

MIG/MAG Cored Wires C-Mn and low-alloy steels

FLUXOFIL 20HD is a seamless copper coated rutile flux cored wire for gas-shielded metal arc welding of fine grain steels with operating temperatures from -40°C up to +450°C. The enhanced degree of fill, results in a higher current carrying capacity and deposition rate. It can be welded in all positions using only one parameter setting (24 volts, wire feed 9 m/min, wire dia. 1,2 mm). The weld metal produced features excellent mechanical-technological properties and a hydrogen content of hydrogen < 5 ml per 100g deposited weld metal. Low spatter loss, easy slag removal producing finely rippled, pore-free welds without undercut. To be used under mixed gas

Classification	
EN ISO	17632-A: T 46 4 1Ni P M 1 H5
EN ISO	17632-B: T554T1-1MA-N1-UH5
AWS	A5.29: E81T1-Ni1M-JH4

Approvals	Grade
ABS	4Y46SA H5
BV	SA4Y46M H5
DB	●
DNV	IVY46MS H5
GL	4Y46H5S
LRS	4Y46S H5
RMRSS	4Y46S H5
TÜV	●

CE

Chemical analysis (Typical values in %)

C	Mn	Si	P	S	Ni
0.06	1.3	0.4	≤ 0.010	≤ 0.010	≤ 0.9

All-weld metal Mechanical Properties

Heat Treatment	Yield Strength (MPa)	Tensile Strength (MPa)	Elongation A5 (%)	Impact Energy ISO - V (J)	
				-40 °C	
As Welded	≥ 480	570-680	≥ 24	≥ 80	
580 °C x 2 h/f.	≥ 480	570-670	≥ 22	≥ 100	

Gas test: 82% Ar+18% CO2

Shielding Gas - EN ISO 14175 : M21

Materials

S(P)275-S(P)460

X42 - X70

Storage
Keep dry and avoid condensation

Current condition and welding position							
DC+							
PA	PB	PC	PD	PE	PF	PG	

Packaging data

Packaging Type	B300
Diam(mm) / weight(kg)	16
1,6	●
1,2	●
1,4	●