



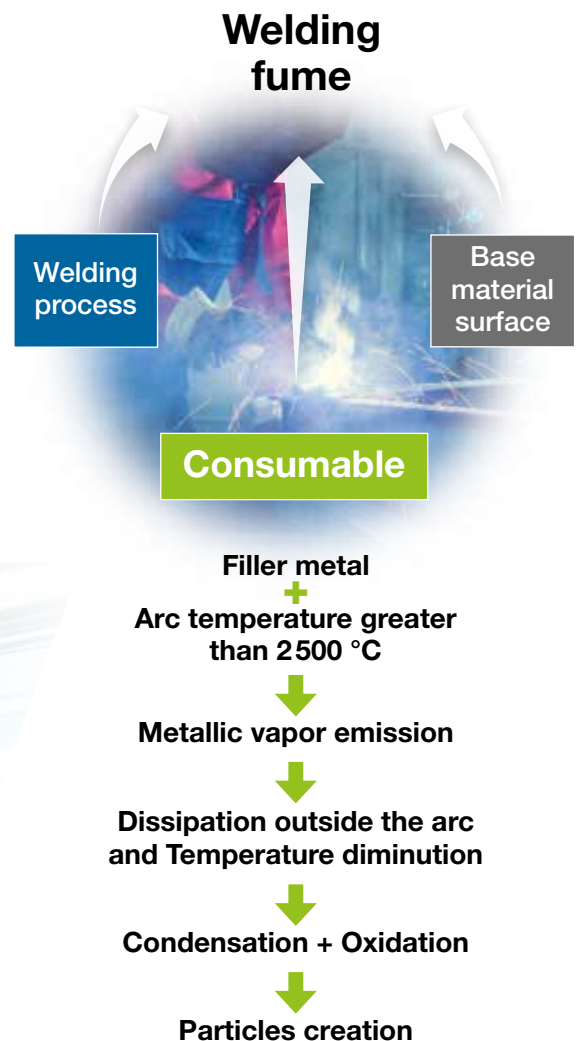
SAF-FRO

SKYNOX RANGE

*Low Hexavalent
Chromium Emission
Consumables*

Help employers create a safer welding environment is a priority

Welding fume emission rates are influenced by different factors such as welding consumables, welding process selection & parameters and base materials. It is important to understand each factor and their influence in fume emission rate in order to reduce generation of CrVI in the fume. Ensure the base material is clean, optimize your welding parameters for the application and use the **SKYNOX product range**, one of the most advanced consumables in reducing overall fume emission rates and the concentration of CrVI in the welding fume.



How can I reduce CrVI in welding fume ?

SKYNOX consumables reduce the CrVI emission rate. Use of **SKYNOX** products **in conjunction with a fume control strategy** to minimize worker exposure to CrVI in welding fume.

LOWER HEXAVALENT
CHROMIUM CONCENTRATION

MMA range SKYNOX E

Available in 308L, 316L and 309L

Double coated stick electrodes

High operator appeal and control due to the more stable and focused arc transfer:

- Suitable for root pass
- Lower porosity
- Good striking and re striking
- Excellent slag removal

Bead appearance after welding

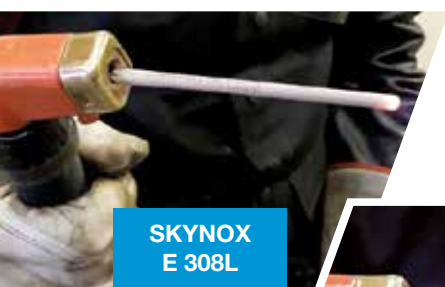
- Excellent behaviour in flat position
- Good striking and re striking
- Excellent slag removal
- Low fumes residues along bead line thus less cleaning



SKYNOX E 308L

Competition E 308L-17

Higher efficiency



- Lower overheating
- Lower stub end thus saving



SKYNOX E 308L

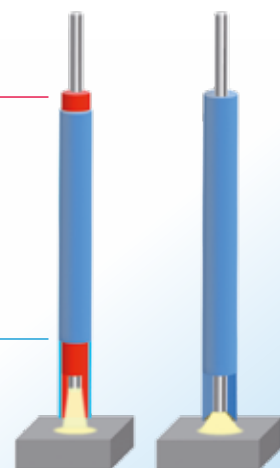
Competition E 308L-17

Understanding double-coated technology

Inside coat provides:

