

Flux 801

For welding with submerged arc wire such as
Avesta Welding

308L/MVR, 347/MVNB, 316L/SKR, 318/SKNb, 309L and P5

Standard designation

EN 760 SA CS 2 Cr DC

Characteristics

AVESTA Flux 801 is a neutral chromium-compensated agglomerated flux. It is a general-purpose flux designed for both joint welding stainless steel and for cladding onto unalloyed or low-alloyed steel.

Flux 801 can be used in combination with all types of stabilised and non-stabilised Cr-Ni and Cr-Ni-Mo fillers. It provides neat weld surfaces, very good welding properties and easy slag removal.

Flux 801 is chromium-alloyed to compensate for losses in the arc during welding.

- Bulk density: 0.8 kg/dm³
- Basicity index: 1.0 (Boniszewski)
- Flux consumption: 0.4 kg flux/kg wire (26 V)
0.7 kg flux/kg wire (34 V)

Welding data

Diameter mm	Current A	Voltage V	Speed cm/min
2.40	300 – 400	29 – 33	40 – 60
3.20	350 – 500	29 – 33	40 – 60
4.00	400 – 600	30 – 36	40 – 60

Flux care

The flux should be stored indoors in a dry place. Moist flux can be redried at 250 – 300°C for 2 hours. Both heating and cooling must be carried out slowly.

Chemical composition, all weld metal (typical values, %)

SA wire	C	Si	Mn	Cr	Ni	Mo	FN
308L/MVR	0.02	0.9	1.0	20.0	9.5	–	13 ¹⁾
316L/SKR	0.02	0.9	1.0	19.0	12.0	2.6	13 ¹⁾

¹⁾ According to DeLong.

Mechanical properties

Typical values (IIW) in combination with

SAW wire	308L/MVR	316L/SKR
Yield strength R _{p0,2}	440 N/mm ²	430 N/mm ²
Tensile strength R _m	590 N/mm ²	580 N/mm ²
Elongation A ₅	37 %	36 %
Impact strength KV		
+20°C	65 J	70 J
–196°C	30 J	–
Hardness	200 Brinell	210 Brinell

Approvals

In combination with SAW wire

308L/MVR	• CE	• DNV	• TÜV
347/MVNB	• CE	• TÜV	
316L/SKR	• CE	• DNV	• TÜV
318/SKNb	• CE	• TÜV	
P5	• DNV		
P7	• DNV		