
1.4959	X8NiCrAlTi 32 21	UNS N08811
2.4663	NiCr23Co12Mo	UNS N06617

The weld metal is resistant to hot-cracking. It is used for operating temperatures up to 1100 °C. Scale-resistant at temperatures up to 1100 °C in oxidizing resp. carburizing atmospheres, e. g. gas turbines, ethylene production plants.

Typical analysis in %

C	Si	Cr	Mo	Ni	Co	Ti	Al	Fe
0.06	<0.3	22.0	8.5	balance	11.5	0.4	1.0	1.0

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	> 750	> 30	> 120

Welding instruction

Clean welding area carefully. Keep heat input as low as possible and interpass temperature at max. 150 °C.

Approvals

TÜV (No. 05450)

Wire diameter [mm]	Current type	Shielding gas (EN ISO 14175)	
0.8	DC (+)	I 1	Z-ArHeHC-30/2/0.05
1.0	DC (+)	I 1	Z-ArHeHC-30/2/0.05
1.2	DC (+)	I 1	Z-ArHeHC-30/2/0.05
1.6	DC (+)	I 1	Z-ArHeHC-30/2/0.05