- better arc protection due to greater depth of the cone that is formed between the outer coating and core
- high arc "stiffness" and burning stability
- stable and low-spatter drop transition

Outside coat provides a slag metallurgically effective



Available In DRY PACK

- No rebaking, no holding oven and no quiver
- Can be used right after opening and during 8h



Ordering information

Product name	Ø (mm)	Length (mm)	Quantity		Reference
			Per pack	Per Box	
SKYNOX E 308L	2.5	300	90	540	W000387163
	3.2	350	55	330	W000387164
	4	350	40	240	W000387165
	5	350	20	120	W000387166
SKYNOX E 316L	2.5	300	90	540	W000387171
	3.2	350	55	330	W000387172
	4	350	40	240	W000387173
	5	350	20	120	W000387174
SKYNOX E 309L	2.5	300	90	540	W000387167
	3.2	350	55	330	W000387168
	4	350	40	240	W000387169
	5	350	20	120	W000387170

Specifications

Product name	AWS A 5.4	ISO 3581-A	Chemistry								Typical Ferrite	Mechanical properties			
			C	Mn	Si	Cr	Ni	Mo	S	P		RP0.2	RM	Elongation (%)	Impact toughness (J)
SKYNOX E 308L	E 308L-17	E 19 9 L R 22	0.03	0.8	1	19.5	10	-	0.01	0.025	5-10 (6)	450	570	40	60J @ +20 °C
SKYNOX E 316L	E 316L-17	E 19 12 3 L R 22	0.03	0.8	1	19.5	10	2.7	0.01	0.025	5-10 (8)	450	570	40	60J @ +20 °C
SKYNOX E 309L	E 309L-17	E 23 12 L R 22	0.03	0.9	1	24.0	13	-	0.01	0.025	8-15 (11)	480	580	40	55J @ +20 °C

FCAW range SKYNOX F

Available in 308L, 316L and 309L

Features

High operator appeal and control due to the more stable and focused arc transfer:

- As unparalleled consistency in weldability and mechanical properties as standard grades
- Eliminates typical disadvantages of GMAW and SMAW welding (lack of penetration, cold laps, slag inclusions)
- Reduced welding cost compared to GMAW, standard M21 shielding gas is used
- Works better than GMAW both on standard CV and pulse welding modes
- Very good weld appearance and regularity
- Optimal slag system helps to achieve best results



Specifications

Product name	Chemistry								Typical Ferrite	Mechanical properties						
	C	Mn	Si	Cr	Ni	Mo	S	P	WRC -92	RP0.2	RM	Elongation (%)	Impact toughness (J)			
													-20 °C	-60 °C	-110 °C	-196 °C
SKYNOX F 308L	0.03	1.3	0.7	19.5	10	-	0.01	0.02	3-12 (7)	400	570	45	50	-	-	30
SKYNOX F 316L	0.03	1.3	0.7	18.5	12	2.7	0.01	0.02	3-12 (7)	470	580	35	50	-	38	-
SKYNOX F 309L	0.03	0.8	0.7	23.0	13	-	0.01	0.02	10-30 (14)	400	550	40	45	40	-	-

Ordering information

Product name	AWS 5.22	EN ISO	Ø (mm)	Weight (kg)	Reference
SKYNOX F 308L	E308LT1-1	17633-A: T 19 9 L P C 1	1.2	15	W000387178
	E308LT1-4	17633-A: T 19 9 L P M 1			
		17633-B: TS308L-FB1			
SKYNOX F 316L	E316LT1-1	17633-A: T 19 12 3 L P C 1	1.2	15	W000387180
	E316LT1-4	17633-A: T 19 12 3 L P M 1			
		17633-B: TS316L-FB1			
SKYNOX F 309L	E309LT1-1	17633-A: T 19 12 3 L P C 1	1.2	15	W000387179
	E309LT1-4	17633-A: T 19 12 3 L P M 1			
		17633-B: TS316L-FB1			

