SG 2

MAG wires - unalloyed steel

AWS A5.18: ER70S-6

EN 440: G 42 2 C G3 Si 1 / G 42 4 M G3 Si 1

Wire type:
MAG Solid wire

Welding Current:

Welding positions:

Approvals:
LR

Shielding gas:
C1 = CO_2, M11-M32 = $ArCO_2$-$ArCO_2O_2$ including M21 (1) = $ArHeCO_2$

SG 2 is our copper coated solid wire for MAG welding unalloyed and low alloyed, incl. fine grain types, structural steels. Typical applications include: general constructions, shipbuilding, bridges, tanks etc.

Base materials to be welded:

- Ships plate A-E, A(H)32-E(H)36, S315G1S-S355G3S
- Structural steel S185-S355J2G3, St.33-St.52.3, C(K)10-C(K)35
- Boiler steel P235GH-P355GH, HI, HII, 17Mn4, 19Mn6
- Fine grain steel P275N-P355NL2, S275N-S420N, StE285-EStE355, StE285TM-EStE355TM
- Pipe steel P235T1-P355N, L210-L415MB, St37.0-St52.4, St45.8, X42-X60, StE210.7-StE360.7TM
- Cast steel GP240R, GS45

Applications:

- Shipyards/offshore
- Construction works
- Bridge & road constructions
- Pressure vessel & boiler industry
- Repair Shops
- Car industry

Equivalent product in alternative welding process:

SMAW	GMAW	FCAW	GTAW	SAW	Gas welding / brazing
Red Extra	-	Hilcord 40	Fer SG 2	H100 / HW530	Fer G 1

Chemical composition, wt.% weld metal – typical:

C	Mn	Si	S	P	Cr	Ni	Mo	Cu	Nb	V	Al
0,10	1,50	0,85	$\leq$ 0,030	$\leq$ 0,025							

Mechanical properties, weld metal – typical:

Condition	0,2% Yield strength MPa	Tensile strength MPa	Elongation Lo=5d - %	Impact Values ISO-V J
As welded	$\geq$ 430	$\geq$ 510	$\geq$ 22	-20°C $\geq$ 70

Note: properties under M21 = $ArCO_2$ gas shielding

Packaging and welding data:

Dia. mm.	Spooltype	Weight / spool kg.	Current A	Voltage V
0,6	S200	5	60-140	16-20
0,8	S200	5	80-180	17-20
0,6	S300	15	60-140	16-20
0,8	S300	15	80-180	17-20
0,9	S300	15	100-200	17-22
1,0	S300	15	120-240	17-22
1,2	S300	15	160-260	18-26