



TECHNICAL DATA SHEET
NOVOFIL SG2 | SPECIAL BRONZE WIRES

Classification of the material according to the international spec.

AWS A5.18: ER70S-6
DIN 8559: SG2
ISO 14341-A (2011) G 42 4 M21 G3 SI 1

Welding wires to be used for both Co₂ / M₂x-M₃x mixed combination gases The wire is specially coated by a bronze film. Available from sizes 0,80 to 1.60mm on spools 1/kg-25/kg and megapacks 80/kg-450/kg

Materials : St. 37 – St 52, H I – III, 17 Mn 4, steel St 35 , St. 35.8, St. 45.8, SIE 420.

Typical chemical content (%)

C	Mn	Si
0.07-0.09	1.40-1.50	0.80-0.90

Mechanical properties of welded material as per DIN 32 525 (min.)

Tested in laboratory in accordance to UNI EN ISO 148-1:2011

Tensile Strength : (N/mm ²)	> = 540	CO ₂ /M ₂₁
Yield strength: (N/mm)	> = 460	CO ₂ /M ₂₁
Elongation: (A 5 %)	27 – 32	CO ₂ /M ₂₁

RECOMMENDED WELDING PARAMETERS

DIAMETER WIRE MM	SHORT AMPERE	ARC VOLT	SPRAY AMPERE	ARC VOLT
0,80	80-130	18-20	170-250	23-28
0,90	130-170	18-22	180-260	24-29
1,00	140-180	18-25	220-280	24-29
1,20	140-200	18-25	320-370	26-29
1,40	140-200	18-25	350-400	26-30
1,60	140-200	18-25	380-420	26-30
The used gas is M 21 (80% Argon - 20% Co ₂) - Including 92%Ar – 8%CO ₂				
Power type : DC+	Wire speed: 12-15mts/min		Gas: 12-14 lt/minute	

Quality Department
NOVOFIL S.p.A.

NOVOFIL S.p.A.