

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

FLUXOFIL 21HD 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 CO₂ gas.

Classification	
EN ISO	17632-A: T 46 4 1Ni P C 1 H5
EN ISO	17632-B: T554T1-1CA-N1-UH5
AWS	A5.29: E81T1-Ni1C-JH4

Approvals	Grade
ABS	4Y46SA H5
BV	SA4Y46M H5
DNV	IVY46MS H5
GL	4Y46H5S
LRS	4Y46S H5



Chemical analysis (Typical values in %)

C	Mn	Si	P	S	Ni
0.07	1.4	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	≥ 70
As Welded	≥ 490	570-670	≥ 22		

Gas test: 100% CO₂

Shielding Gas - EN ISO 14175 : C1

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	B200	B300
Diam(mm) / weight(kg)	5.0	16.0
1.2	●	●