

For welding with submerged arc wire such as:

Avesta Welding
2205, 2507/P100, 904L, P12 and P16, but also with 308L/MVR, 347/MVNB, 316L/SKR, 318/SKNb, 309L, 309L-HF and P5

#### CHARACTERISTICS

AVESTA FLUX 805 is a basic, slightly chromium-compensated agglomerated flux. It is primarily designed for welding with high-alloyed stainless fillers such as AVESTA P12, 904L and 2205. Standard Cr-Ni and Cr-Ni-Mo fillers can also be welded with excellent results. Flux 805 is especially suitable for applications where high impact strength values are required.

Flux 805 provides neat weld surfaces, very good welding properties and easy slag removal.

- Bulk density: 1.0 kg/dm<sup>3</sup>
- Basicity index: 1.7 (according to Boniszewski)
- Flux consumption: 0.5 kg flux/kg wire (26 V)  
0.8 kg flux/kg wire (34 V)

#### Welding data

Diam. 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

When welding high-alloyed grades, such as Avesta P12, current should be kept at the lower range. For further recommendations, please contact Avesta Welding.

#### FLUX CARE

AVESTA FLUX 805 is supplied in plastic-lined paper bags containing 25 kg. 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.

#### Standard designation

EN 760 SA AF 2 Cr DC

#### Typical weld metal composition, %

	C	Si	Mn	Cr	Ni	Mo	FN
316L/SKR	0.02	0.6	1.2	19.0	12.0	2.5	13 <sup>(1)</sup>
2205	0.02	0.6	1.1	23.0	8.5	3.0	50 <sup>(2)</sup>
P12	0.01	0.1	0.1	22.0	65	8.5	-

1. Ferrite according to Schaeffler-DeLong

2. Ferrite according to WRC-92

#### Mechanical properties – Typical values (IIW)

	316L/SKR	2205
Yield strength, R <sub>p0.2</sub>	410 N/mm <sup>2</sup>	590 N/mm <sup>2</sup>
Tensile strength, R <sub>m</sub>	590 N/mm <sup>2</sup>	800 N/mm <sup>2</sup>
Elongation, A <sub>5</sub>	35 %	28 %
Impact strength, KV	+20°C	75 J
	-40°C	- J
	-196°C	35 J
		- J

#### Approvals

In combination with SA wire

309L-HF	DNV
316L/SKR	DNV, TÜV
P5	DNV
2205	DNV, Svetskommissionen, TÜV, UDT
904L	TÜV
P12	UDT