

Classifications

Material-No.	EN ISO 18274	AWS A5.14 / SFA-5.14
2.4627	S Ni 6617 (NiCr22Co12Mo9)	ERNiCrCoMo-1

Characteristics and typical fields of application

NiCrCoMo TIG rod used particularly for joining heat-resistant and creep-resistant nickel-base alloys of identical and similar nature, high-temperature austenitic and cast alloys.

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.

Base materials

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

Typical analysis


	C	Si	Cr	Ni	Mo	Co	Ti	Fe	Al
wt.-%	0.06	0.1	22.0	Bal.	8.5	11.5	0.4	1.0	1.0

Mechanical properties of all-weld metal - typical values (min. values)

Condition	Yield strength R _{p0.2}	Tensile strength R _m	Elongation A (L ₀ =5d ₀)	Impact energy ISO-V KV J
	MPa	MPa	%	+20°C
u	> 450	>750	>30	>120

u untreated, as-welded

Operating data

	Polarity	DC-	Dimension mm
	Shielding gas (EN ISO 14175)	I1, R1	1.6 × 1000
	Rod marking	Ni 6617 / ER NiCrCoMo-1	2.0 × 1000
			2.4 × 1000
			3.2 × 1000

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

Approvals

TÜV (05451)