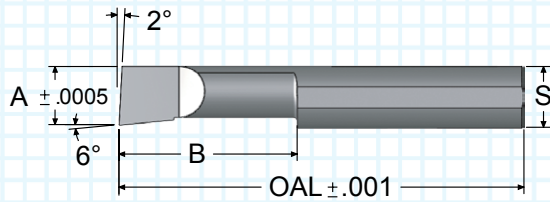


QUALIFIED BORING BARS - SOLID CARBIDE



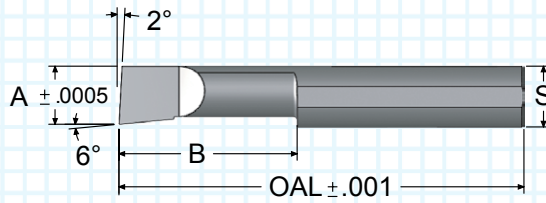
- Qualified length provides quicker tool changes
- Overall length is qualified to ± 0.001
- Minimum bore diameter is qualified to ± 0.0005
- Precision ground flat for guaranteed tool orientation

"A" MIN BORE	"B" MAX DEPTH	"S" SHANK DIA.	OAL	ORDER #	
				UNCOATED	ALTiN+
0.048	0.150	0.125	1.50	BQ050150	BQ050150A
0.048	0.200	0.125	1.50	BQ050200	BQ050200A
0.048	0.300	0.125	1.50	BQ050300	BQ050300A
0.048	0.400	0.125	1.50	BQ050400	BQ050400A
0.058	0.150	0.125	1.50	BQ060150	BQ060150A
0.058	0.200	0.125	1.50	BQ060200	BQ060200A
0.058	0.300	0.125	1.50	BQ060300	BQ060300A
0.058	0.400	0.125	1.50	BQ060400	BQ060400A
0.058	0.500	0.125	1.50	BQ060500	BQ060500A
0.078	0.150	0.125	1.50	BQ080150	BQ080150A
0.078	0.200	0.125	1.50	BQ080200	BQ080200A
0.078	0.300	0.125	1.50	BQ080300	BQ080300A
0.078	0.400	0.125	1.50	BQ080400	BQ080400A
0.078	0.500	0.125	1.50	BQ080500	BQ080500A
0.078	0.600	0.125	1.50	BQ080600	BQ080600A
0.098	0.150	0.125	1.50	BQ100150	BQ100150A
0.098	0.200	0.125	1.50	BQ100200	BQ100200A
0.098	0.300	0.125	1.50	BQ100300	BQ100300A
0.098	0.400	0.125	1.50	BQ100400	BQ100400A
0.098	0.500	0.125	1.50	BQ100500	BQ100500A
0.098	0.600	0.125	1.50	BQ100600	BQ100600A
0.098	0.700	0.125	1.50	BQ100700	BQ100700A
0.108	0.150	0.125	1.50	BQ110150	BQ110150A
0.108	0.200	0.125	1.50	BQ110200	BQ110200A
0.108	0.300	0.125	1.50	BQ110300	BQ110300A
0.108	0.400	0.125	1.50	BQ110400	BQ110400A
0.108	0.500	0.125	1.50	BQ110500	BQ110500A
0.108	0.600	0.125	1.50	BQ110600	BQ110600A
0.108	0.700	0.125	1.50	BQ110700	BQ110700A
0.118	0.250	0.1875	2.00	BQ120250	BQ120250A
0.118	0.350	0.1875	2.00	BQ120350	BQ120350A
0.118	0.500	0.1875	2.00	BQ120500	BQ120500A
0.118	0.600	0.1875	2.00	BQ120600	BQ120600A
0.118	0.700	0.1875	2.00	BQ120700	BQ120700A
0.118	0.800	0.1875	2.00	BQ120800	BQ120800A

"A" MIN BORE	"B" MAX DEPTH	"S" SHANK DIA.	OAL	ORDER #	
				UNCOATED	ALTiN+
0.138	0.250	0.1875	2.00	BQ140250	BQ140250A
0.138	0.400	0.1875	2.00	BQ140400	BQ140400A
0.138	0.500	0.1875	2.00	BQ140500	BQ140500A
0.138	0.600	0.1875	2.00	BQ140600	BQ140600A
0.138	0.700	0.1875	2.00	BQ140700	BQ140700A
0.138	0.750	0.1875	2.00	BQ140750	BQ140750A
0.138	0.800	0.1875	2.00	BQ140800	BQ140800A
0.158	0.250	0.1875	2.00	BQ160250	BQ160250A
0.158	0.400	0.1875	2.00	BQ160400	BQ160400A
0.158	0.500	0.1875	2.00	BQ160500	BQ160500A
0.158	0.600	0.1875	2.00	BQ160600	BQ160600A
0.158	0.750	0.1875	2.00	BQ160750	BQ160750A
0.158	0.900	0.1875	2.00	BQ160900	BQ160900A
0.158	1.000	0.1875	2.00	BQ1601000	BQ1601000A
0.178	0.350	0.250	2.50	BQ180350	BQ180350A
0.178	0.500	0.250	2.50	BQ180500	BQ180500A
0.178	0.600	0.250	2.50	BQ180600	BQ180600A
0.178	0.750	0.250	2.50	BQ180750	BQ180750A
0.178	0.900	0.250	2.50	BQ180900	BQ180900A
0.178	1.000	0.250	2.50	BQ1801000	BQ1801000A
0.178	1.100	0.250	2.50	BQ1801100	BQ1801100A
0.178	1.250	0.250	2.50	BQ1801250	BQ1801250A
0.178	1.500	0.250	2.50	BQ1801500	BQ1801500A
0.198	0.400	0.250	2.50	BQ200400	BQ200400A
0.198	0.500	0.250	2.50	BQ200500	BQ200500A
0.198	0.600	0.250	2.50	BQ200600	BQ200600A
0.198	0.700	0.250	2.50	BQ200700	BQ200700A
0.198	0.800	0.250	2.50	BQ200800	BQ200800A
0.198	0.900	0.250	2.50	BQ200900	BQ200900A
0.198	1.000	0.250	2.50	BQ2001000	BQ2001000A
0.198	1.100	0.250	2.50	BQ2001100	BQ2001100A
0.198	1.200	0.250	2.50	BQ2001200	BQ2001200A
0.198	1.300	0.250	2.50	BQ2001300	BQ2001300A

