



Manufacturers of Custom Welding Lines for Resale
www.selectrode.com

SELECTRODE 1163

Extra High Strength Low
Hydrogen

INTERNATIONAL CLASSIFICATIONS

AWS/ASME A E 11018-M

EN 757: E 69 4Mn 2NiCrMo B 42 H5

DIN 8529: EY 6965 Mn2NiCrMoB

BS 2493 2NiMo.BH

FEATURES & APPLICATIONS

Structural and repair welds on high strength fine grained steels.

Low alloy, high strength AC/ DC electrode for joining low and medium alloy construction steels.

- Extra low moisture content is below .14%.
- Smooth running AC/DC coating operates in all positions.
- Low spatter yield, self releasing slag and uniform rippled deposit.

ALL WELD METAL ANALYSIS (TYPICAL WEIGHT %)

Microstructure: In the as welded condition, the microstructure is ferritic/bainitic with a proportion of acicular ferrite.

Flux Color: Grey

C	Mn	S	Si	P	Cr	Ni	Mo	Fe
.059	1.3	.006	.5	.012	.32	1.91	.37	bal

TYPICAL MECHANICAL PROPERTIES

Undiluted Weld Metal

Tensile Strength
 Yield Strength
 Elongation
 Impact Energy

Maximum Value Up to:

120,000 psi (845 MPa)
 96,000 psi (665 MPa)
 23%
 82J (60ft. lbs.): 68°F (20°C)
 50J (36ft. lbs.): -60°F (-51°C)

WELDING CURRENT & INSTRUCTIONS

Recommended Current: DC Reverse (+) or AC

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

Welding Techniques: For the majority of materials to be welded with these electrodes, minimum preheats between 212°F (100°C) and 392°F (200°C) are required to avoid hydrogen induced "cold" cracking. 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	Recovery Rate
3/32 (2.5)	14" (350)	.42oz (12g)	38 (83)	38 (84)	80	115%

1/8 (3.25)	14" (350)	.59oz (17g)	27 (60)	21 (47)	115	115%
5/32 (4.0)	14" (350)	1.1oz (30g)	15 (32)	18 (39)	175	115%
3/16 (5.0)	14" (350)	1.8oz (50g)	9 (20)	13 (28)	220	115%

APPROXIMATE ELECTRODE PACKAGING & DIMENSIONS

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