

FOR HEAT-
RESISTING STEEL

AWS E502-16
JIS DT2516
KS DT2516

K-502

Typical applications

Welding of heat treated high tensile strength steel for aircraft parts, such as SAE 4130.

Welding of 5%Cr-0.5%Mo steel used in oil refining and chemical industries.

Coating

Low hydrogen type.

Characteristics on Usage

- ① Preheat at 250~350°C and postheat treat at 730~760°C because of high self-hardening properties of the deposited weld metal.
- ② Redry the electrode at 300~350°C for 60 minutes prior to use.

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

C	Si	Mn	Cr	Mo
0.06	0.43	0.57	4.98	0.51

Typical mechanical properties of all-weld-metal

Temp.	Y · P N/mm ² {kgf/mm ² }	T · S N/mm ² {kgf/mm ² }	EI (%)	PWHT
R.T	420 {43}	540 {55}	33	850°C × 1hr. S · R
500°C	380 {39}	420 {43}	6	

Sizes available and recommended currents (AC or DC ⊕)

Dia.	(mm)	2.6	3.2	4.0	5.0	6.0
Length	(mm)	350	350	400	400	450
Amp.	F	50~90	80~120	120~160	160~210	210~260
	V&OH	50~80	70~110	90~130	—	—

Welding positions



Approved by