
























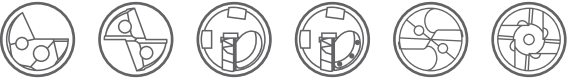
| Special tools   |   |  |  |  |  |   |
|---|---|--|--|--|--|---|
| Drilling  | <b>Type B200</b><br>Solid carbide drill<br>DIN 1897<br>3-fluted<br>30° helix<br>140° drill point<br><br>Ø 3.000 - 20.000 mm<br>                                      | <b>Type B300</b><br>Tap size end mill<br>solid carbide<br>DIN 8378<br>3-fluted<br>30° helix<br>90° countersink<br><br>Ø 2.500 - 10.200 mm<br> | <b>Type B301</b><br>Tap size end mill<br>solid carbide<br>DIN 8378<br>3-fluted<br>30° helix<br>180° countersink<br><br>Ø 0.700 - 32.000 mm<br>  | <b>PCD tipped single flute/<br/>twin flute gundrills<br/>and form boring<br/>tools are also<br/>available.</b><br>  |  | <b>Step and form boring tools with<br/>indexable inserts.</b><br>   |
|   | <b>Type P300</b><br>Insert pocket<br>and end mill<br>solid carbide<br>3-fluted<br><br>Ø 0.800 - 32.000 mm<br>  | <b>Type F244...F251</b><br>Ball nose end mill<br>solid carbide<br>DIN 6527<br>+ botek standard<br>2-fluted<br><br>Ø 1.500 - 32.000 mm<br>     | <b>Type F341...F347</b><br>Ball nose end mill<br>solid carbide<br>DIN 6527<br>+ botek standard<br>3-fluted<br>30° helix<br><br>Ø 1.500 - 32.000 mm<br>  | <b>Type F440...F445</b><br>Ball nose end mill<br>solid carbide<br>DIN 6527<br>+ botek standard<br>4-fluted<br><br>Ø 1.500 - 32.000 mm<br>   | <b>Type F20</b><br>Solid carbide cutter<br>DIN 6527 + botek standard<br>2-fluted<br><b>Type F30</b><br>3-fluted<br><b>Type F40</b><br>4-fluted<br>Ø 1.500 - 32.000 mm<br> | <b>Type F005-01</b><br>Insert pocket<br>and end mill<br>solid carbide<br>3-fluted<br><br>Ø 1.800 - 25.000 mm<br> |
| Reaming   | <b>Type 140</b><br>4 cutting edges counterboring tool<br>with solid carbide tip<br><br>diameter range:<br>6.000 - 40.000 mm<br>                                      |  |  | <b>Type 160</b><br>6 cutting edges counterboring tool<br>with solid carbide tip<br><br>diameter range:<br>6.000 - 40.000 mm<br>   |  | Special tools<br>on request.  |
|   | <b>Solid carbide twist drills</b>   |  |  |  |  |   |
| <b>Type 158-00</b><br>Solid carbide twist drill<br>(high performance twist drill)<br>4 margins / coolant fed<br>Point angle 140°<br>diameter range:<br>3.000 - 14.000 mm<br>   |   |  | <b>Type 158-01</b><br>Solid carbide twist drill<br>2 margins / coolant fed (available on request)<br>Point angle 140°<br><br>diameter range:<br>3.000 - 14.000 mm<br>  |  |  |   |
| <b>Regrinding (single flute gundrills)</b>  |   |  |  |  |  |   |
| <b>Type PS</b><br>Sharpening fixture<br>single flute gundrills can<br>be reground on any good<br>tool grinding machine.<br>drill-range:<br>Ø 0.500 - 6.000 mm<br>   | <b>Type ZS</b><br>Sharpening fixture<br>single flute gundrills can<br>be reground on any good<br>tool grinding machine.<br>drill-range:<br>Ø 2.000 - 50.000 mm<br> | <b>MS 01</b><br>Bench top grinding<br>machine<br>suitable for our<br>sharpening<br>fixtures.<br>  | <b>MS 12-2</b><br>Multi-station grinding machine<br>for highly efficient grinding of<br>large batches of tools with the<br>same point geometry. The<br>machine is suitable for tool<br>diameters from 1.850 mm to<br>12.000 mm and tool lengths<br>up to approx. 1000 mm.<br> | <b>MS 12-3</b><br>Multi-station grinding machine<br>for highly efficient grinding of<br>large batches of tools with the<br>same point geometry. The<br>machine is suitable for tool<br>diameters from 1.850 mm to<br>12.000 mm and tool lengths<br>up to approx. 1000 mm.<br> | Additional<br>accessories<br>(grinding<br>wheels, tool<br>holders etc.)<br>are also<br>available.  |   |
| <b>Axial-Pulsator</b><br><br>Axial-Pulsator<br>The botek Axial-Pulsator has been developed to<br>maximize the feed rate of straight fluted deep<br>hole drilling tools when drilling steel and long<br>chipping materials.<br><br>botek's Axial-Pulsator achieves equal hole making<br>quality (straightness, run out, concentricity and<br>surface finish) as standard deep hole drilling tools<br>with economic performance.<br><br> |   | <b>Coolant pressure gauging-kit</b><br><br>Coolant pressure gauging-kit for machining centres<br>and deep hole drilling machines.<br><br>   |  | <b>Drill Head Setting Gauge</b><br><br>Drill Head Setting Gauge<br>Process reliable diameter setting of drill<br>heads.<br><br>  |  |   |