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

QUALIFIED BORING BARS - SOLID CARBIDE



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"A" MIN BORE	"B" MAX DEPTH	"S" SHANK DIA.	OAL	ORDER #	
				UNCOATED	ALTiN+
0.228	0.400	0.3125	2.50	BQ230400	BQ230400A
0.228	0.500	0.3125	2.50	BQ230500	BQ230500A
0.228	0.600	0.3125	2.50	BQ230600	BQ230600A
0.228	0.700	0.3125	2.50	BQ230700	BQ230700A
0.228	0.800	0.3125	2.50	BQ230800	BQ230800A
0.228	0.900	0.3125	2.50	BQ230900	BQ230900A
0.228	1.000	0.3125	2.50	BQ2301000	BQ2301000A
0.228	1.100	0.3125	2.50	BQ2301100	BQ2301100A
0.228	1.150	0.3125	2.50	BQ2301150	BQ2301150A
0.228	1.200	0.3125	2.50	BQ2301200	BQ2301200A
0.228	1.250	0.3125	2.50	BQ2301250	BQ2301250A
0.228	1.400	0.3125	2.50	BQ2301400	BQ2301400A
0.228	1.500	0.3125	2.50	BQ2301500	BQ2301500A
0.228	1.600	0.3125	3.00	BQ2301600	BQ2301600A
0.288	0.500	0.3125	2.50	BQ290500	BQ290500A
0.288	0.600	0.3125	2.50	BQ290600	BQ290600A
0.288	0.750	0.3125	2.50	BQ290750	BQ290750A
0.288	0.900	0.3125	2.50	BQ290900	BQ290900A
0.288	1.000	0.3125	2.50	BQ2901000	BQ2901000A
0.288	1.100	0.3125	2.50	BQ2901100	BQ2901100A
0.288	1.250	0.3125	2.50	BQ2901250	BQ2901250A
0.288	1.350	0.3125	2.50	BQ2901350	BQ2901350A
0.288	1.500	0.3125	2.50	BQ2901500	BQ2901500A
0.288	1.600	0.3125	3.00	BQ2901600	BQ2901600A
0.288	1.750	0.3125	3.00	BQ2901750	BQ2901750A
0.318	0.500	0.375	2.50	BQ320500	BQ320500A
0.318	0.600	0.375	2.50	BQ320600	BQ320600A
0.318	0.750	0.375	2.50	BQ320750	BQ320750A
0.318	0.900	0.375	2.50	BQ320900	BQ320900A
0.318	1.000	0.375	2.50	BQ3201000	BQ3201000A
0.318	1.100	0.375	2.50	BQ3201100	BQ3201100A
0.318	1.250	0.375	2.50	BQ3201250	BQ3201250A
0.318	1.500	0.375	2.50	BQ3201500	BQ3201500A
0.318	1.600	0.375	3.00	BQ3201600	BQ3201600A
0.318	1.800	0.375	3.00	BQ3201800	BQ3201800A
0.318	2.000	0.375	4.00	BQ3202000	BQ3202000A
0.318	2.500	0.375	4.00	BQ3202500	BQ3202500A
0.318	3.000	0.375	4.00	BQ3203000	BQ3203000A

"A" MIN BORE	"B" MAX DEPTH	"S" SHANK DIA.	OAL	ORDER #	
				UNCOATED	ALTiN+
0.358	0.500	0.375	2.50	BQ360500	BQ360500A
0.358	0.600	0.375	2.50	BQ360600	BQ360600A
0.358	0.750	0.375	2.50	BQ360750	BQ360750A
0.358	0.900	0.375	2.50	BQ360900	BQ360900A
0.358	1.000	0.375	2.50	BQ3601000	BQ3601000A
0.358	1.150	0.375	2.50	BQ3601150	BQ3601150A
0.358	1.250	0.375	2.50	BQ3601250	BQ3601250A
0.358	1.500	0.375	2.50	BQ3601500	BQ3601500A
0.358	1.600	0.375	3.00	BQ3601600	BQ3601600A
0.358	1.800	0.375	3.00	BQ3601800	BQ3601800A
0.358	2.000	0.375	4.00	BQ3602000	BQ3602000A
0.358	2.500	0.375	4.00	BQ3602500	BQ3602500A
0.358	3.000	0.375	4.00	BQ3603000	BQ3603000A
0.488	0.750	0.500	3.00	BQ490750	BQ490750A
0.488	1.000	0.500	3.00	BQ4901000	BQ4901000A
0.488	1.250	0.500	3.00	BQ4901250	BQ4901250A
0.488	1.500	0.500	3.00	BQ4901500	BQ4901500A
0.488	2.000	0.500	4.00	BQ4902000	BQ4902000A
0.488	2.500	0.500	4.00	BQ4902500	BQ4902500A
0.488	2.600	0.500	4.00	BQ4902600	BQ4902600A
0.488	2.750	0.500	4.00	BQ4902750	BQ4902750A