

Classifications

EN ISO 14172	AWS A5.11	Mat. No.
E Ni 6617 (NiCr22Co12Mo)	ENiCrCoMo-1 (mod.)	2.4628

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.

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

Base materials

1.4876 – Alloy 800 – UNS N08800 – X10NiCrAlTi32-20
1.4958 – Alloy 800 H – UNS N08810 – X5NiCrAlTi31-20
1.4859 – UNS N08151 – GX10NiCrNb32-20
2.4851 – Alloy 601 – UNS N06601 – NiCr23Fe
2.4663 – Alloy 617 – UNS N06617 – NiCr23Co12Mo

Typical analysis of all-weld metal (wt.-%)

	C	Si	Mn	Cr	Mo	Ni	Co	Al	Ti	Fe
wt.-%	< 0.08	0.7	< 0.5	21.0	9.0	Bal.	11.0	1.2	0.5	1.0

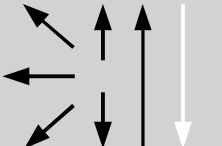
Structure: Austenite

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	400	700	30	100

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

Operating data

	Polarity: DC (+)	ø (mm) 2.5 3.2 4.0	L mm 250 300 350	Amps A 45 – 65 65 – 105 85 – 130
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Welding instruction

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

Approvals

TÜV (06844), CE