Thermanit ATS 4

Stick electrode, high-alloyed, basic

Classifications

EN ISO 3581-A	AWS A5.4	Mat. No.
E 19 9 H B 2 2	E308H-15	≈1.4948

Characteristics and typical fields of application

High temperature resistant up to 700 °C (1292 °F); resistant to scaling up to 800 °C (1472 °F).
For surfacing and joining applications on matching / similar high temperature resistant steels / cast steel grades.

Characteristics and typical fields of application

TÜV certified parent metals

1.4948 – X6CrNi18-11; 1.4878 – X12CrNiTi18-9

1.4550 – X6CrNiNb18-10; AISI 304, 304H, 321H, 347H

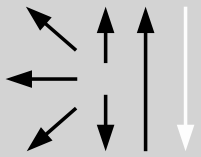
Typical analysis of all-weld metal (wt.-%)

	C	Si	Mn	Cr	Ni
wt-%	0.05	0.3	1.6	18.5	9.5

Mechanical properties of all-weld metal

Heat-treatment	Yield strength $R_{p0.2}$	Yield strength $R_{p1.0}$	Tensile strength R_m	Elongation A (L_0=5d_0)	Impact work ISO-V KV J
	MPa	MPa	MPa	%	+20 °C
aw	350	390	550	35	70

Operating data



Polarity:	ø (mm)	L mm	Amps A
DC (+)	2.5	300	55 – 80
	3.2	350	80 – 105
	4.0	350	90 – 135
	5.0	450	150 – 190

Welding instruction

Materials	Preheating	Postweld heat treatment
Matching / similar steels / cast steel grades	Up to 25 mm wall thickness: none. Over 25 mm wall thickness: max. 200 °C (392 °F) advisable	Up to 25 mm wall thickness: none. Over 25 mm wall thickness: to avoid stress corrosion cracking 1050 °C (1922 °F) / air

Approvals

TÜV (01526), CE