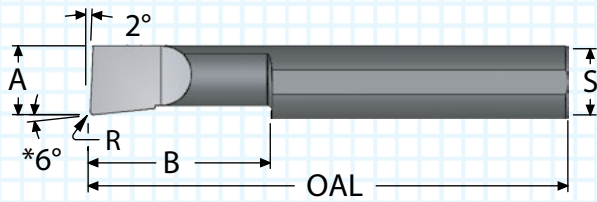


# RADIUS BORING BARS - SOLID CARBIDE



- ALTiN+ coating extends tool life
- Polished flute face for optimum performance
- Corner radius ensures strength and better surface finish

THREAD MILLS

SINGLE POINT TOOLS BORING

INDEXABLE TOOLS

PORT - CAVITY

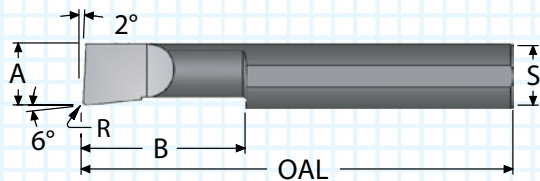
SPECIALTY

| "A"<br>MIN<br>BORE | "B"<br>MAX<br>DEPTH | "R"<br>RADIUS<br>±0.001 | "S"<br>SHANK<br>DIA. | OAL  | ORDER #  |           |
|--------------------|---------------------|-------------------------|----------------------|------|----------|-----------|
|                    |                     |                         |                      |      | UNCOATED | ALTiN+    |
| 0.050              | 0.150               | 0.004                   | 0.125                | 1.50 | B050150R | B050150RA |
| 0.050              | 0.200               | 0.004                   | 0.125                | 1.50 | B050200R | B050200RA |
| 0.050              | 0.300               | 0.004                   | 0.125                | 1.50 | B050300R | B050300RA |
| 0.050              | 0.400               | 0.004                   | 0.125                | 1.50 | B050400R | B050400RA |
| 0.060              | 0.150               | 0.004                   | 0.125                | 1.50 | B060150R | B060150RA |
| 0.060              | 0.200               | 0.004                   | 0.125                | 1.50 | B060200R | B060200RA |
| 0.060              | 0.300               | 0.004                   | 0.125                | 1.50 | B060300R | B060300RA |
| 0.060              | 0.400               | 0.004                   | 0.125                | 1.50 | B060400R | B060400RA |
| 0.060              | 0.500               | 0.004                   | 0.125                | 1.50 | B060500R | B060500RA |
| 0.080              | 0.150               | 0.004                   | 0.125                | 1.50 | B080150R | B080150RA |
| 0.080              | 0.200               | 0.004                   | 0.125                | 1.50 | B080200R | B080200RA |
| 0.080              | 0.300               | 0.004                   | 0.125                | 1.50 | B080300R | B080300RA |
| 0.080              | 0.400               | 0.004                   | 0.125                | 1.50 | B080400R | B080400RA |
| 0.080              | 0.500               | 0.004                   | 0.125                | 1.50 | B080500R | B080500RA |
| 0.080              | 0.600               | 0.004                   | 0.125                | 1.50 | B080600R | B080600RA |
| 0.100              | 0.150               | 0.004                   | 0.125                | 1.50 | B100150R | B100150RA |
| 0.100              | 0.200               | 0.004                   | 0.125                | 1.50 | B100200R | B100200RA |
| 0.100              | 0.300               | 0.004                   | 0.125                | 1.50 | B100300R | B100300RA |
| 0.100              | 0.400               | 0.004                   | 0.125                | 1.50 | B100400R | B100400RA |
| 0.100              | 0.500               | 0.004                   | 0.125                | 1.50 | B100500R | B100500RA |
| 0.100              | 0.600               | 0.004                   | 0.125                | 1.50 | B100600R | B100600RA |
| 0.100              | 0.700               | 0.004                   | 0.125                | 1.50 | B100700R | B100700RA |
| 0.110              | 0.150               | 0.004                   | 0.125                | 1.50 | B110150R | B110150RA |
| 0.110              | 0.200               | 0.004                   | 0.125                | 1.50 | B110200R | B110200RA |
| 0.110              | 0.300               | 0.004                   | 0.125                | 1.50 | B110300R | B110300RA |
| 0.110              | 0.400               | 0.004                   | 0.125                | 1.50 | B110400R | B110400RA |
| 0.110              | 0.500               | 0.004                   | 0.125                | 1.50 | B110500R | B110500RA |
| 0.110              | 0.600               | 0.004                   | 0.125                | 1.50 | B110600R | B110600RA |
| 0.110              | 0.700               | 0.004                   | 0.125                | 1.50 | B110700R | B110700RA |
| 0.120              | 0.250               | 0.0065                  | 0.1875               | 2.00 | B120250R | B120250RA |
| 0.120              | 0.350               | 0.0065                  | 0.1875               | 2.00 | B120350R | B120350RA |
| 0.120              | 0.500               | 0.0065                  | 0.1875               | 2.00 | B120500R | B120500RA |
| 0.120              | 0.600               | 0.0065                  | 0.1875               | 2.00 | B120600R | B120600RA |
| 0.120              | 0.700               | 0.0065                  | 0.1875               | 2.00 | B120700R | B120700RA |
| 0.120              | 0.800               | 0.0065                  | 0.1875               | 2.00 | B120800R | B120800RA |

