

Special tools

PCD tipped single flute/twin flute gundrills and form boring tools also available.

Step and form boring tools with indexable inserts.
System BTA, Ejector and inner coolant fed tools.



<p>Type B200 Solid carbide drill DIN 1897 3-fluted 30° helix 140° drill point</p> <p>Ø 3.000 - 20.000 mm</p>	<p>Type B300 Tap size end mill solid carbide DIN 8378 3-fluted 30° helix 90° countersink</p> <p>Ø 2.500 - 10.200 mm</p>	<p>Type F005-01 Insert pocket end mill solid carbide 3-fluted</p> <p>Ø 1.800 - 25.000 mm</p>	<p>Type F244...F251 Ball nose end mill solid carbide DIN 6527 + botek standard 2-fluted</p> <p>Ø 3.000 - 20.000 mm (25.000 mm)</p>	<p>Type F341...F347 Ball nose end mill solid carbide DIN 6527 + botek standard 3-fluted 30° helix</p> <p>Ø 3.000 - 20.000 mm</p>	<p>Type F440...F445 Ball nose end mill solid carbide DIN 6527 + botek standard 4-fluted</p> <p>Ø 3.000 - 20.000 mm (25.000 mm)</p>
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Non standards also available.
Please contact your botek representative.

Type 140
4 cutting edge counterboring tool with solid carbide tip



diameter range:
6.000 - 40.000 mm

Type 160
6 cutting edges counterboring tool with solid carbide tip



diameter range:
6.000 - 40.000 mm

Special tools on request.

Regrinding (single flute gundrills)

Type PS
Sharpening fixture
single flute gundrills can be reground on any good tool grinding machine.
drill-range:
Ø 0.500 - 6.000 mm



Type ZS
Sharpening fixture
single flute gundrills can be reground on any good tool grinding machine.
drill-range:
Ø 2.000 - 50.000 mm



MS 01
Bench top grinding machine
suitable for our sharpening fixtures.



MS 12
Multi-station grinding machine
for highly efficient grinding of large batches of tools with the same point geometry. The machine is suitable for tool diameters from 1.850 mm to 12.000 mm and tool lengths up to approx. 1000 mm.



Additional accessories (grinding wheels, tool holders etc.) are also available.

New Axial-Pulsator

Axial-Pulsator
The botek Axial-Pulsator has been developed to maximize the feed rate of straight fluted deep hole drilling tools when drilling steel and long chipping materials.

botek's Axial-Pulsator achieves equal hole making quality (straightness, run out, concentricity and surface finish) as standard deep hole drilling tools with economic performance.



botek Service

Coating (PVD)

