

## Classifications

<b>EN ISO 14343-A</b>	<b>AWS A5.9 / SFA-5.9</b>
G 25 20 Mn	ER310 (mod.)

## Characteristics and typical fields of application

Solid wire of G 25 20 Mn / ER310 (mod.) type for joining and surfacing of matching / similar heat resisting, rolled, forged and cast steels, e.g. in annealing shops, hardening shops, steam boiler construction, crude oil industry and the ceramics industry. The temperature range between 650 – 900°C should be avoided due to the risk of embrittlement.

## Base materials

1.4586 X5NiCrMoCuNb22-18, 1.4710 GX30CrSi6, 1.4713 X10CrAl7, 1.4724 X10CrAl13, 1.4740 GX40CrSi17, 1.4742 X10CrAl18 1.4762 X10CrAl25, 1.4826 GX40CrNiSi22-9, 1.4840 GX15CrNi25-20, 1.4841 X15CrNiSi25-20, 1.4845 X12CrNi25-21, 1.4828 X15CrNiSi20-12, 1.4837 GX40CrNiSi25-12, 1.4840 GX15CrNi25-20, 1.4846 GX40CrNi25-21  
 UNS S31000, S31400, S44600  
 AISI 305, 310, 314, 446

## Typical analysis

	C	Si	Mn	Cr	Ni
wt.-%	0.13	0.9	3.2	24.6	20.5

## Mechanical properties of all-weld metal - typical values (min. values)

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 energy ISO-V KV J	
	MPa	MPa	%	20°C	-196°C
u	400 (≥ 350)	620 (≥ 550)	38 (≥ 20)	95	(≥ 32)

u untreated, as-welded – shielding gas Ar + 2.5% CO<sub>2</sub>

## Operating data

	<b>Polarity</b>	DC+	<b>Dimension mm</b>
	<b>Shielding gas (EN ISO 14175)</b>	M13	0.8
			1.0
			1.2

Preheating and interpass temperatures for ferritic steels 200 – 300°C.

Shielding gas: Ar + 2 – 3% CO<sub>2</sub>

## Approvals

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