



Manufacturers of Custom Welding Lines for Resale
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SELECTRODE 1861

7018 Moisture Resistant Low
Hydrogen

INTERNATIONAL CLASSIFICATIONS

AWS/ASME A 5.1 E 7018-1

EN 499: E 42 4 B 12 H5

DIN 1913: E51 54B R 10

ISO 2560: E51 5B120 26H

NFA 81-309: E515/4 B 120 26 BH

BS 639: E 5154 B 120 26 (H)

FEATURES & APPLICATIONS

For joining and repairing boiler plate, pipe steels, shipbuilding steels and cast steels. Excellent for weathering steels, such as "Corten".

Extra low hydrogen – Moisture resistant steel electrode for unalloyed construction steels

- Only low hydrogen alloy made in 1/16 (1.6mm) size.
- Extremely smooth - spatter and turbulence free arc transfer.
- Coating is totally non-conductive.
- Unusually good AC welding characteristics.
- Easy re-strike.

ALL WELD METAL ANALYSIS (TYPICAL WEIGHT %)

Microstructure: In the stress-relieved condition, the microstructure consists of acicular ferrite with some tempered bainite.

Flux Color: Tan/grey

C	Mn	Si	S	P	Mo	Fe
.04	.90	.60	.013	.018	.40	Bal.

Undiluted Weld Metal	Maximum Value Up to:
Tensile Strength	84,000 psi (610 MPa)
Yield Strength	69,000 psi (500 MPa)
Elongation	32%
Impact Energy	90J: -30°C

WELDING CURRENT & INSTRUCTIONS

Recommended Current: DC Reverse (+) or AC

Diameter (mm)	1/16 (1.6)	3/32 (2.5)	1/8 (3.25)	5/32 (4.0)	3/16 (5.0)
Minimum Amperage	30	65	100	140	190
Maximum Amperage	45	100	140	190	250

Welding Techniques: Remove all surface contaminants. Maintain a short arc gap and use a stringer or slight weave technique. Chip slag thoroughly between passes.

Welding Positions: Flat, Vertical up, Vertical down, Horizontal, Overhead

Deposition Rates:

Diameter (mm)	Length (mm)	Weldmetal/ Electrode	Electrodes per lb (kg) of Weldmetal	Arc Time of Deposition min/lb (kg)	Amperage Settings
1/16 (1.6)	12" (300)	.13oz (49g)	120 (264)	59 (129)	35
3/32 (2.5)	14" (350)	.42oz (12g)	38 (83)	38 (84)	80
1/8 (3.2)	14" (350)	.59oz (17g)	27 (60)	21 (47)	115
5/32 (4.0)	14" (350)	1.1oz (30g)	15 (32)	18 (39)	175
3/16 (5.0)	14" (350)	1.8oz (50g)	9 (20)	13 (28)	220

APPROXIMATE ELECTRODE PACKAGING & DIMENSIONS

Diameter (mm)	1/16 (1.6)	3/32 (2.5)	1/8 (3.25)	5/32 (4.0)	3/16 (5.0)
Length (mm)	12" (300)	14" (350)	14" (350)	14" (350)	14" (350)
Electrodes / lb	54	21	12	8	6
Electrodes / kg	119	46	26	18	13