

AS SG2 / ASFIL 250

AS SG2 is a copper coated gas metal arc welding wire in 15 kg spools or 250 kg drums. It is particularly designed for semi-automatic and full-automatic GMAW applications. Working temperature can range between -50 to +450°C. CO₂ or 80 % Ar - 20 % CO₂ are used for gas shielding.

Classification and Typical Wire Composition (%)

AWS A5.18 : ER 70 S-6
EN 440 : G42 3CM G3Si 1

C	Si	Mn
0.08	0.85	1.5
*) 0.06	0.55	1.1

*) Typical Weld Metal Composition (CO₂ gas shielding)

Approvals	CO ₂	CO ₂ +Ar
ABS	: 3SA, 3YSA	3YSA
BV	: 3YM	
DNV	: III YMS	III YMS
GL	: 3YS	3YS
LRS	: 3S 3YS H15	
RMRS	: 3Y	
CE , DB , GOST , NAKS , SEPRO , TÜV		

Mechanical Properties of the Weld Metal, Typical

Yield Strength	[N/mm ²]	: 440
Tensile Strength	[N/mm ²]	: 540
Elongation (L=5d)	[%]	: 30
Impact (ISO-V)	[Joule]	: - 30°C = 50 J



Applications

It is used for the gas metal arc welding of unalloyed structural steels with a tensile strength up to 530 N/mm²; ship's plate and fine grained carbon-manganese steels.

Structural Steels :	Pipe Materials :	Ship Plates :
1.0035 - St 33	0.8135 - St E 210-7	Grade - A
1.0037 - St 37-2	1.0457 - St E 240-7	- B
1.0570 - St 52-3	1.0484 - St E 290-7	- C
1.0301 - C10 - Ck10	1.0430 - St E 320-7	- D
1.0501 - C35 - Ck35	1.0582 - St E 360-7	- E
Pressure Vessel Steels :	Fine Grained Steels :	- AH
1.0345 - HI	1.0461 - St E 255	- DH
1.0425 - HII	1.8902 - St E 420	- EH
1.0481 - 17 Mn 4		
1.0473 - 19 Mn 6		

Current Type : [DC (+)]

Welding Positions

	Diameter [mm]	Current [A]	Voltage [V]	Spool Weight [kg]
Short Arc	0.8	60 - 140	18 - 22	15
	1.0	80 - 175	18 - 24	15
	1.2	120 - 200	18 - 27	15
Spray Arc	1.2	150 - 280	25 - 40	15
	1.6	225 - 480	28 - 40	15

