

DESCRIPTION

- Highly basic agglomerated flux designed for the welding of stabilised and unstabilised austenitic stainless steel as well as “duplex” and “super-duplex” alloys.
- Excellent technological behaviour and good mechanical proprieties.
- Easy slag removal and good wetting properties.

GENERAL CHARACTERISTICS

- Current DC (+ and -) and AC – 900 A max.
- Basicity index 2.2 (according to Bonizewski; calculated in mole %)
- Grain size 0.4 – 1.4 mm (14 x 40 N° ASTM)
- Apparent density 1.0
- Consumption 0.65 (kg fused flux / kg wire)
- Redrying 1 to 2 hours at 350 +/- 50°C

APPROVALS

TYPICAL WELD METAL ANALYSIS OF WIRE/FLUX COMBINATION (WEIGHT%)

Wire	SFA 5.9 SFA 5.14	EN ISO 14343-A EN ISO 18274	C	Mn	Si	Cr	Ni	Mo	Nb	N	Fe	FN
Thermanit JE-308L Weld metal	ER 308 L	S 19 9 L	0.015 0.020	1.60 1.20	0.40 0.60	20.0 19.5	10.0 9.6	- -	- -	- -	Bal. Bal.	- 5
Thermanit GE-316 L Weld metal	ER 316 L	S 19 12 3 L	0.015 0.020	1.70 1.20	0.35 0.60	18.2 18.0	12.2 11.6	2.60 2.50	- -	- -	Bal. Bal.	- 5
Thermanit H-347 Weld metal	ER 347	S 19 9 Nb	0.030 0.030	1.40 1.10	0.45 0.60	19.2 18.8	9.6 9.3	- -	0.60 0.50	- -	Bal. Bal.	- 5
Thermanit A Weld metal	ER 318	S 19 12 3 Nb	0.040 0.030	1.25 1.00	0.40 0.60	18.5 18.1	11.5 11.1	2.50 2.45	0.50 0.45	- -	Bal. Bal.	- 5
Thermanit 22/09 Weld metal	ER 2209	S 22 9 3 L	0.012 0.020	1.70 1.20	0.25 0.50	23.0 22.0	9.2 9.0	3.00 2.80	- -	0.15 0.12	Bal. Bal.	- 35
Thermanit 25/07CUT Weld metal	-	S 25 9 4 L	0.020 0.020	0.50 0.40	0.30 0.40	25.0 24.0	9.5 9.2	4.00 3.90	- -	0.25 0.22	Bal. Bal.	- 45
Thermanit 25-14 E-309L Weld metal	ER 309 L	S 23 12 L	0.015 0.020	1.80 1.25	0.40 0.60	23.6 22.8	13.6 12.9	- -	- -	- -	Bal. Bal.	- 10
UP 6222 Mo Weld metal	ER NiCrMo-3	SNi6625	0.010 0.012	0.02 0.026	0.05 0.31	22.4 21.6	Bal. Bal.	9.3 9.1	3.4 3.1	- -	0.20 1.5	- -

TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES

Wire	Rm [MPa]	Rp0.2 [MPa]	A5 [%]	Av [ISO – V]			
				+ 20° C	-40° C	-105°C	-196° C
Thermanit JE-308L	540	380	42	110 J	-	-	40 J
Thermanit GE-316 L	580	400	40	95 J	-	-	40 J
Thermanit H-347	610	420	38	100 J	-	60 J	35 J
Thermanit A	600	430	38	100 J	-	80 J	40 J
Thermanit 22/09	780	570	32	130 J	100 J	-	-
Thermanit 25/07 CUT	850	650	28	100 J	75 J	-	-
Thermanit 25-14 E-309L	560	420	40	80 J	-	-	-
UP 6222 Mo	730	485	45	115 J	-	-	90J

