



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

SELECTRODE 1173

Low Temperature Crack
Resistant Low Hydrogen

INTERNATIONAL CLASSIFICATIONS

AWS/ASME A 5.5 E 8018-C3

EN 499: E 465 1 Ni B 42

DIN 8529: EY 4655 Ni BH5 20

BS 2493 1NiB

NFA 81-340: EY 46 Ni Mo B 110 26 BH

FEATURES & APPLICATIONS

Welding of higher strength steel structures that require an appropriate degree of toughness and crack resistance to temperatures as low as -76°F(-60°C).

Nickel bearing low hydrogen designed for joining low alloy steels requiring high elongation combined with excellent low temperature impact values.

- Phenomenal combination of physical properties.
- Excellent welding characteristics and deposit appearance.
- Extra low moisture content is below .14%.

ALL WELD METAL ANALYSIS (TYPICAL WEIGHT %)

Microstructure: In the as-welded condition, the micro-structure is ferritic with a component of acicular ferrite for optimum toughness.

Flux Color: Grey

C	Mn	Si	S	P	Cr	Ni	Mo	Fe
.05	1	.3	.015	.015	.05	1.1	.25	bal

TYPICAL MECHANICAL PROPERTIES

Undiluted Weld Metal	Maximum Value Up to:
Tensile Strength	92,000 psi (670 MPa)
Yield Strength	76,000 psi (550 MPa)
Elongation	29%
Impact Energy	100J: -76°F (-60°C)
	90J: -103°F (-75°C)
	35J: -148°F (-100°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: 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	50
1/8 (3.25)	14" (350)	.59oz (17g)	27 (60)	21 (47)	115	80
5/32 (4.0)	14" (350)	1.1oz (30g)	15 (32)	18 (39)	175	105
3/16 (5.0)	14" (350)	1.8oz (50g)	9 (20)	13 (28)	220	140

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