Regrinding

Optimizing your process

250 000 002/11-2008

botek

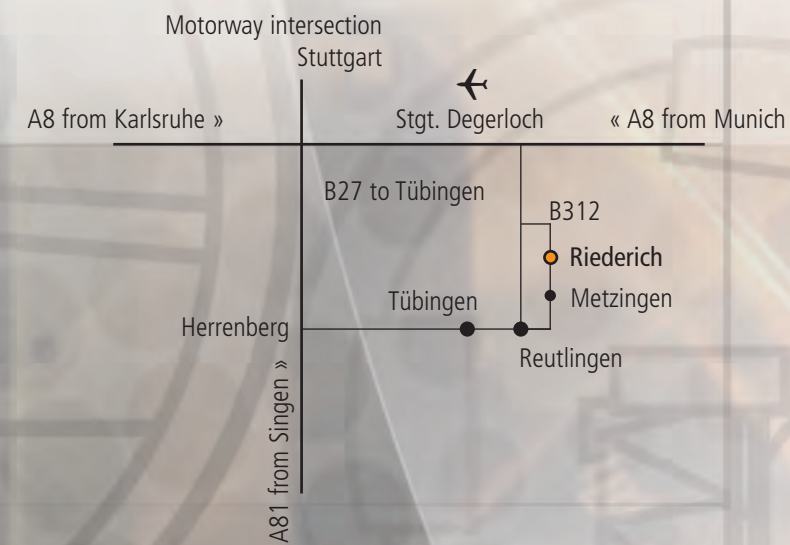
DEEP HOLE DRILLING SYSTEMS
SOLID CARBIDE TOOLS

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DEEP HOLE DRILLING SYSTEMS
SOLID CARBIDE TOOLS

Product line botek

New Axial-Pulsator



Single flute gundrills

Twin fluted drills

System BTA

System Ejector

Solid drilling tools




Counterboring tools








Trepanning tools




Accessories





Machining centres

<p>Type 113 Solid carbide gundrill kidney-shaped coolant channel</p> <p>diameter range: 0.500-12.000 mm</p> 	<p>Type 113-01 Solid carbide stepped drill kidney-shaped coolant channel</p> <p>diameter range: 1.500-... mm</p> 	<p>Type 110 Single flute gundrill with brazed solid carbide tip kidney-shaped coolant channel</p> <p>diameter range: 1.850-7.059 mm</p> 	<p>Type 111 Single flute gundrill drill head made of a steel body with inserted carbide cutting blade and bearing pads</p> <p>2 coolant holes</p> <p>diameter range: 7.060-51.200 mm</p> 	<p>1 coolant hole</p> <p>diameter range: 5.800-40.009 mm</p> 	<p>2 coolant holes</p> <p>diameter range: 40.010-60.009 mm</p> 
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<p>Type 120 Twin fluted drills with solid carbide head</p> <p>diameter range: 6.000-26.500 mm</p> 	<p>Type 122 Twin fluted stepped solid drilling tool with solid carbide head</p> <p>diameter range: 4.510-26.500 mm</p> 	<p>Type 123 Solid carbide 2-fluted drill coolant fed double margin</p> <p>diameter range: 2.800-32.000 mm</p> 
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<p>Type 17 Solid drill head regrindable, brazed carbide blade and guide pads, head to be brazed onto drill tube</p> <p>drilling range: 7.76-15.50 mm</p> 	<p>Type 18 Solid drill head regrindable, brazed carbide blade and guide pads, 1-start connection thread external</p> <p>drilling range: 12.21-15.50 mm</p> 	<p>Type 20 Solid drill head regrindable, brazed carbide blade and guide pads</p> <p>drilling range: 14.51-36.99 mm</p> 	<p>Type 11 Solid drill head with indexable inserts and guide pads, setting of drill diameter by stop plate</p> <p>drilling range: 18.00-36.99 mm</p> 	<p>Type 70B Solid drill head with indexable inserts and guide pads, diameter will be manufactured as per order</p> <p>drilling range: 25.00-64.99 mm</p> 	<p>Type 12 Solid drill head with indexable inserts and guide pads, setting of drill diameter by stop plate</p> <p>drilling range: 28.50-74.99 mm</p> 	<p>Type 22 Solid drill head with indexable inserts and guide pads</p> <p>drilling range: 75.00-149.99 mm</p> 
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<p>Type 15 Solid drill head brazed type, disposable</p> <p>drilling range: 18.40-65.00 mm</p> 	<p>Type 60 Solid drill head with indexable inserts and guide pads, setting of drill diameter by stop plate</p> <p>drilling range: 18.40-36.20 mm</p> 	<p>Type 70E Solid drill head with indexable inserts and guide pads, diameter will be manufactured as per order</p> <p>drilling range: 25.00-64.99 mm</p> 
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<p>Type 112 Single flute stepped gundrill with solid carbide tip (to produce precise stepped holes in one operation) Kidney-shaped coolant channel or 2 coolant holes depending on tool diameter</p> <p>diameter range: 2.000-51.200 mm</p> 	<p>Type 01 Deep hole drilling tool with indexable inserts and guide pads, setting of drill diameter by stop plate</p> <p>diameter range: 13.50-43.99 mm</p> 	<p>Type 07 Deep hole drilling tool with indexable inserts and guide pads, diameter will be manufactured as per order, larger dia. on request</p> <p>diameter range: 25.00-50.99 mm</p> 	<p>Type 02 Deep hole drilling tool with indexable inserts and guide pads, setting of drill diameter by stop plate, larger dia. on request</p> <p>diameter range: 37.00-100.00 mm</p> 
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Type 113/ 110/ 112 also available cutting edge with PCD (from Ø 4,0 mm)

