

SAW Consumables for High Tensile Strength Steel

KF-990

KW-3

Classification

AWS A 5.17/A5.17M F7A(P)2-EM12K/F49A(P)3-EM12K

JIS Z3183 S502-H

EN ISO 14171-A S42 3 AB S2Si

GB T5293 F5A3-H08MnA

Basicity : 1.2

Applications and Features

- (1) KF-990+KW-3 is suitable for welding 490N/mm² grade steel.
- (2) KF-990 is an agglomerated aluminate-basic type flux, providing good bead appearance, high current resistance, and excellent slag detachability.
- (3) Ideal for flat butt welding and flat fillet welding in shipbuilding, machinery, steel structures, and bridges.

Welding Position



Welding Instruction

Please refer to Appendix E.

Typical Chemical Composition of Weld Metal (wt%)

C	Si	Mn	P	S
0.08	0.38	1.61	0.015	0.010

Typical Mechanical Properties of Weld Metal

Heat treatment condition	Tensile Strength N/mm ²	Yield Strength N/mm ²	Elongation %	Charpy V-Notch °C	J
As-welded	580	500	29	0	70
				-30	58
PWHT	497	405	36	0	68
				-30	50