

PROWELD 4111 *For Mild Steel*

Classification

AWS A 5.1 : E6011

Applications

Welding of mild steels for rolling-stocks, structures, and pipes.

Characteristics

PROWELD 6011 is a high cellulose type electrode. Arc force is strong and penetration is deep. Since it produces little slag which is easily removed, it is especially suitable for narrow grooves, vertical and overhead positions on site. Also, vertical downward of butt joints of pipes and sheets are easily and efficiently performed.

Typical Chemical Composition of Deposited Metal (%)

C	Si	Mn	P	S
0.08	0.11	0.43	0.015	0.013

Typical Mechanical Properties of Deposited Metal

Tensile Strength N/mm ² (kgf/mm ²)	Yield Strength N/mm ² (kgf/mm ²)	Elongation %	Charpy 2V-notch at 0°C, J (kgf.m)
460 (47)	400 (41)	29	76 (7.8)

Sizes & Recommended Current Range (AC or DC +)

Diameter/ Length (mm)	2.0/250	2.6/300	3.2/350	4.0/350	5.0/350
Welding Position	Current (A)				
F	40~60	50~80	70~110	120~160	160~200
V, OH	30~50	40~70	60~100	110~150	130~170

Guideline in Usage

1. Use dry electrodes only.
2. Care in storing is especially needed since coating flux contains large amount of organic matter and is apt to absorb moisture. Damp electrodes should be re-dried at 80°C for 60 minutes.
3. Excessively high current and wide weaving deteriorate X-ray quality. Use optimum current and limit weaving width to within 2.5 times electrode diameter.

Welding Positions



All positions