

EF-100S/KD-42

AWS F7A(P)2-EM12K
JIS S502-H
KS FS-BN1/YS-S3

FOR HIGH TENSILE
STRENGTH STEEL

Typical applications

Welding of vessels, steel structure and general fabrications.

Characteristics on Usage

- ① Active flux for limited pass welding
- ② High speed welding of 490N/mm² high tensile steel
- ③ Good slag removal, good bead shape
- ④ Redry the flux at 250~350°C for more than 60 minutes
- ⑤ Excessive flux height may bring out poor bead appearance

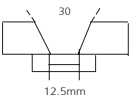
Typical chemical composition of all-weld-metal (%)

C	Si	Mn	S	P	Base metal	
					Class	Thick (mm)
0.05	0.52	1.63	0.021	0.012	SM490	25

Typical mechanical properties of all-weld-metal

Y · P N/mm ² {kgf/mm ² }	T · S N/mm ² {kgf/mm ² }	EI (%)	Charpy V-notch J {kgf · m}		Remark
			-20°C	-30°C	
455 {56}	591 {60}	30	80 {8}	70 {7}	As-welded
510 {52}	584 {59}	31	85 {8}	72 {7}	PWHT(620°CX1hr)

Typical welding conditons

Thick (mm)	Wire dia. (mm)	Groove dimension (mm)	Pass	Amp. (A)	Volt. (V)	Travel speed (cm/min)
25	4.0		1~14	600	30	40~50

Approved by