| Express production line / Stock program   |  |
|---|--|
| <b>Express production line:</b><br><b>The product range contains the following tools:</b> <ul style="list-style-type: none"><li>- Single flute gundrills: Type 110/112/113/115/01/07</li><li>- Twin fluted drills: Type 120/122/123/123-01</li><li>- Twist drills: Type 158-00/158-01</li><li>- Special tools: Type B200/B300/B301/P300/F24/F34/F44/F20/F30/F40</li><li>- Pilot drills: Type 153-02/153-03/158-07/158-08/154-02/154-03</li></ul> <b>Contact:</b> Stephan Falk (e-Mail: Eilfertigung@botek.de, T: +49 7123 3808-121)<br><b>Stock program:</b> <ul style="list-style-type: none"><li>- Single flute gundrills: Type 110/113/113-HP/01</li><li>- BTA / Ejector: Type 70A / 70E</li><li>- Twist drills: Type 158</li><li>- Pilot drills: Type 153-02/153-03/158-08</li></ul> For more information regarding our stock and express program please refer to our online-shop on <a href="http://www.botek.de">www.botek.de</a>   |  |
| Service   |  |
| <b>Customer trials</b> in our research and development department: <ul style="list-style-type: none"><li>- tool development specifically tailored to suit your application</li><li>- supportive when introducing the latest technology</li><li>- solving processing problems</li></ul> <b>Process layout:</b> You submit us your drilling application and we will develop the whole process from engineering to finding the perfect tooling solution.<br><b>Process optimization:</b> Our team of Application Engineers analyse and improve your process in your facility and coordinate all technical details.<br>Reduced manufacturing costs by: <ul style="list-style-type: none"><li>- optimised cutting values</li><li>- improved tool life</li><li>- shortenend auxiliary process time</li><li>- maximized process capacity</li></ul> The botek trial department assists you in all stages of the process with: <ul style="list-style-type: none"><li>- Feasibility tests</li><li>- Optimization</li><li>- Instruction and training for your technicians</li></ul> <b>Regrinding:</b><br>botek offers prompt and cost effective in house regrinding service.<br><b>Coating:</b><br>botek offers prompt and cost effective in house coating service. |  |
| <b>You can download our catalogues on our website <a href="http://www.botek.de">www.botek.de</a></b>  |  |
| <ul style="list-style-type: none"><li>• Please see our application notes, <a href="http://www.botek.de">www.botek.de</a></li><li>• Our General Standard Terms and Conditions, which we assume as known, apply.</li><li>• We reserve the right to make modifications in the interests of technical improvement. Such modifications cannot, in principle, be accepted as justifiable grounds for complaint.</li><li>• Subject to change. The manufacturer accepts no responsibility for misprints and other errors.</li></ul> © botek Präzisionsbohrtechnik GmbH  |  |
| 250 000 002/20-2021   |  |

Product line

botek

Express Production Line –  
Delivery within 24 h  
(if all components are in stock  
or by arrangement)





