

# SW 703Si

Submerged Arc Welding Wire - Non Alloyed Steels

### Standards

AWS/ASME SFA - 5.17	EH12K
EN ISO 14171-A	S3Si
TS EN ISO 14171-A	S3Si

### Approvals & Certificates

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 manganese and 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	0.30	1.65

### Typical Chemical Values of Weld Metal

Welding Flux	Type of Analysis	C	Si	Mn
SF 204	Weld Deposit	0.06	0.60	1.70
SF 212	Weld Deposit	0.05	0.95	1.70
SF 414	Weld Deposit	0.06	0.35	1.65
SF 134	Weld Deposit	0.07	0.55	1.90
SF 401	Weld Deposit	0.07	0.30	1.60
SF 104	Weld Deposit	0.06	0.45	1.55
SF 304	Weld Deposit	0.06	0.65	1.75
SF 124	Weld Deposit	0.06	0.45	1.75

### 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)		
					-20°C → 90	-30°C → 75	-40°C → 60
As welded	SF 104	470	550	28	-20°C → 120	-30°C → 80	-40°C → 55
As welded	SF 304	480	540	28	-30°C → 90	-40°C → 70	
As welded	SF 124	440	550	30	-20°C → 120	-30°C → 100	-40°C → 60
As welded	SF 204	510	610	28	20°C → 65	0°C → 40	
As welded	SF 212	530	610	26	-40°C → 120	-50°C → 75	-60°C → 50
As welded	SF 414	470	560	30	-30°C → 100	-40°C → 70	-50°C → 50
As welded	SF 134	475	575	30	-30°C → 120	-40°C → 100	-50°C → 80
As welded	SF 401	480	530	28			

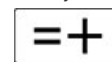
### Application Information

#### Welding Positions



PA PB PC

#### Polarity:



#### Welding Parameters & Efficiency

Diameter (mm)
2.00
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
41004HXAM2	2.00	25 kg	25.90	1	25.90	Wire Basket Spool (K435)
41004IXAM2	2.40	25 kg	25.90	1	25.90	Wire Basket Spool (K435)
41004L9GM2	3.20	1000 kg	0.00	1	0.00	COIL
41004LXAM2	3.20	25 kg	25.90	1	25.90	Wire Basket Spool (K435)
41004M9GM2	4.00	1000 kg	0.00	1	0.00	COIL
41004MXAM2	4.00	25 kg	25.90	1	25.90	Wire Basket Spool (K435)

**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.