

# SW 702

Submerged Arc Welding Wire - Non Alloyed Steels

### Standards

AWS/ASME SFA - 5.17	EM12
EN ISO 14171-A	S2
TS EN ISO 14171-A	S2

### Approvals & Certificates

DNV-GL	BV	CE
TSE	ClassNK	TUV
TL	ABS	

### 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. Also suitable to use in combination with SHF 325, SHF 335 and SHF 345 hardfacing fluxes for hardfacing applications. 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	0.08	1.00

### Typical Chemical Values of Weld Metal

Welding Flux	Type of Analysis	C	Si	Mn
SF 204	Weld Deposit	0.05	0.40	1.40
SF 212	Weld Deposit	0.05	0.70	1.35
SF 414	Weld Deposit	0.06	0.25	1.40
SF 113	Weld Deposit	0.04	0.40	1.80
SF 134	Weld Deposit	0.05	0.45	1.45
SF 104	Weld Deposit	0.05	0.30	1.10
SF 304	Weld Deposit	0.05	0.25	1.25
SF 124	Weld Deposit	0.05	0.20	1.10

### 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	420	500	28	-20°C → 65	-30°C → 45
As welded	SF 304	430	500	29	20°C → 110	-30°C → 75
As welded	SF 124	430	490	30	-20°C → 70	-40°C → 40
As welded	SF 204	435	510	30	-20°C → 90	-30°C → 70
As welded	SF 212	480	560	28	20°C → 70	0°C → 30
As welded	SF 414	410	510	30	-20°C → 120	-40°C → 100
As welded	SF 113	400	500	30	0°C → 65	-20°C → 55
As welded	SF 134	440	530	30	-30°C → 90	-40°C → 50

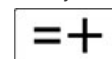
### Application Information

#### Welding Positions



#### Welding Parameters & Efficiency

#### Polarity:



1.60
2.00
2.40
3.00
3.20
4.00
5.00

### Packaging Information

Product Code	Diameter (mm)	Quantity per Box	Box Gross Weight (kg)	Boxes per Outer Box	Outer Box Gross Weight (kg)	Packaging Type
41002G1GM2	1.60	250 kg	257.50	1	257.50	Fiber Drum
41002GJAM5	1.60	15 kg	15.70	1	15.70	Wire Basket Spool (K300MS)
41002H2GM2	2.00	400 kg	415.60	1	415.60	Fiber Drum
41002HXAM2	2.00	25 kg	25.90	1	25.90	Wire Basket Spool (K435)
41002I2GM2	2.40	400 kg	415.60	1	415.60	Fiber Drum
41002I3GM2	2.40	600 kg	616.50	1	616.50	Fiber Drum
41002I8GM2	2.40	1000 kg	1030.00	1	1030.00	Spider
41002IXAM2	2.40	25 kg	25.90	1	25.90	Wire Basket Spool (K435)
41002KXAM2	3.00	25 kg	25.90	1	25.90	Wire Basket Spool (K435)
41002L2GM2	3.20	400 kg	415.60	1	415.60	Fiber Drum
41002L3GM2	3.20	600 kg	616.50	1	616.50	Fiber Drum
41002L8GM2	3.20	1000 kg	1030.00	1	1030.00	Spider
41002L9GM2	3.20	1000 kg	0.00	1	0.00	COIL
41002LXAM2	3.20	25 kg	25.90	1	25.90	Wire Basket Spool (K435)
41002M2GM2	4.00	400 kg	415.60	1	415.60	Fiber Drum
41002M3GM2	4.00	600 kg	616.50	1	616.50	Fiber Drum
41002M8GM2	4.00	1000 kg	1030.00	1	1030.00	Spider
41002M9GM2	4.00	1000 kg	0.00	1	0.00	COIL
41002MXAM2	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.