| "A"<br>MIN<br>BORE | "B"<br>MAX<br>DEPTH | "R"<br>RADIUS<br>±0.001 | "S"<br>SHANK<br>DIA. | OAL  | ORDER #   |            |
|--------------------|---------------------|-------------------------|----------------------|------|-----------|------------|
|                    |                     |                         |                      |      | UNCOATED  | ALTiN+     |
| 0.140              | 0.250               | 0.0065                  | 0.1875               | 2.00 | B140250R  | B140250RA  |
| 0.140              | 0.400               | 0.0065                  | 0.1875               | 2.00 | B140400R  | B140400RA  |
| 0.140              | 0.500               | 0.0065                  | 0.1875               | 2.00 | B140500R  | B140500RA  |
| 0.140              | 0.600               | 0.0065                  | 0.1875               | 2.00 | B140600R  | B140600RA  |
| 0.140              | 0.700               | 0.0065                  | 0.1875               | 2.00 | B140700R  | B140700RA  |
| 0.140              | 0.750               | 0.0065                  | 0.1875               | 2.00 | B140750R  | B140750RA  |
| 0.140              | 0.800               | 0.0065                  | 0.1875               | 2.00 | B140800R  | B140800RA  |
| 0.160              | 0.250               | 0.0065                  | 0.1875               | 2.00 | B160250R  | B160250RA  |
| 0.160              | 0.400               | 0.0065                  | 0.1875               | 2.00 | B160400R  | B160400RA  |
| 0.160              | 0.500               | 0.0065                  | 0.1875               | 2.00 | B160500R  | B160500RA  |
| 0.160              | 0.600               | 0.0065                  | 0.1875               | 2.00 | B160600R  | B160600RA  |
| 0.160              | 0.750               | 0.0065                  | 0.1875               | 2.00 | B160750R  | B160750RA  |
| 0.160              | 0.900               | 0.0065                  | 0.1875               | 2.00 | B160900R  | B160900RA  |
| 0.160              | 1.000               | 0.0065                  | 0.1875               | 2.00 | B1601000R | B1601000RA |
| 0.180              | 0.350               | 0.0065                  | 0.250                | 2.50 | B180350R  | B180350RA  |
| 0.180              | 0.500               | 0.0065                  | 0.250                | 2.50 | B180500R  | B180500RA  |
| 0.180              | 0.600               | 0.0065                  | 0.250                | 2.50 | B180600R  | B180600RA  |
| 0.180              | 0.750               | 0.0065                  | 0.250                | 2.50 | B180750R  | B180750RA  |
| 0.180              | 0.900               | 0.0065                  | 0.250                | 2.50 | B180900R  | B180900RA  |
| 0.180              | 1.000               | 0.0065                  | 0.250                | 2.50 | B1801000R | B1801000RA |
| 0.180              | 1.100               | 0.0065                  | 0.250                | 2.50 | B1801100R | B1801100RA |
| 0.180              | 1.250               | 0.0065                  | 0.250                | 2.50 | B1801250R | B1801250RA |
| 0.180              | 1.500               | 0.0065                  | 0.250                | 2.50 | B1801500R | B1801500RA |
| 0.200              | 0.400               | 0.0065                  | 0.250                | 2.50 | B200400R  | B200400RA  |
| 0.200              | 0.500               | 0.0065                  | 0.250                | 2.50 | B200500R  | B200500RA  |
| 0.200              | 0.600               | 0.0065                  | 0.250                | 2.50 | B200600R  | B200600RA  |
| 0.200              | 0.700               | 0.0065                  | 0.250                | 2.50 | B200700R  | B200700RA  |
| 0.200              | 0.800               | 0.0065                  | 0.250                | 2.50 | B200800R  | B200800RA  |
| 0.200              | 0.900               | 0.0065                  | 0.250                | 2.50 | B200900R  | B200900RA  |
| 0.200              | 1.000               | 0.0065                  | 0.250                | 2.50 | B2001000R | B2001000RA |
| 0.200              | 1.100               | 0.0065                  | 0.250                | 2.50 | B2001100R | B2001100RA |
| 0.200              | 1.200               | 0.0065                  | 0.250                | 2.50 | B2001200R | B2001200RA |
| 0.200              | 1.300               | 0.0065                  | 0.250                | 2.50 | B2001300R | B2001300RA |

\* The B050 and the B060 series have 3° side clearance.

