

FCAW/MCAW Cored Wires
C-Mn and low-alloy steels

FLUXOFIL 31 is a seamless copper coated basic flux cored wire. The operating features produce very crack resistant and tough welded joints with very low hydrogen content, especially when welding steels with a higher carbon content. Pore-free welds with easy slag removal. Weld metal with very low content of diffusible hydrogen (HD< 3 ml/100g deposited weld metal). A low-slag variant FLUXOFIL 31 S is available to order.

Classification	
EN ISO	17632-A: T 42 4 B C 2 H5
EN ISO	17632-A: T 42 4 B M 2 H5
EN ISO	17632-B: T494T5-1CA-UH5
EN ISO	17632-B: T494T5-1MA-UH5
AWS	A5.20: E70T-5C-JH4
AWS	A5.20: E70T-5M-JH4
AWS	A5.36: E70T5-C1A4-CS1-H4
AWS	A5.36: E70T5-M21A4-CS1-H4

Approvals	Grade
ABS	3YSA H5
BV	SA3-3YM H5
DB	●
DNV	IIY40MS H5
GL	3YH5S
LRS	3S-3YS-H5
PRIS	3S-3YS H5
TÜV	●

CE

Chemical analysis (Typical values in %)

	C	Mn	Si	P	S
All weld metal (**)	0.05	1.2	0.3	≤ 0.010	≤ 0.010

(**) 100% CO2

All-weld metal Mechanical Properties

Heat Treatment	Yield Strength (MPa)	Tensile Strength (MPa)	Elongation A5 (%)	Impact Energy ISO - V (J)	
				-40 °C	
As Welded	≥ 420	500-640	≥ 25	≥ 80	

Gas test: 100% CO2

Shielding Gas - EN ISO 14175 : M21,C1

Materials

S(P)235-S(P)420, GP240-GP280

Storage

Keep dry and avoid condensation

Current condition and welding position

DC-



PA

PB

PC

PD

PE

PF

Packaging data

Packaging Type	B300
Diam(mm) / weight(kg)	16
1.2	W000281166
1.4	W000281168
1.6	W000281169