

FOR HEAT-
RESISTING STEEL

K-91TB9

Typical applications

Butt and fillet welding of 9%Cr-1%Mo-Ni-Nb-V steel used for high pressure boilers, Chemical and oil refinery plants. It's applied for ASTM A189-F91, A199-T91, A200-T91, A213-T91, A335-P91, A369-F91, A387-Gr91 and equivalents.

Characteristics on Usage

- ① All-position welding provide the metal of 9%Cr-1%Mo-Ni-Nb-V
- ② Excellent creep rupture strength, easy slag removal and good weld soundness
- ③ The shielding gas should be used 80%Ar+20%CO₂ for welding.
- ④ Preheat at 200~350°C and postheat at 720~780°C
- ⑤ wire should be used as soon as possible after taking out from package.

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

Shielding Gas	C	Si	Mn	Cr	Mo	Ni	V	Nb	N
Ar+20%CO ₂	0.12	0.25	0.72	10.3	1.0	0.7	0.19	0.03	0.04

Typical mechanical properties of all-weld-metal

Shielding Gas	Y · P N/mm ² {kgf/mm ² }	El (%)	PWHT
Ar+20%CO ₂	810 {82}	15	760°C X 2hr.

Sizes available and recommended currents (DC wire⊕)

Dia.	(mm)	1.2
Amp.	F	120~280
	H-Fil	
	V	120~220

Package

Dia.	(mm)	1.2
Spool	(kg)	15,20

Welding positions



Approved by