4551 Ti

CATEGORY	SMAW Stick Electrodes
TYPE	Corrosion-resistant alloy for stabilized Cr-Ni steels
APPLICATIONS	The electrode is suitable for welding austenitic corrosion-resistant stabilized Cr-Ni steels for working temperatures up to 400° C
PROPERTIES	The weld deposit is scale-resistant up to approx. 800°C in normal atmosphere and oxidizing gases. The weld deposit is capable of taking a high polish

CLASSIFICATION

AWS	A 5.4: E 347–17
EN ISO	3581-A: E 19 9 Nb R 12
DIN: W.Nr.	1.4551
DIN	8556: E 19 9 Nb R23

SUITABLE FOR

1.4306	X2CrNi 19 11	(TP) 304L
1.4301	X4CrNi 18 10	(TP) 304
1.4541	X6CrNiTi 18 10	(TP) 321
1.4550	X6CrNiNb 18 10	(TP) 347
1.4552	G-X5CrNiNb 19 10	CF-8C, 302
1.4312	G-X10CrNi 18 8	(TP) 302
1.4546	X5CrNiNb 18 10	-
1.4311	X2CrNiN 18 10	

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⇒1.4303, 1.4308, 1.4310, 1.4312, 1.4319

APPROVALS: CE approved

WELDING POSITIONS:

WELD DEPOSIT WEIGHT %

C	Mn	Si	Cr	Ni	Mo	Nb
>0.03	0.8	0.8	18-20	10	-	10 x %C

MECHANICAL PROPERTIES

Heat Treatment	$R_{P0,2}$ (N/mm²)	Rm (N/mm²)	A5 (%)	Impact Energy (J) ISO-V 20°C	-40°C	-120°C	Hardness HRc / HV
AW	>380	>540	33-37	>50		>32	

AW: as welded

WELDING PARAMETERS / PACKING

Welding Parameters			Packing		
D (mm)	Length (mm)	Current (A) DC+/AC	kg / can	kg / 6pack	kg / 1000
2.5	300	50-90	2.4	14.4	18.8
3.2	350	80-110	2.8	16.8	35.6
4.0	350	100-150	2.7	16.2	54
5.0	450	150-200			107.1

REDRYING TEMPERATURE: 300°C/2hr (not often required).