Recommended starting parameters

Welding position	WFS (m/min)	Current (A)	Voltage (V)	Travel speed (cm/min)
PF	7 - 9	160 - 180	25.5 - 26.5	12 - 16

EXPOSURE
TO CrVI REDUCED



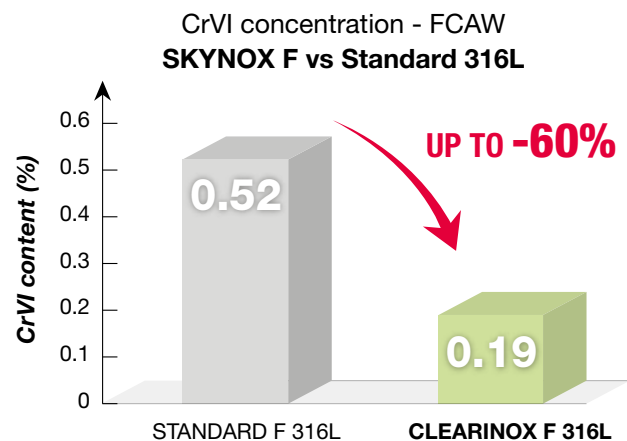
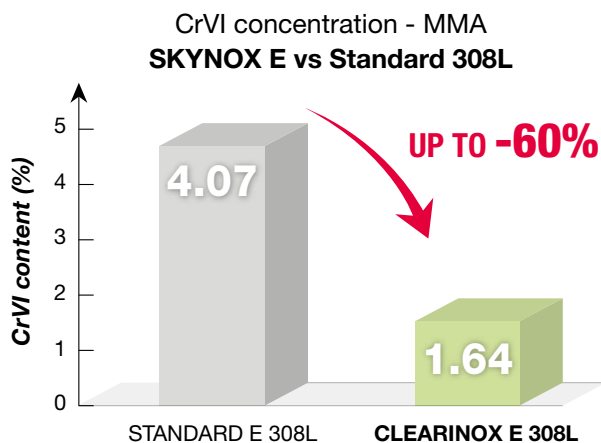
SKYNOX

Innovative range of stick electrodes and flux-cored wires
which significantly reduce your welding fume and emission of CrVI.

Comparative fume characteristics

Results generated by TWI (The Welding Institute Ltd), Cambridge UK, June 2016.

- Suitable for root pass
- Emission rate testing according to EN ISO 15011-1,4
- Fumes analysis according to BS ISO 16740:2005
- Welding performed with an inverter on degreased stainless steel (AISI 304)
- Welding conditions:
 - Electrode: 115 A - 29V
 - Flux cored wire: 200 A - 28V
 - Gas protection: M21
- A reduction up to -40% is also observed for fume rate using SKYNOX range
- Comparable results in fume emission and CrVI concentration between 308L, 316L and 309L

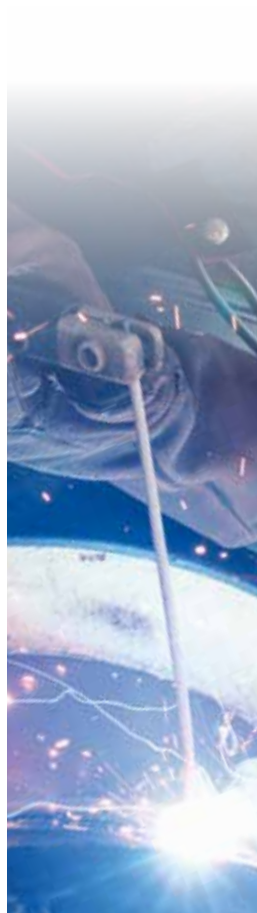


PURE STREAM fume management in 3 steps

1. Optimization
2. Ventilation & exhaust
3. Safe work practice and PPE

When used properly, our solutions can significantly reduce the amount of fumes inhaled by welders.





www.saf-fro.com

CUSTOMER ASSISTANCE POLICY

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