<p>Type 123-01 Solid carbide 2-fluted drill for taps, coolant fed, step angle 90°</p> <p>diameter range: 2.800-32.000 mm</p> 	<p>Type 123-02 Solid carbide 2-fluted step drill for taps, coolant fed, step angle 180°</p> <p>diameter range: 2.800-32.000 mm</p> 
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Type 120/ 123 also available cutting edge with PCD

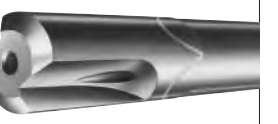

<p>Type 14 Solid drill head brazed type, disposable</p> <p>drilling range: 15.61-65.00 mm</p> 	<p>Type 61 Solid drill head with indexable inserts and guide pads, diameter will be manufactured as per order</p> <p>drilling range: 18.00-36.99 mm</p> 	<p>Type 70A Solid drill head with indexable inserts and guide pads, diameter will be manufactured as per order</p> <p>drilling range: 25.00-64.99 mm</p> 	<p>Type 64 Solid drill head with indexable inserts and guide pads, setting of drill diameter by stop plate</p> <p>drilling range: 28.71-65.00 mm</p> 	<p>Type 62 Solid drill head with indexable inserts and guide pads, setting of drill diameter by stop plate</p> <p>drilling range: 65.00-74.99 mm</p> 	<p>Type 42 Solid drill head with indexable inserts and guide pads</p> <p>drilling range: 75.00-149.99 mm</p> 	<p>Type 43B/A/F Solid drill head with indexable inserts and guide pads, setting of drill diameter by stop plate</p> <p>drilling range: 150.00-350.00 mm</p> 
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4-start connection thread external

<p>Type 62 Solid drill head with indexable inserts and guide pads, setting of drill diameter by stop plate</p> <p>drilling range: 28.71-74.99 mm</p> 	<p>Type 42 Solid drill head with indexable inserts and guide pads</p> <p>drilling range: 75.00-149.99 mm</p> 	<p>Type 43 Solid drill head with indexable inserts and guide pads, setting of drill diameter by stop plate</p> <p>drilling range: 150.00-183.99 mm</p> 
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4-start connection thread external

<p>Type 113-02 Single flute counterboring tool solid carbide</p> <p>diameter range: 0.700-10.000 mm</p> 	<p>Type 115 Single flute counterboring tool with solid carbide tip, chips forward (round tube)</p> <p>diameter range: 2.000-51.200 mm</p> 	<p>Type 115-01 Single flute stepped counterboring tool with solid carbide tip</p> <p>diameter range: 2.000-51.200 mm</p> 	<p>Type 115-03 Single flute counterboring tool with guiding pilot with solid carbide tip</p> <p>diameter range: 4.000-60.006 mm</p> 	<p>Type 115-04 Single flute counterboring tool with guiding pilot steel body with inserted carbide cutting blade and bearing pads</p> <p>diameter range: 30.000-60.006 mm</p> 
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<p>Type 125 Twin fluted counterboring tool with solid carbide head</p> <p>diameter range: 4.000-40.000 mm</p> 	<p>Type 125-03 Twin fluted counterboring tool with guiding pilot with solid carbide tip and steel shank</p> <p>diameter range: 6.000-40.000 mm</p> 
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<p>Type 13B/A Counterboring head 1-start or 4-start connection thread</p> <p>drilling range Type 13B: 28.50-74.99 mm drilling range Type 13A: 28.71-74.99 mm</p> 	<p>Type 34/Type 54 Counterboring head 1-start or 4-start connection thread</p> <p>drilling range Type 34: 44.00-401.99 mm drilling range Type 54: 47.00-401.99 mm</p> 	<p>Type 35B/A/F Counterboring head 1-start or 4-start connection thread or flange mounting, large adjustment range</p> <p>drilling range: 61.00-500.00 mm</p> 	<p>Type 36/Type 56 Counterboring head multi-cutter 1-start or 4-start connection thread</p> <p>drilling range: 34.00-159.99 mm</p> 	<p>Type 33B/A/F Counterboring head multi-cutter 1-start or 4-start connection thread or flange mounting, large adjustment range</p> <p>drilling range: 160.00-500.00 mm</p> 	<p>Type 38 Pull boring head 1-start connection thread internal</p> <p>drilling range: 20.00-222.99 mm</p> 	<p>Type 58 Pull boring head 4-start connection thread external</p> <p>drilling range: 20.00-222.99 mm</p> 
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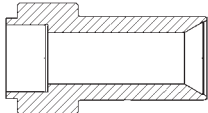

