

Classifications

EN ISO 14343-A	AWS A5.9 / SFA-5.9
G 19 9 Nb	ER347

Characteristics and typical fields of application

Solid wire of G 19 9 Nb / ER347 type for joining and surfacing application with matching and similar stabilized and non-stabilized austenitic CrNi(N)-steels and cast steel grades. Service temperatures from -196°C to 400°C.

Base materials

1.4301 X5CrNi18-10, 1.4306 X2CrNi19-11, 1.4311 X2CrNi18-9, 1.4312 GX10CrNi18-8, 1.4541 X6CrNiTi18-10, 1.4546 X5CrNiNb18-10, 1.4550 X6CrNiNb18-10, 1.4552 GX5CrNiNb19-11
 UNS S30400, S30403, S30453, S32100, S34700
 AISI 347, 321,302, 304, 304L, 304LN

Typical analysis

	C	Si	Mn	Cr	Ni	Nb
wt.-%	0.05	0.5	1.8	19.5	9.5	≥ 12×C

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

Condition	Yield strength $R_{p0.2}$	Tensile strength R_m	Elongation A ($L_0=5d_0$)	Impact energy ISO-V KV J
	MPa	MPa	%	20°C
u	400 (≥ 350)	570 (≥ 550)	30 (≥ 25)	65 (≥ 47)

u untreated, as-welded – shielding gas Ar + 2.5% CO₂

Operating data

	Polarity	DC+	Dimension mm
	Shielding gas (EN ISO 14175)	M12 M13	

Suggested heat input is max. 1.5 kJ/mm and interpass temperature max. 100°C.
 Generally no heat treatment needed.

Approvals

-