

MT- 82

2.4806

Nickel chrome iron MIG/TIG wire for welding nickel alloys and cold-tough nickel steels and for joining dissimilar steels, suitable for working temperatures of up to +550°C; cold-tough down to -196°C.

Standard designation

EN ISO 18274	S Ni 6082
Material No	2.4806
AWS/ASME SFA-5.14	ER NiCr - 3

Main fields of application

Nickel chrome alloys, e.g. NiCr 15 Fe (2.4816), NiCr 20 Ti (2.4951); heat-proof austenitic steels, e.g. X 10 NiCrAlTi 32 20 (1.4876); cold-tough nickel steels e.g. X 8 Ni 9 (1.5662), 12 Ni 19 (1.5680), 10 Ni 14 (1.4637), and cold-tough austenitic steels, e.g. X 2 CrNi 19 11 (1.4306), especially if subsequent thermal treatment is required.
Joining austenitic to ferritic steels subjected to working temperatures exceeding +300°C. Joining dissimilar materials, e.g. copper to ferrous metals.

Mechanical properties of all – weld – metal (typical values)

Wlding process		TIG and MIG				
Gas shield		I1				
Thermal treatment		untreated				
Test temperature		[°C]	+20°C	+600°C	-196°C	+20°C
0,2% yield strength	R _{p0,2}	MPa	>295			
Tensile strength	R _m	MPa	>550			
Elongation	A ₅	[%]	>30			
Impact strength	A _v	[J]	LNB			

Average chemical composition of all-weld-metal (%)

Ni	C	Cr	Fe	Mn	Nb	Si	Ti
Basis	0,1	18,0-22,0	3,0	2,5-3,5	2,0-3,0	0,5	0,7

Gas types applicable TIG Gas types applicable MIG

I1
I1

Approvals TIG Approvals MIG

TÜV, CE
TÜV, CE

TIG rod diameters, unit weights

Diameter [mm]	Length [mm]	Kg per box
1,60	1000	10,0
2,00	1000	10,0
2,40	1000	10,0
3,20	1000	10,0

MIG welding wire

Diameter 0,8 mm 1,0 mm 1,2 mm

Welding positions MIG acc.to EN ISO 6947 Welding positions TIG acc.to EN ISO 6947

PA, PB, PF
PA, PB, PC, PF

Current/Polarity TIG

= -

Current/Polarity MIG

= +