

UTP A 6170 Co

NiCrCoMo rods and wires for high temperature materials

Standards :

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

Application field

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

Properties of the weld metal

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.

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	> 750	> 30	> 120

Weld metal 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

Welding instructions

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

Welding procedure and availability

Ø (mm)	Current type	Shielding gas EN ISO 14175			Availability	
		Z-ArHeHC-30/2/0,05	I I	R I	Spools EN ISO 544	Rods L = 1000mm
0,8	DC (+)	x	x		x	
1,0	DC (+)	x	x		x	
1,2	DC (+)	x	x		x	
1,6	DC (+)	x	x		x	
1,6	DC (-)		x	x		x
2,0	DC (-)		x	x		x
2,4	DC (-)		x	x		x
3,2	DC (-)		x	x		x

Approvals

TÜV (No. 05450; 05451)