

Classification

EN ISO 3581-A	EN ISO 3581-B	AWS A5.4
E 19 9 Nb B 2 2	ES347-15	E347-15

Characteristics and typical fields of application

Basic electrode, stabilised core wire alloyed, stainless steel, mainly for Ti and Nb stabilised 1.4541 / 321 / 347 CrNi-steel grades.

Designed to produce first class weld deposits with reliable CVN toughness values down to $-196\text{ }^{\circ}\text{C}$, 100 % X-ray safety together with very good root pass and positional welding characteristics, good gap bridging ability, easy weld pool and slag control as well as easy slag removal even in narrow preparations resulting in clean bead surfaces and minimum post weld cleaning. An excellent electrode for welding on site and for heavy and rigid components.

The product is resistant to intergranular corrosion up to $+400\text{ }^{\circ}\text{C}$.

Base materials

1.4550 X6CrNiNb18-10, 1.4541 X6CrNiTi18-10, 1.4552 GX5CrNiNb19-11, 1.4301 X5CrNi18-10, 1.4312 GX10CrNi18-8, 1.4546 X5CrNiNb18-10, 1.4311 X2CrNi18-10, 1.4306 X2CrNi19-11
AISI 347, 321,302, 304, 304L, 304LN; ASTM A296 Gr. CF 8 C; A157 Gr. C9; A320 Gr. B8C or D

Typical analysis of all-weld metal (wt.-%)

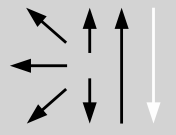
	C	Si	Mn	Cr	Ni	Nb
wt.-%	0.03	0.4	1.3	19.8	10.2	+

Mechanical properties of all-weld metal

Condition	Yield strength $R_{p0.2}$	Tensile strength R_m	Elongation A ($L_0=5d_0$)	Impact work ISO-V KV J	
	MPa	MPa	%	$+20\text{ }^{\circ}\text{C}$	$-196\text{ }^{\circ}\text{C}$
u	470 (≥ 350)	640 (≥ 550)	36 (≥ 25)	110	≥ 32

u untreated, as welded

Operating data

	Polarity: DC (+)	Electrode identification: FOX SAS 2 347-15 E 19 9 Nb B	\varnothing (mm)	L mm	Amps A
			2.5	300	50 – 80
			3.2	350	80 – 110
			4.0	350	110 – 140

Approvals

TÜV (1282.), DB (30.014.04), ABS (Cr18/21, Ni8/11, TaNb.1.1), GL (4550), LTSS, SEPROZ, CE