



Manufacturers of Custom Welding Lines for Resale  
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# SELECTRODE 1267 Niobium Carbide

## INTERNATIONAL CLASSIFICATIONS

AWS - None

DIN 8555: E10-UM-65-GR

## FEATURES & APPLICATIONS

For protecting all iron based parts subject to severe fine particle abrasion. Also excellent in wear applications at elevated temperatures.

Smooth deposits enriched with Niobium Carbide and Chromium Carbide offer the ultimate combination of abrasion resistance and high temperature hardness retention

- 1/3 the cost of Tungsten Carbide electrodes with superior wear properties.
- High percentage of hardness retention up to 1200°F (649°C).
- Replaces Stellite in many applications.

## ALL WELD METAL ANALYSIS (TYPICAL WEIGHT %)

**Microstructure:** In the as welded condition the microstructure consists of an austenitic alloy matrix and a large proportion of chromium and complex alloy carbides.

**Flux Color:** Black

C	Mn	Si	Cr	Nb	Fe
5	.30	2	26	7	Bal.

## TYPICAL MECHANICAL PROPERTIES

**Undiluted Weld Metal**

Hardness:

**Maximum Value Up to:**

1st Pass RC 59-60

2nd Pass RC 60-63

**WELDING CURRENT & INSTRUCTIONS****Recommended Current:** DC Reverse (+) or Straight (-), AC

Diameter (mm)	1/8 (3.25)	5/32 (4.0)	3/16 (5.0)
Minimum Amperage	105	130	170
Maximum Amperage	135	170	240

**Welding Techniques:** Select the minimum required amperage and utilize a medium arc gap. For smooth flat welds use a 3 x weave. There is minimal slag which can be overwelded without prior removal. Only 2 passes are required for development of the full benefits of this alloy. Cross crack stress relieving is normal.

**Welding Positions:** Flat, Horizontal, Half up**Deposition Rates:**

Diameter (mm)	Length (mm)	Weldmetal/ Electrode	Electrodes per lb (kg) of Weldmetal	Arc Time of Deposition min/lb (kg)	Amperage Settings
1/8 (3.25)	14" (350)	1.42 oz (40g)	11 (25)	27 (59)	120
5/32 (4.0)	18" (450)	2.74 oz (79g)	6 (13)	17 (38)	165
3/16 (5.0)	18" (450)	4.45 oz (128g)	3.6 (8)	11.6 (25.6)	225

**APPROXIMATE ELECTRODE PACKAGING & DIMENSIONS**

Diameter (mm)	1/8 (3.25)	5/32 (4.0)	3/16 (5.0)
Length (mm)	14" (350)	18" (450)	18" (450)
Electrodes / lb	8	4.25	2.5
Electrodes / kg	17.5	9.5	5.75