

## Classifications

<b>EN ISO 18274</b>	<b>AWS A5.14</b>
S Ni 6617 (NiCr22Co12Mo9)	ERNiCrCoMo-1

## Characteristics and typical fields of application

GMAW solid wire for joining high-temperature and similar nickel-base alloys, heat resistant austenitic and cast alloys, such as 2.4663 (NiCr21Co12Mo), 2.4851 (NiCr23Fe), 1.4876 (X10 NiCrAlTi 32 20), 1.4859 (GX 10 NiCrNb 32 20). The weld metal is resistant to hot-cracking and is used for service temperatures up to +1100 °C. Scale-resistance up to +1100 °C, high temperature resistant up to 1000°C. High resistance to hot gases in oxidizing and carburized atmospheres, e.g. gas turbines, ethylene production plants.

## Base materials

X10NiCrAlTi32-20 (1.4876)  
NiCr23Fe (2.4851)  
GX10NiCrNb32-20 (1.4859)  
NiCr23Co12Mo (2.4663)  
Alloy 617, UNS N06617

## Typical analysis of solid wire (wt.-%)

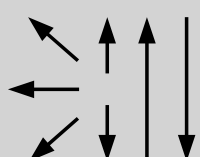
	C	Si	Mn	Cr	Mo	Ni	Co	Al	Ti	Fe
wt.-%	0.06	0.1	0.1	21.8	9.0	Bal.	11.0	1.3	0.3	< 0.5

## Mechanical properties of all-weld metal

Condition	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
u	≥ 400	≥ 620	≥ 40	≥ 100

u untreated, as welded – shielding gas Argon

## Operating data

	<b>Polarity:</b> DC (+)	<b>Shielding gases:</b> 100 % Argon M12 (Argon + 30 % He + 0.5 % CO <sub>2</sub> ) Ar + 28 % He + 2 % H <sub>2</sub> + 0.05 % CO <sub>2</sub>	<b>ø (mm)</b> 1.0 1.2
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## Approvals

TÜV (10551.), CE