

## 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.

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 solid wire (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 <sub>p0.2</sub>	Tensile strength R <sub>m</sub>	Elongation A (L <sub>0</sub> =5d <sub>0</sub> )	Impact work ISO-V KV J
	MPa	MPa	%	+20 °C
aw	400	700	40	100

## Operating data

Polarity:	Shielding gas:	ø (mm)	Spool:
DC ( + )	(EN ISO 14175) I1, M12 (ArHeC-30/0,5)	0.8 1.0 1.2	BS300 BS300 BS300

## Welding instruction

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