

# SELECTRODE 1276

**RC-68 Boron Carbide** 

### INTERNATIONAL CLASSIFICATIONS

**AWS - None** 

### FEATURES & APPLICATIONS

1276 has been engineered so that while the same levels of dilution can be expected based on the application method, the dilution layer itself retains maximum hardness and wear resistance after a short distance from the weld overlay interface (i.e. within  $100 \, \mu$ m). This allows maximum hardness/wear resistance to develop in the first weld overlay pass while conventional weld materials need two or more passes to generate their best wear characteristics. Typical applications include impellers, shovels, buckets, mixer shafts, transport screws and crushers for the concrete industry.

- For protecting all iron based parts subjected to severe abrasion and moderate impact
- Average hardness equivalent to Rockwell C 67 69
- Recommended for single layer application

# ALL WELD METAL ANALYSIS (TYPICAL WEIGHT %)

**Microstructure:** In the as welded condition the microstructure consists of boron carbides in a martensitic matrix.

Flux Color: Black

С	Mn	Si	Ni	В	Ti	Fe
0.54	2.18	3.20	2.16	4.8	0.3	Bal.

## TYPICAL MECHANICAL PROPERTIES

**Undiluted Weld Metal** 

**Maximum Value Up to:** 

Hardness:

1st Pass RC 67-69 Vickers 1114

## WELDING CURRENT & INSTRUCTIONS

**Recommended Current:** DC Reverse (+) or Straight (-), AC

Diameter (mm)	1/8 (3.25)	5/32 (4.0)	3/16 (5.0)	1/4 (6.0)
Minimum Amperage	105	130	170	230
Maximum Amperage	135	170	240	300

**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 over welded without prior removal.

Welding Positions: Flat, Horizontal, Half up

## **ELECTRODE DIMENSIONS**

Diameter (mm)	1/8 (3.25)	5/32 (4.0)	3/16 (5.0)	1/4 (6.0)
Length (mm)	14" (356)	18" (457)	18" (457)	18" (457)