# RADIUS BORING BARS - SOLID CARBIDE



- Elliptically ground neck provides maximum strength
- Made with premium submicron grade carbide
- ALTiN+ coating for higher Surface Feet per Minute

| "A"<br>MIN<br>BORE | "B"<br>MAX<br>DEPTH | "R"<br>RADIUS<br>±0.001 | "S"<br>SHANK<br>DIA. | OAL  | ORDER #   |            |
|--------------------|---------------------|-------------------------|----------------------|------|-----------|------------|
|                    |                     |                         |                      |      | UNCOATED  | ALTiN+     |
| 0.230              | 0.400               | 0.0065                  | 0.3125               | 2.50 | B230400R  | B230400RA  |
| 0.230              | 0.500               | 0.0065                  | 0.3125               | 2.50 | B230500R  | B230500RA  |
| 0.230              | 0.600               | 0.0065                  | 0.3125               | 2.50 | B230600R  | B230600RA  |
| 0.230              | 0.700               | 0.0065                  | 0.3125               | 2.50 | B230700R  | B230700RA  |
| 0.230              | 0.800               | 0.0065                  | 0.3125               | 2.50 | B230800R  | B230800RA  |
| 0.230              | 0.900               | 0.0065                  | 0.3125               | 2.50 | B230900R  | B230900RA  |
| 0.230              | 1.000               | 0.0065                  | 0.3125               | 2.50 | B2301000R | B2301000RA |
| 0.230              | 1.100               | 0.0065                  | 0.3125               | 2.50 | B2301100R | B2301100RA |
| 0.230              | 1.150               | 0.0065                  | 0.3125               | 2.50 | B2301150R | B2301150RA |
| 0.230              | 1.200               | 0.0065                  | 0.3125               | 2.50 | B2301200R | B2301200RA |
| 0.230              | 1.250               | 0.0065                  | 0.3125               | 2.50 | B2301250R | B2301250RA |
| 0.230              | 1.400               | 0.0065                  | 0.3125               | 2.50 | B2301400R | B2301400RA |
| 0.230              | 1.500               | 0.0065                  | 0.3125               | 2.50 | B2301500R | B2301500RA |
| 0.230              | 1.600               | 0.0065                  | 0.3125               | 3.00 | B2301600R | B2301600RA |
| 0.290              | 0.500               | 0.0065                  | 0.3125               | 2.50 | B290500R  | B290500RA  |
| 0.290              | 0.600               | 0.0065                  | 0.3125               | 2.50 | B290600R  | B290600RA  |
| 0.290              | 0.750               | 0.0065                  | 0.3125               | 2.50 | B290750R  | B290750RA  |
| 0.290              | 0.900               | 0.0065                  | 0.3125               | 2.50 | B290900R  | B290900RA  |
| 0.290              | 1.000               | 0.0065                  | 0.3125               | 2.50 | B2901000R | B2901000RA |
| 0.290              | 1.100               | 0.0065                  | 0.3125               | 2.50 | B2901100R | B2901100RA |
| 0.290              | 1.250               | 0.0065                  | 0.3125               | 2.50 | B2901250R | B2901250RA |
| 0.290              | 1.350               | 0.0065                  | 0.3125               | 2.50 | B2901350R | B2901350RA |
| 0.290              | 1.500               | 0.0065                  | 0.3125               | 2.50 | B2901500R | B2901500RA |
| 0.290              | 1.600               | 0.0065                  | 0.3125               | 3.00 | B2901600R | B2901600RA |
| 0.290              | 1.750               | 0.0065                  | 0.3125               | 3.00 | B2901750R | B2901750RA |
| 0.320              | 0.500               | 0.0065                  | 0.375                | 2.50 | B320500R  | B320500RA  |
| 0.320              | 0.600               | 0.0065                  | 0.375                | 2.50 | B320600R  | B320600RA  |
| 0.320              | 0.750               | 0.0065                  | 0.375                | 2.50 | B320750R  | B320750RA  |
| 0.320              | 0.900               | 0.0065                  | 0.375                | 2.50 | B320900R  | B320900RA  |
| 0.320              | 1.000               | 0.0065                  | 0.375                | 2.50 | B3201000R | B3201000RA |
| 0.320              | 1.100               | 0.0065                  | 0.375                | 2.50 | B3201100R | B3201100RA |
| 0.320              | 1.250               | 0.0065                  | 0.375                | 2.50 | B3201250R | B3201250RA |
| 0.320              | 1.500               | 0.0065                  | 0.375                | 2.50 | B3201500R | B3201500RA |
| 0.320              | 1.600               | 0.0065                  | 0.375                | 3.00 | B3201600R | B3201600RA |
| 0.320              | 1.800               | 0.0065                  | 0.375                | 3.00 | B3201800R | B3201800RA |
| 0.320              | 2.000               | 0.0065                  | 0.375                | 4.00 | B3202000R | B3202000RA |
| 0.320              | 2.500               | 0.0065                  | 0.375                | 4.00 | B3202500R | B3202500RA |
| 0.320              | 3.000               | 0.0065                  | 0.375                | 4.00 | B3203000R | B3203000RA |