without add. fibre guide pads for boring depth up to 30 x dia. with add. fibre guide pads for boring depth up to 100 x dia.



<p>Type 13E Counterboring head 4-start connection thread external, setting of drill diameter by stop plate</p> <p>drilling range: 28.71-74.99 mm</p> 	<p>Type 35E Counterboring head 4-start connection thread external, large adjustment range</p> <p>drilling range: 61.00-197.99 mm</p> 
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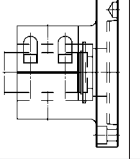
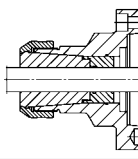
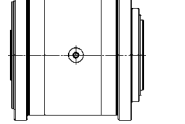
without add. fibre guide pads for boring depth up to 30 x dia.



<p>Type 114 Trepanning gundrill carbide tip for producing annular drill holes diameter range: 11.000-50.000 mm</p> 

<p>Type 28 Trepanning head 1-start connection thread internal drilling range: 55.00-197.99 mm</p> 	<p>Type 48 Trepanning head 4-start connection thread external drilling range: 55.00-197.99 mm flange mounting drilling range: 198.00-412.99 mm</p> 
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<p>170-02 Clamping cone</p> 	<p>170-03 Drill bush holder</p> 	<p>170-04 Drill bushings according to DIN 179 extended, made of steel, hardened throughout</p> 
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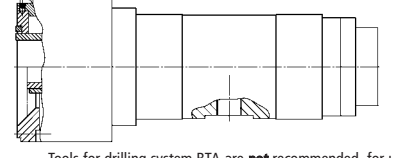
<p>170-05 Whipguide bushings with and without hole or formed type</p> 	<p>170-07 Sealing disc made of Vulkollan</p> 
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<p>Type 25 Drill tube with 1-start connection thread external</p> 	<p>Type 45 Drill tube with 4-start connection thread internal</p> 	<p>Drill tube drivers (split bush style)</p> 	<p>Drill tube drivers (collet style)</p> 	<p>Vibration dampers</p> 
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<p>Type 55 Drill tube (outer tube) with 4-start connection thread internal</p> 	<p>Type 55 Inner tube for all types of coolant connectors</p> 
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<p>Type 153-02 Solid carbide guide hole drill 2-fluted (not coolant fed)</p> <p>diameter range: 1.000-26.000 mm</p> 	<p>Type 153-03 Solid carbide guide hole drill 2-fluted, coolant fed</p> <p>diameter range: 3.000-26.000 mm</p> 
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Single flute and twin fluted gundrills are highly suitable for drilling on modern CNC machining centres.

<p>Pressure heads (BOZA) for rotating and non-rotating workpieces with clamping cones or face sealing</p> 
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Tools for drilling system BTA are **not** recommended for use on machining centres.

<ul style="list-style-type: none"> - Drill bushings - Wear pieces for drill tubes - Adaptors - Guide pieces - Drill head setting gauges - Grinding arbors 	<ul style="list-style-type: none"> - Drill bushings - Guide pieces - Vibration dampers 	<ul style="list-style-type: none"> - Coolant connectors (rotating, non rotating) - Drill head setting gauges - Grinding arbors
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Tools for drilling system Ejector are highly suitable for drilling on modern CNC machining centres.