

# BORON CARBIDE NOZZLES



**QUALITY • SERVICE • PRICE**

[www.graystarllc.com](http://www.graystarllc.com)

**GRAYSTAR** ★

**GRAYSTAR** ★ **LLC**

# BORON CARBIDE NOZZLES

**LONGER LIFE  
LOWER COST PER USE**

**REDUCE DOWN TIME  
MAINTAIN EFFICIENCY**

Boron Carbide nozzles are the longest lasting nozzles commercially available.  
Boron Carbide costs more but will outlast tungsten carbide by 3 to 10 times.

## ESTIMATED SERVICE LIFE IN HOURS

NOZZLE MATERIAL	STEEL GRIT/SHOT	SAND	ALUMINUM OXIDE
Alumina	20-40	10-30	1-4
Tungsten Carbide	500-800	300-400	20-40
Silicon Carbide	600-1000	400-600	50-100
Boron Carbide	1500-2500	750-1500	200-1000

Values for comparison only. Actual service life will vary.

<table style="width: 100%;"> <tr> <td style="width: 20%;">PART NO.</td> <td style="width: 20%;">BORE STRAIGHT</td> <td rowspan="6" style="width: 10%; text-align: center; vertical-align: middle;"> </td> </tr> <tr> <td>41411 F1</td> <td>1/4</td> </tr> <tr> <td>51411 F1</td> <td>5/16</td> </tr> <tr> <td>61411 F1</td> <td>3/8</td> </tr> <tr> <td>71411 F1</td> <td>7/16</td> </tr> <tr> <td>81411 F1</td> <td>1/2</td> </tr> </table>	PART NO.	BORE STRAIGHT		41411 F1	1/4	51411 F1	5/16	61411 F1	3/8	71411 F1	7/16	81411 F1	1/2	<table style="width: 100%;"> <tr> <td style="width: 20%;">PART NO.</td> <td style="width: 20%;">BORE STRAIGHT</td> <td rowspan="6" style="width: 10%; text-align: center; vertical-align: middle;"> </td> </tr> <tr> <td>22017 T1</td> <td>1/8</td> </tr> <tr> <td>32017 T1</td> <td>3/16</td> </tr> <tr> <td>42017 T1</td> <td>1/4</td> </tr> <tr> <td>52017 T1</td> <td>5/16</td> </tr> <tr> <td>62017 T1</td> <td>3/8</td> </tr> <tr> <td>72017 T1</td> <td>7/16</td> </tr> <tr> <td>82017 T1</td> <td>1/2</td> <td></td> </tr> </table>	PART NO.	BORE STRAIGHT		22017 T1	1/8	32017 T1	3/16	42017 T1	1/4	52017 T1	5/16	62017 T1	3/8	72017 T1	7/16	82017 T1	1/2						
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PART NO.	BORE STRAIGHT		
21416 F1	1/8		
31416 F1	3/16		
41416 F1	1/4		
51416 F1	5/16		
61416 F1	3/8		
71416 F1	7/16		
81416 F1	1/2		

\*F2= 1 1/8" O D

PART NO.	BORE VENTURI		
31833 F3 SV	3/16		
41833 F3 SV	1/4		
51833 F3 SV	5/16		
61833 F3 SV	3/8		
71833 F3 SV	7/16		
81833 F3 SV	1/2		

\*F4= 1 3/8" O D

PART NO.	BORE STRAIGHT		
21424 F1	1/8		
31424 F1	3/16		
41424 F1	1/4		
51424 F1	5/16		
61424 F1	3/8		
71424 F1	7/16		
81424 F1	1/2		

\*F2= 1 1/8" O D

PART NO.	BORE VENTURI		
32433 F6SV	3/16		
42433 F6SV	1/4		
52433 F6SV	5/16		
62433 F6SV	3/8		
72433 F6SV	7/16		
82433 F6SV	1/2		

PART NO.	BORE STRAIGHT		
21432 F1	1/8		
31432 F1	3/16		
41432 F1	1/4		
51432 F1	5/16		
61432 F1	3/8		
71432 F1	7/16		
81432 F1	1/2		

\*F2= 1 1/8" O D

PART NO.	BORE STRAIGHT		
21816 F3	1/8		
31816 F3	3/16		
41816 F3	1/4		
51816 F3	5/16		
61816 F3	3/8		
71816 F3	7/16		
81816 F3	1/2		

