

Classifications

EN ISO 3581-A	AWS A5.4 / SFA-5.4
E 19 9 H R 4 2	E308H-16

Characteristics and typical fields of application

Rutile basic core wire alloyed electrode for the use of high temperature CrNi austenitic steel for service temperatures up to +700 °C. Specially designed for the base metal AISI 304H (W. no. 1.4948). Controlled ferrite content of 3-8 FN. The deposit is insusceptible to embrittlement and scaling.

Excellent weld ability in all position except vertical down.

Base materials

Similar alloyed creep resistant steels

1.4948 X6CrNi18-11, 1.4878 X8CrNiTi18-10, 1.4940 X7CrNiTi18-10; 1.4912 X7CrNiNb18-10
AISI 304, 304H, 321H, 347H

Typical analysis of all-weld metal

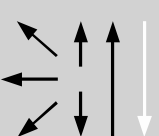
	C	Si	Mn	Cr	Ni
wt.-%	0.05	0.60	0.80	19.80	10.20

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 work ISO-V KV J
	MPa	MPa	%	+20 °C
u	420 (≥ 350)	580 (≥ 550)	40 (≥ 30)	70 (≥ 32)

u untreated, as welded

Operating data

	Polarity:	Redrying if necessary:	Electrode identification:	ø mm	L mm	Amps A
	DC (+)	120 – 200 °C, min. 2 h	FOX E 308 H-16 E 19 9 H R	2.5	300	45 – 75
	AC			3.2	350	70 – 110
				4.0	350	110 – 145

Preheating is not required; only in case of wall thickness above 25 mm preheat up to 150 °C. Interpass temperature should not exceed 200 °C.

Approvals

TÜV (11178.); CE