

KSW-12KM / KFL-1101

Classifications:

AWS A5.17 EM12K / F7A2

SUBMERGED ARC WELDING WIRE AND FLUX

Characteristics and Applications:

KSW-12KM is a copper coated submerged arc welding wires designed particularly for the welding of middle and high strength steels. It is used for the submerged arc welding of unalloyed structural steels with a tensile strength up to 530N/mm², ship plates and fine grained carbon-manganese steels.

Typical Chemical Composition of Weld Metal:

Alloy wt%	C	Mn	Si	P	S
KSW-12KM + KFL-1101	0.05	1.00	0.35	0.017	0.011

Typical Chemical Properties of Weld Metal:

Mechanical Property	Y.S.(MPa)	T.S.(MPa)	EI(%)	CVN(J/°C)
AWS	400	480-660	22	27/-30
KSW-12KM + KFL-1101	420	500	28	53/-30

Notes on Usage:

1. Lower current is recommended for welding first pass.

Suggested Welding Parameters (with KFL-1101 Flux):

Diameter/mm	1.6	2.0	2.4	3.2	4.0
Voltage(Volt)	26-28	26-29	26-30	27-31	27-32
Current (Amp)	250-350	300-400	350-500	400-550	450-600
W.F.S.(cm/min)	110-280	110-240	100-205	80-150	60-115
Stick out (mm)	13-19	13-19	19-132	25-38	25-38