

## Classifications

EN ISO 14343-A	EN ISO 14343-B	AWS A5.9
G 13 4	SS(410NiMo)	ER410NiMo (mod.)

## Characteristics and typical fields of application

GMAW solid wire of low-carbon type 13% Cr 4% Ni suited for soft-martensitic steels like 1.4313 / CA 6 NM. Designed with precisely tuned alloying composition creating a weld deposit featuring very good ductility, CVN toughness and crack resistance despite its high strength. For applications like hydro- and steam turbines, corrosion resistant against water and steam.

## Base materials

1.4317 GX4CrNi13-4, 1.4313 X3CrNiMo13-4, 1.4407 GX5CrNiMo13-4, 1.4414 GX4CrNiMo13-4  
ACI Gr. CA 6 NM

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

	C	Si	Mn	Cr	Ni	Mo
wt.-%	0.01	0.65	0.7	12.2	4.8	0.5

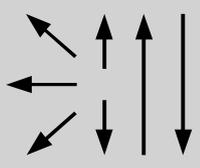
## Mechanical properties of all-weld metal

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	-20°C
u	<b>950</b>	<b>1210</b>	<b>12</b>	<b>36</b>	
a	<b>760 (≥ 500)</b>	<b>890 (≥ 750)</b>	<b>17 (≥ 15)</b>	<b>80</b>	≥ 47

u untreated, as welded – shielding gas Ar + 8 – 10% CO<sub>2</sub>

a annealed, 580°C/8 h / furnace down to 300°C / air – shielding gas Ar + 8 – 10% CO<sub>2</sub>

## Operating data

	<b>Polarity:</b> DC (+)	<b>Shielding gases:</b> Argon + 8 – 10% CO <sub>2</sub>	<b>ø (mm)</b> 1.2
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Preheating and interpass temperatures in case of thick-walled sections 100 – 160°C.

Maximum heat input 15 kJ / cm. Tempered at 580 – 620°C.

## Approvals

SEPROZ, CE