

## Classifications

EN ISO 14343-A	EN ISO 14343-B	AWS A5.9	Mat. No.
G 23 12 L Si	SS309LSi	ER309LSi	1.4332

## Characteristics and typical fields of application

Stainless. Well suited for depositing intermediate layers when welding clad materials. Favorably high Cr and Ni contents, low C content. For joining unalloyed/low-alloy steels/cast steel grades or stainless heat resistant Cr steels / cast steel grades to austenitic steels / cast steel grades. For depositing intermediate layers when welding the side of plates clad with low-carbon – non stabilized or stabilized – austenitic CrNiMo(N) austenitic metals.

Application temperature max. 300°C (572 °F).

## Base materials

Joints of and between HSLA, unalloyed and alloyed quenched and tempered, stainless, ferritic Cr and austenitic CrNi steels, high manganese steels as well as weld claddings for the first layer of chemical resistant weld claddings on ferritic-pearlitic steels up to fine grained structural steel S500N for steam boiler and pressure boiler constructions, as well as on creep resistant fine grained structural steels 22NiMoCr4-7 acc. to leaflet "SEW-Werkstoffblatt" No. 365, 366, 20MnMoNi5-5 and G18NiMoCr3-7.

## Typical analysis of solid wire

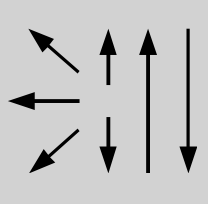
	C	Si	Mn	Cr	Ni
wt-%	0.03	0.9	2.0	24.0	13.0

**Structure:** Austenite with part ferrite

## Mechanical properties of all-weld metal

Heat-treatment	Yield strength R <sub>p0.2</sub>	Yield strength R <sub>p1.0</sub>	Tensile strength R <sub>m</sub>	Elongation A (L <sub>0</sub> =5d <sub>0</sub> )	Impact work ISO-V CVN J
	MPa	MPa	MPa	%	+20 °C
aw	400	430	550	30	55

## Operating data

	<b>Polarity:</b> DC ( + )	<b>Shielding gas:</b> (EN ISO 14175) M12, M13	<b>ø (mm) BS300, S300</b>
			0.8
			0.9
			1.0
			1.2
1,6			

## Approvals

TÜV (12938.), CE