

HEAT-RESISTANT LOW-ALLOY STEEL SMAW

DESCRIPTION & APPLICATIONS :

- SR-591 is a low hydrogen electrode for heat resistant low alloy steel.
- Welding for all positions. As containing 9%Cr-1%Mo and minor niobium(Nb) and vanadium(V), it is with excellent creep under high temperature of 550-650°C.
- Suitable for steel pipe of ASTM A213-T91, A335 P91, extended steel plate of A387 Gr.91.

NOTE ON USAGE :

- Proper preheat at 200 ~ 315°C and PWHT at 760 ± 15°C.
- Rebake the electrodes at 350 ~ 400°C for 60 minutes and keep at 100 ~ 150°C before use.
- Keep the arc as short as possible. Please take the method of back-forward.

WELDING POSITION :



TYPICAL CHEMICAL COMPOSITION OF WELD METAL (wt%) :

C	Mn	Si	P	S	Cr	Ni	Mo	Nb	V	N
0.09	0.55	0.22	0.008	0.007	9.10	0.51	0.99	0.04	0.19	0.03

TYPICAL MECHANICAL PROPERTIES OF WELD METAL :

YIELD POINT N/mm ² (Kgf/mm ²)	TENSILE STRENGTH N/mm ² (Kgf/mm ²)	ELONGATION RATE %	HEAT TREATMENT
584(59.5)	690(70.4)	21	760°Cx2hr

SIZE AND RECOMMENDED CURRENT RANGE : DC(+)

Diameter (mm)		3.2	4.0	5.0
Length (mm)		350	400	400
Current (Amp)	F	90-130	140-170	170-220
	V & OH	80-120	120-160	-