

ESW Consumables for High Tensile Strength Steel

KF-600

KW-80

Classification

AWS A 5.25/A5.25M	FES80-ES-G-EW
JIS Z3353	YES561-S
EN ISO	-
GB	-

Applications and Features

- (1) Designed for SESNET (Simplified Electroslag Welding with No-consumable Elevating Tip) of 550 N/mm² grades steel.
- (2) The combination of KF-600 and KW-80 will get a weld metal with refined microstructure and excellent mechanical properties.
- (3) Suitable for shipbuilding, bridge, steel structure, especially good for BOX welding.

Welding Instruction

- (1) Tack welding should be outside of welding part, and keep the gap below 0.5mm.
- (2) Clean surface of base metal before welding.
- (3) Keep wire extension at about 30~40mm.

Typical Chemical Composition of Weld Metal (wt%)

C	Si	Mn	P	S	Other
0.10	0.74	1.73	0.012	0.005	<0.5

Typical Mechanical Properties of Weld Metal

Tensile Strength	Yield Strength	Elongation	Charpy V-Notch	
N/mm ²	N/mm ²	%	°C	J
651	469	25	-18	80

Size and Suggested Operating Range (DC+)

Diameter (mm)	1.6
Current (A)	350~450
Voltage (V)	40~50