

# SW 702Si

Submerged Arc Welding Wire - Non Alloyed Steels

### Standards

AWS/ASME SFA - 5.17	EM12K
EN ISO 14171-A	S2Si
TS EN ISO 14171-A	S2Si

### Approvals & Certificates

TSE	TUV	CE
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### Properties and Applications

Solid, submerged arc welding wire suitable for welding general structural steels with medium and high tensile strengths, used in pressure vessel, boiler, pipe, shipbuilding and steel constructions. Higher silicon content improves deoxidation of weld pool. Copper coating increases electrical conductivity and resistance against rusting.

### Typical Chemical Features of the Welding Wire

Type of Analysis	C	Si	Mn
Welding Wire	0.09	0.25	1.10

### Typical Chemical Values of Weld Metal

Welding Flux	Type of Analysis	C	Si	Mn
SF 204	Weld Deposit	0.06	0.55	1.35
SF 212	Weld Deposit	0.05	0.80	1.40
SF 414	Weld Deposit	0.07	0.35	1.45
SF 113	Weld Deposit	0.04	0.65	1.90
SF 134	Weld Deposit	0.05	0.60	1.60
SF 401	Weld Deposit	0.06	0.30	1.15
SF 104	Weld Deposit	0.04	0.50	1.10
SF 304	Weld Deposit	0.06	0.45	1.40
SF 124	Weld Deposit	0.05	0.30	1.20

### Typical Mechanical Values of Weld Metal

Test Condition	Welding Flux	Yield Strength (N/mm <sup>2</sup> )	Tensile Strength (N/mm <sup>2</sup> )	Elongation A5 (%)	Charpy V-Notch Properties (J)		
As welded	SF 104	425	510	29	0°C → 80	-20°C → 50	-30°C → 40
As welded	SF 304	460	530	28	-20°C → 90	-30°C → 70	-40°C → 50
As welded	SF 124	435	500	27	-20°C → 90	-30°C → 70	-40°C → 50
As welded	SF 204	440	530	29	-30°C → 70	-40°C → 40	
As welded	SF 212	490	570	28	20°C → 80	0°C → 55	
As welded	SF 414	420	520	30	-20°C → 140	-40°C → 110	-50°C → 70
As welded	SF 113	450	550	30	0°C → 60	-20°C → 50	
As welded	SF 134	470	560	29	-20°C → 90	-30°C → 70	-40°C → 45
As welded	SF 401	425	520	30	-30°C → 110	-40°C → 90	-50°C → 70

### Application Information

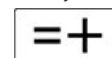
#### Welding Positions



#### Welding Parameters & Efficiency

Diameter (mm)
1.60
2.00

#### Polarity:



2.40
3.20
4.00

### Packaging Information

Product Code	Diameter (mm)	Quantity per Box	Box Gross Weight (kg)	Boxes per Outer Box	Outer Box Gross Weight (kg)	Packaging Type
41003G1GM2	1.60	250 kg	257.50	1	257.50	Fiber Drum
41003G1HM2	1.60	250 kg	261.00	1	261.00	Fiber Drum
41003GMAM2	1.60	15 kg	15.70	1	15.70	Wire Basket Spool (K300)
41003GXAM2	1.60	25 kg	25.90	1	25.90	Wire Basket Spool (K435)
41003H2GM2	2.00	400 kg	415.60	1	415.60	Fiber Drum
41003HXAM2	2.00	25 kg	25.90	1	25.90	Wire Basket Spool (K435)
41003I1GM2	2.40	200 kg	215.00	1	215.00	Fiber Drum
41003I2GM2	2.40	400 kg	415.60	1	415.60	Fiber Drum
41003IXAM2	2.40	25 kg	25.90	1	25.90	Wire Basket Spool (K435)
41003IYAM2	2.40	100 kg	102.00	1	102.00	Tel Makara (K785)
41003L2GM2	3.20	400 kg	415.60	1	415.60	Fiber Drum
41003L3GM2	3.20	600 kg	616.50	1	616.50	Fiber Drum
41003L9GM2	3.20	1000 kg	0.00	1	0.00	COIL
41003LXAM2	3.20	25 kg	25.90	1	25.90	Wire Basket Spool (K435)
41003M2GM2	4.00	400 kg	415.60	1	415.60	Fiber Drum
41003M3GM2	4.00	550 kg	616.50	1	616.50	Fiber Drum
41003M9GM2	4.00	1000 kg	0.00	1	0.00	COIL
41003MXAM2	4.00	25 kg	25.90	1	25.90	Wire Basket Spool (K435)
41003MYAM2	4.00	100 kg	102.00	1	102.00	Tel Makara (K785)

### Storage & Re-Drying Information

Shouldn't be exposed to high statical load and impact.  
It should be stored in a dry room (relative humidity < 50%, room temperature > 20°C) on wooden pallets.