

S-777Q X M-12K

Type : Neutral

Conformances

AWS A5.17/ ASME SFA5.17 F7A2-EM12K

JIS Z3352 SA AR1

EN ISO 14174-S A AR 1 / EN ISO 14171-A-S2Si

Applications

- LPG tanks
- General fabrications
- Structural steels
- Shipbuilding

Features

- Easy to remove slag
- High speed welding
- Horizontal and flat fillet welding
- Density : 1.0g/cm³

Current

AC, DC +

Basicity Index

0.6

Packages (Flux)

Tin Can 20kg(44lbs)

Flux Composition

Consumable	Chemical Composition, wt%			
	Al ₂ O ₃ + MgO	MnO + TiO ₂	Fe ₂ O ₃ + SiO ₂	CaF ₂ + CaO
S-777Q	50	20	15	15

Diameter / Packaging

Diameter mm (in)	Spool	Basket			Coil					Pac				
	20kg (44lbs)	25kg (55lbs)	100kg (220lbs)	25kg (55lbs)	100kg (220lbs)	200kg (440lbs)	250kg (551lbs)	300kg (661lbs)	500kg (1102lbs)	200kg (440lbs)	250kg (551lbs)	300kg (661lbs)	350kg (771lbs)	400kg (881lbs)
1.6 (1/16)	✓			✓									✓	
2.0 (5/64)	✓			✓							✓		✓	✓
2.4 (3/32)		✓	✓	✓	✓									✓
3.2 (1/8)		✓	✓	✓	✓					✓				✓
4.0 (5/32)		✓	✓	✓	✓	✓			✓	✓	✓	✓		✓
4.8 (3/16)				✓	✓			✓	✓	✓				

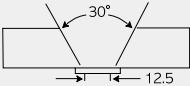
Typical Chemical Composition of All-Weld Metal(%)

Wire	C	Si	Mn	P	S	BM	Th.(mm)
M-12K	0.05	0.83	1.41	0.024	0.009	SS400	25

Typical Mechanical Properties of All-Weld Metal

Wire	YS Mpa(lbs/in ²)	TS Mpa(lbs/in ²)	EL (%)	Temp °C(°F)	CVN-Impact Value J (ft-lbs)	BM	Th.(mm)
M-12K	537 (78,000)	621 (90,000)	28.1	-18 (0) -29 (-20)	41 (30) 32 (24)	SS400	25

Typical Welding Parameters

Wire	Dia. (mm)	Th. (mm)	Groove Design (mm)	Pass	Amp. (A)	Volt. (V)	Speed (cm/min)	Remarks
M-12K	4.0	25		1~13	550	30	40	AWS A5.17