\*F4= 1 3/8" O D

PART NO.	BORE STRAIGHT		
41448 F1	1/4		
51448 F1	5/16		
61448 F1	3/8		
71448 F1	7/16		
81448 F1	1/2		

\*F2= 1 1/8" O D

PART NO.	BORE STRAIGHT		
21825 F3	1/8		
31825 F3	3/16		
41825 F3	1/4		
51825 F3	5/16		
61825 F3	3/8		
71825 F3	7/16		
81825 F3	1/2		

\*F4= 1 3/8" O D

PART NO.	BORE VENTURI		
32633T3 SV	3/16		
42633T3 SV	1/4		
52633T3 SV	5/16		
62633T3 SV	3/8		
72633T3 SV	7/16		
82633T3 SV	1/2		

PART NO.	BORE STRAIGHT		
21849 F3	1/8		
31849 F3	3/16		
41849 F3	1/4		
51849 F3	5/16		
61849 F3	3/8		
71849 F3	7/16		
81849 F3	1/2		

\*F4= 1 3/8" O D

PART NO.	BORE VENTURI		
42643T3 SV	1/4		
52663T3 SV	5/16		
62648T3 SV	3/8		
72654T3 SV	7/16		
82672T3 SV	1/2		

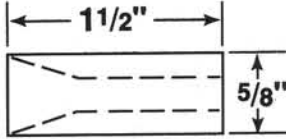
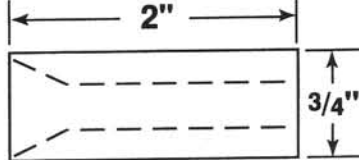
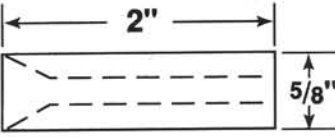
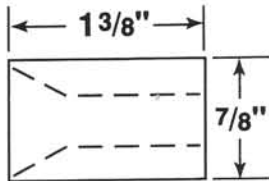
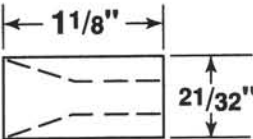
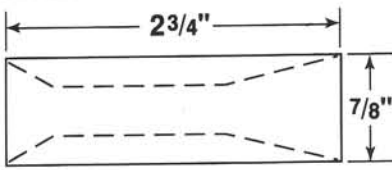
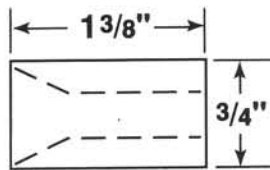
THREAD 1 1/4" - 11 1/2" N.P.S.

PART NO.	BORE STRAIGHT		
21824 F5	1/8		
31824 F5	3/16		
41824 F5	1/4		
51824 F5	5/16		
61824 F5	3/8		
71824 F5	7/16		
81824 F5	1/2		

PART NO.	BORE VENTURI		
51824 F5 WS	5/16		
61824 F5 WS	3/8		
81824 F5 WS	1/2		

WIDE SPRAY

# BORON CARBIDE INSERTS

<p>PART NO. BORE STRAIGHT</p> <p>21012 1/8</p> <p>31012 3/16</p> <p>41012 1/4</p> <p>51012 5/16</p>		<p>PART NO. BORE STRAIGHT</p> <p>21216 1/8</p> <p>31216 3/16</p> <p>41216 1/4</p> <p>51216 5/16</p> <p>61216 3/8</p>	
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<p>PART NO. BORE STRAIGHT</p> <p>410+9 1/4</p> <p>510+9 5/16</p> <p>610+9 3/8</p> <p>710+9 7/16</p>		<p>PART NO. BORE</p> <p>51422 WS 5/16</p> <p>61422 WS 3/8</p> <p>71422 WS 7/16</p> <p>81422 WS 1/2</p>	
<p>PART NO. BORE STRAIGHT</p> <p>21211 1/8</p> <p>31211 3/16</p> <p>41211 1/4</p> <p>51211 5/16</p> <p>61211 3/8</p>			

## PLEASE NOTE:

- CUSTOM DESIGNS AVAILABLE
- OTHER STYLES, BORE SIZES & LENGTHS AVAILABLE UPON REQUEST
- MINIMUM ORDER QUANTITY MAY APPLY TO SOME NOZZLE & INSERT ORDERS
- PLEASE CONTACT CUSTOMER SERVICE FOR FURTHER INFORMATION

**GRAYSTAR★LLC**

Tel: (843) 815-5600 | Fax: (843) 815-5601