

SUPRANOX



Premium Quality **Stick Electrodes**
range for Stainless Welding



*Available in both rutile -17
and semi-basic -16 types*

www.oerlikon-welding.com

Premium Quality Stick Electrodes range for Stainless Welding

The success of a stainless steel stick electrode is determined by the appreciation of both welders and welding engineers/management. Both groups have different requirements: welders want a user friendly electrode that does the job without defects and consequent repairs; welding engineers and the management want an efficient and reliable solution for the quality requirements they have to fulfil.

The most important requirements are:

- Electrode easy to bend slightly, without cracking of the coating
- Easy striking, no sticking electrodes/extinguishing arc
- Stable arc that is easy to direct
- No spatter
- Good side wall wetting, no undercut
- Good slag detachability, no shooting slag
- Pore free weld metal

Application	Electrode/weld metal Characteristic	Preferred electrode range	Coating type
Downhand fillets and filling of joints	Excellent bead shape/ slag release	Supranox	-17 Rutile
All position welding	Excellent side all wetting/ arc stability	Supranox RS	-16 Semi-basic



SUPRANOX

Specification



Application	Material Description	ISO	AWS	Cr	Ni	Mn	Si	C	Mo	Nb	N	Cu	Fn
STANDARD AUSTENITIC	SUPRANOX 308L	E 19 9 L R 12	E308L-17	19,8	9,5	0,9	0,8	0,025	-	-	-	-	5-10
	SUPRANOX RS 308L	E 19 9 L R 12	E308L-16	19,8	9,5	0,9	0,8	0,025	-	-	-	-	5-10
	SUPRANOX 316L	E 19 12 3 L R 12	E316L-17	19,0	12,0	0,9	0,8	0,035	2,6	-	-	-	5-10
	SUPRANOX RS 316L	E 19 12 3 L R 12	E316L-16	19,0	12,0	0,9	0,8	0,035	2,6	-	-	-	5-10
DISSIMILAR; MAINTENANCE & REPAIR; DIFFICULT TO BE WELDED; ARMOUR PLATES	SUPRANOX 309L	E 23 12 L R 12	E309L-17	23,5	12,2	0,9	0,8	≤0,040	-	-	-	-	5-20
	SUPRANOX RS 309L	E 23 12 L R 12	E309L-16	23,5	12,2	0,9	0,8	≤0,040	-	-	-	-	5-20
	SUPRANOX RS 312	E Z (29 9) R 12	E312-16*	28,0	12,0	1,0	1,2	0,08	-	-	-	-	25-50
	SUPRANOX RS 307	E 18 8 Mn R 12 E Fe10	E307-16*	18,0	9,0	5,0	1	0,12	-	-	-	-	-
	SUPRANOX 309LMo	E 23 12 3 L R 22	E309LMo-17	22,7	12,5	0,9	0,9	0,03	2,3	-	-	-	10-25
	SUPRANOX RS 309LMo	E 23 12 2 L R 12	E309LMo-16	22,7	12,5	0,9	0,9	0,03	2,3	-	-	-	10-25
AUSTENITIC	SUPRANOX RS 310	E 25 20 R 12	E310-16	27,0	21,0	1,7	0,6	0,1	-	-	-	-	-
	SUPRANOX RS 317L	E Z (19 13 4 N L) R 12	E317L-16	20,0	13,0	0,9	0,8	0,025	3,4	-	-	-	5-10
STABILIZED; HIGH TEMPERATURE	SUPRANOX RSL 347	E 19 9 Nb R 12	E347-16	18,0- 21,0	9,0- 11,0	0,5- 2,0	0,5- 0,9	≤0,05	≤0,075	0,4	-	-	5-10
	SUPRANOX RS 347*	E 19 9 Nb R 12	E347-16	19,5	10,0	0,8	0,6	0,05	-	0,4	-	-	5-10
	SUPRANOX RS 318	E 19 12 3 Nb R 12	E318-16	19,0	11,5	0,8	0,9	≤0,03	2,7	0,4	-	-	5-15
	SUPRANOX RS 308H	E 19 9 H R 12	E308H-16	19,5	9,5	0,9	0,8	0,05	-	0,4	-	-	3-8
DUPLEX; SUPERAUSTENITIC	SUPRANOX RS 22 9 3 N	E 22 9 3 N L R 12	E2209-16	22,5	9,5	0,9	0,9	0,025	2,8	-	0,14	-	30-55
	SUPRANOX RS 904L	E 20 25 5 Cu N L R 53	E385-16	21,0	24,0	21,0	0,4	≤0,03	4,5	-	0,14	1,5	-

*chemical composition matching High temperature service requirements



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