

Classifications

EN ISO 18274	AWS A5.14	Mat. No.
S Ni 6617 (NiCr22Co12Mo9)	ERNiCrCoMo-1	2.4627

Characteristics and typical fields of application

Resistant to scaling up to 1100 °C (2012 °F), high temperature resistant up to 1000 °C (1832 °F). High resistance to hot gases in oxidizing resp. carburizing atmospheres.

For joining and surfacing applications with matching and similar heat resistant steels and alloys.

Base materials

TÜV-certified parent metal

1.4959 – Alloy 800 HT – X8NiCrAlTi32-21;

2.4663 – Alloy 617 (617B) – UNS N06617 – NiCr23Co12Mo

Also heat resistant austenitic steels as: HR3C, Super 304 H, DMV 310 N, DMV 347 HFG and Sanicro 25

Typical analysis of the TIG rods (wt.-%)

	C	Si	Mn	Cr	Mo	Ni	Co	Al	Ti	Fe
wt-%	0.05	0.1	0.1	21.5	9.0	Bal.	11.0	1.3	0.3	0.5

Structure: Austenite

Mechanical properties of all-weld metal

Heat-treatment	Yield strength R _{p0.2}	Tensile strength R _m	Elongation A (L ₀ =5d ₀)	Impact work ISO-V KV J
	MPa	MPa	%	+20 °C
aw	450	700	30	60

Creep rupture properties: According to matching high temperature steels / alloys

Operating data

Polarity:	Shielding gas:	Marks:	ø (mm)	L mm
DC (–)	(EN ISO 14175) I1	✦ Ni 6617 / ERNiCrCoMo-1	2.0	1000
			2.4	1000

Welding instruction

Materials	Preheating	Postweld heat treatment
Matching / similar metals	None	Mostly none. If necessary, solution annealing at 1150 °C (2102 °F)

Approvals

TÜV (06845), CE