

## Stick electrode for 9%Cr-1%Mo-V-Nb steel

- Features:**
- Applied for ASTM A387 Gr.91 and equivalents
  - Excellent creep rupture strength

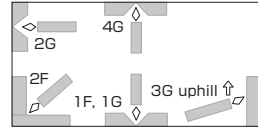
**Classification:** AWS A5.5 E9016-B9

**Redrying Conditions:** 325~375°Cx1h

**Identification color:** 1st Yellow, 2nd Brown

**Polarity:** DCEP

## Welding Positions:



## Packaging data

φ mm	Length mm	kg/pack	kg/carton	g/piece	carton mm
2.6	300	2	20	18	270W, 85H, 330L
3.2	350	5	20	31	170W, 120H, 380L
4.0	400	5	20	55	170W, 115H, 430L
5.0	400	5	20	85	170W, 120H, 430L

## Composition (all-weld metal mass%)

	Typical	Guaranty <sup>a</sup>
<b>C</b>	0.10	0.08~0.13
<b>Si</b>	0.27	0.30
<b>Mn</b>	0.88	1.20
<b>P</b>	0.01	0.01
<b>S</b>	<0.01	0.01
<b>Ni</b>	0.44	0.80
<b>Cr</b>	9.0	8.0~10.5
<b>Mo</b>	1.06	0.85~1.20
<b>Nb</b>	0.04	0.02~0.10
<b>V</b>	0.22	0.15~0.30
<b>Cu</b>	0.03	0.25
<b>Al</b>	<0.01	0.04
<b>N</b>	0.03	0.02~0.07
<b>Mn+Ni</b>	1.32	1.50

## Welding parameters (A)

φ mm	1F, 1G, 2F, 2G	3G uphill, 4G
2.6	55~85	50~80
3.2	75~115	70~110
4.0	120~160	90~140
5.0	160~220	-

Note: <sup>a</sup> Single values are maximum.

## All-weld mechanical properties

	Typical	Guaranty
<b>0.2%YS (MPa)</b>	657	531min.
<b>TS (MPa)</b>	771	621min.
<b>El on 4d (%)</b>	21	17min.
<b>IV 20°C (J)</b>	71	-
<b>PWHT (°C×h)</b>	760x2	760±15x2