| "A"<br>MIN<br>BORE | "B"<br>MAX<br>DEPTH | "R"<br>RADIUS<br>±0.001 | "S"<br>SHANK<br>DIA. | OAL  | ORDER #   |            |
|--------------------|---------------------|-------------------------|----------------------|------|-----------|------------|
|                    |                     |                         |                      |      | UNCOATED  | ALTiN+     |
| 0.360              | 0.500               | 0.0065                  | 0.375                | 2.50 | B360500R  | B360500RA  |
| 0.360              | 0.600               | 0.0065                  | 0.375                | 2.50 | B360600R  | B360600RA  |
| 0.360              | 0.750               | 0.0065                  | 0.375                | 2.50 | B360750R  | B360750RA  |
| 0.360              | 0.900               | 0.0065                  | 0.375                | 2.50 | B360900R  | B360900RA  |
| 0.360              | 1.000               | 0.0065                  | 0.375                | 2.50 | B3601000R | B3601000RA |
| 0.360              | 1.150               | 0.0065                  | 0.375                | 2.50 | B3601150R | B3601150RA |
| 0.360              | 1.250               | 0.0065                  | 0.375                | 2.50 | B3601250R | B3601250RA |
| 0.360              | 1.500               | 0.0065                  | 0.375                | 2.50 | B3601500R | B3601500RA |
| 0.360              | 1.600               | 0.0065                  | 0.375                | 3.00 | B3601600R | B3601600RA |
| 0.360              | 1.800               | 0.0065                  | 0.375                | 3.00 | B3601800R | B3601800RA |
| 0.360              | 2.000               | 0.0065                  | 0.375                | 4.00 | B3602000R | B3602000RA |
| 0.360              | 2.500               | 0.0065                  | 0.375                | 4.00 | B3602500R | B3602500RA |
| 0.360              | 3.000               | 0.0065                  | 0.375                | 4.00 | B3603000R | B3603000RA |
| 0.490              | 0.750               | 0.0065                  | 0.500                | 3.00 | B490750R  | B490750RA  |
| 0.490              | 1.000               | 0.0065                  | 0.500                | 3.00 | B4901000R | B4901000RA |
| 0.490              | 1.250               | 0.0065                  | 0.500                | 3.00 | B4901250R | B4901250RA |
| 0.490              | 1.500               | 0.0065                  | 0.500                | 3.00 | B4901500R | B4901500RA |
| 0.490              | 2.000               | 0.0065                  | 0.500                | 4.00 | B4902000R | B4902000RA |
| 0.490              | 2.500               | 0.0065                  | 0.500                | 4.00 | B4902500R | B4902500RA |
| 0.490              | 2.600               | 0.0065                  | 0.500                | 4.00 | B4902600R | B4902600RA |
| 0.490              | 2.750               | 0.0065                  | 0.500                | 4.00 | B4902750R | B4902750RA |
| 0.490              | 3.000               | 0.0065                  | 0.500                | 6.00 | B4903000R | B4903000RA |
| 0.490              | 3.500               | 0.0065                  | 0.500                | 6.00 | B4903500R | B4903500RA |
| 0.490              | 4.000               | 0.0065                  | 0.500                | 6.00 | B4904000R | B4904000RA |
| 0.490              | 4.500               | 0.0065                  | 0.500                | 6.00 | B4904500R | B4904500RA |

THREAD MILLS

SINGLE POINT TOOLS  
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PORT - CAVITY

SPECIALTY