APPLICATIONS

Base metal	UNS	DIN	W. – Nr.	Wires								
				Thermanit JE-308L	Thermanit GE-316 L	Thermanit H-347	Thermanit A	Thermanit 25-14 E-	Thermanit 22/09	Thermanit 25/07 CUT	UP 6222 Mo	
302	S30200	X12 CrNi 18 8	1.4300	x	-	-	-	-	-	-	-	-
304	S30400	X5 CrNi 18 10	1.4301	x	-	-	-	x	-	-	-	-
304L	S30403	X2 CrNi 18 11	1.4306	x	-	-	-	x	-	-	-	-
-	J92600	G – X6 CrNi 18 9	1.4308	x	-	-	-	x	-	-	-	-
304LN	S30453	X2 CrNiN 18 10	1.4311	x	-	-	-	x	-	-	-	-
(305)	J92701	G – X10 CrNi 18 8	1.4312	x	-	-	-	x	-	-	-	-
308	S30800	X5 CrNi 18 11	1.4303	x	-	-	-	-	-	-	-	-
304H	S30409	X6 CrNi 18 11	1.4948	x	-	-	-	-	-	-	-	-
316	S31600	X5 CrNiMo 17 12 2	1.4401	-	x	-	-	-	-	-	-	-
316L	S31603	X2 CrNiMo 17 13 2	1.4404	-	x	-	-	-	-	-	-	-
-	J92900	G – X6 CrNiMo 18 10	1.4408	-	x	-	-	-	-	-	-	-
317L	S31703	X2 CrNiMo 18 16 4	1.4435	-	x	-	-	-	-	-	-	-
317	S31700	X5 CrNiMo 17 13 3	1.4436	-	x	-	-	-	-	-	-	-
316Ti	S31635	X6 CrNiMoTi 17 12 2	1.4571	-	x	-	x	-	-	-	-	-
316Ti	S31635	X10 CrNiMoTi 18 12	1.4573	-	x	-	x	-	-	-	-	-
(318)	S31640	X10 CrNiMoNb 18 12	1.4583	-	x	-	x	-	-	-	-	-
(318)	S31640	X5 CrNiMo 17 13	1.4449	-	x	-	x	-	-	-	-	-
(318)	S31640	G - X5 CrNiMoNb 18 10	1.4581	-	x	-	x	-	-	-	-	-
321	S32100	X10 CrNiTi 18 9	1.4541	x	-	x	-	x	-	-	-	-
347	S34700	(X5 CrNiNb 18 9)	(1.4543)	x	-	x	-	x	-	-	-	-
347	S34700	X6 CrNiNb 18 10	1.4550	x	-	x	-	x	-	-	-	-
-	-	G – X5 CrNiNb 18 9	1.4552	x	-	x	-	-	-	-	-	-
(329LN)	S31803	X2 CrNiMoN 22 5 3	1.4462	-	-	-	-	-	x	x	-	-
329	S32900	(X4 CrNiMoN 27 5 2)	(1.4460)	-	-	-	-	-	x	-	-	-
-	S31500	X2 CrNiMoSi 19 5	1.4417	-	-	-	-	-	x	-	-	-
-	-	X4 CrNiMoNb 25 7	1.4582	-	-	-	-	-	x	x	-	-
-	-	G – X6 CrNiMo 24 8 2	1.4463	-	-	-	-	-	x	x	-	-
-	-	G – X8 CrNi 26 7	1.4347	-	-	-	-	-	x	x	-	-
35N	S32304	-	-	-	-	-	-	-	x	x	-	-
2507	S32750	G – X2 CrNiMoN 25 7 4	1.4469	-	-	-	-	-	-	x	-	-
-	-	G – X3 CrNiMoN 26 6 3	1.4468	-	-	-	-	-	-	x	-	-
100	S32760	X2 CrNiMoCuW 25 7 3	-	-	-	-	-	-	-	x	-	-
-	J92602	G – X25 CrNiSi 18 9	1.4825	-	-	-	-	x	-	-	-	-
-	J92603	G – X40 CrNiSi 22 9	1.4826	-	-	-	-	x	-	-	-	-

Flux for joining and cladding

309	S30900	X15 CrNiSi 20 12	1.4828	-	-	-	-	x	-	-	-
-	-	G – X25 CrNiSi 20 14	1.4832	-	-	-	-	x	-	-	-
-	-	X10 CrSi6	1.4712	-	-	-	-	x	-	-	-
-	-	X10 CrAl 13	1.4724	-	-	-	-	x	-	-	-
-	-	X10 CrAl 18	1.4742	-	-	-	-	x	-	-	-
625	N06625	NiCr22Mo9Nb	2.4856	-	-	-	-	-	-	-	x

PACKING

25 kg (pail) : SAP stock number : 29071

25 kg (bag) : SAP stock number : 29072