| Single flute gundrills |   |   |  |   |   |  | Twin fluted drills   |   |  |   | System BTA  |   |   |   |   |   |  |   |   |  | System Ejector |   |   |   |                                    |  |  |
|------------------------|---|---|--|---|---|--|--|---|--|---|---|---|---|---|---|---|--|---|---|--|----------------|---|---|---|------------------------------------|--|--|
| Solid drilling tools   | <b>Type 113</b><br>Solid carbide gundrill<br>kidney-shaped coolant channel<br><br>diameter range: 0.500 - 12.000 mm<br>                                    | <b>Type 113-01</b><br>Solid carbide stepped drill<br>kidney-shaped coolant channel<br><br>diameter range: 1.500 - ... mm<br>                         | <b>Type 113-HP</b><br>Solid carbide gundrill<br>High performance tool design alternative to carbide twist drills<br><br>diameter range: 0.700 - 12.000 mm<br>     | <b>Type 113-HP-M</b><br>Solid carbide gundrill<br>High performance tool design for the usage with MQL<br><br>diameter range: 2.000 - 12.000 mm<br> | <b>Type 110</b><br>Single flute gundrill with brazed solid carbide tip kidney-shaped coolant channel<br><br>1 coolant hole diameter range 1.850 - 7.059 mm<br>2 coolant holes diameter range 7.060 - 51.200 mm<br> | <b>Type 111</b><br>Single flute gundrill drill head made of a steel body with inserted carbide cutting blade and bearing pads<br><br>1 coolant hole diameter range 5.800 - 40.009 mm<br>2 coolant holes diameter range 40.010 - 60.009 mm<br> | <b>Type 112</b><br>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<br>diameter range: 2.000 - 51.200 mm<br> | <b>Type 120</b><br>Twin fluted drills with solid carbide head, larger dia. on request<br><br>diameter range: 6.000 - 43.009 mm<br>                                 | <b>Type 122</b><br>Twin fluted stepped solid drilling tool with solid carbide head<br><br>diameter range: 4.510 - 26.500 mm<br>                                       | <b>Type 123</b><br>Solid carbide 2-fluted drill coolant fed double margin<br><br>diameter range: 2.800 - 32.000 mm<br>   | <b>Type 17</b><br>Solid drill head regrindable, brazed carbide blade and guide pads, head to be brazed onto drill tube<br><br>drilling range: 7.76 - 15.50 mm<br>        | <b>Type 18</b><br>Solid drill head regrindable, brazed carbide blade and guide pads, 1-start connection thread external<br><br>drilling range: 12.21 - 15.50 mm<br>                    | <b>Type 20</b><br>Solid drill head regrindable, brazed carbide blade and guide pads<br><br>drilling range: 14.51 - 36.99 mm<br>        | <b>Type 11</b><br>Solid drill head setting of drill diameter by stop plate<br><br>drilling range: 14.55 - 36.99 mm<br>                       | <b>Type 70B</b><br>Solid drill head diameter will be manufactured as per order<br><br>drilling range: 25.00 - 65.00 mm<br> | <b>Type 12</b><br>Solid drill head setting of drill diameter by stop plate<br><br>drilling range: 28.50 - 74.99 mm<br>           | <b>Type 15</b><br>Solid drill head brazed type, disposable<br><br>drilling range: 18.40 - 65.00 mm<br>                      | <b>Type 60</b><br>Solid drill head setting of drill diameter by stop plate<br><br>drilling range: 18.40 - 36.20 mm<br> | <b>Type 70E</b><br>Solid drill head diameter will be manufactured as per order<br><br>drilling range: 25.00 - 65.00 mm<br> | 1-start connection thread internal<br>4-start connection thread external |                |   |   |   |                                    |  |  |
|                        | Type 113 / 110 / 112 also available with PCD cutting edge (from Ø 4.0 mm)   |   |  |   |   |  |  | <b>Type 01</b><br>Deep hole drilling tool with indexable inserts and guide pads, setting of drill diameter by stop plate<br><br>diameter range: 12.00 - 43.99 mm<br> | <b>Type 07</b><br>Deep hole drilling tool with indexable inserts and guide pads, diameter will be manufactured as per order<br><br>diameter range: 25.00 - 50.99 mm<br> | <b>Type 02</b><br>Deep hole drilling tool with indexable inserts and guide pads, setting of drill diameter by stop plate, larger dia. on request<br><br>diameter range: 37.00 - 74.99 mm<br> | <b>Type 07A</b><br>Deep hole drilling tool with indexable inserts and guide pads, diameter will be manufactured as per order<br><br>drilling-range: 51.00 - 113.99 mm<br> | <b>Type 03</b><br>Twin fluted drills with indexable inserts and guide pads<br><br>diameter range-Ø 12.50 - 30.00 mm<br>  | <b>Type 123-01</b><br>Solid carbide 2-fluted drill for taps, coolant fed, step angle 90°<br><br>diameter range-Ø 2.800 - 32.000 mm<br> | <b>Type 123-02</b><br>Solid carbide 2-fluted step drill for taps, coolant fed, step angle 180°<br><br>diameter range-Ø 2.800 - 32.000 mm<br> | <b>Type 14</b><br>Solid drill head brazed type, disposable<br><br>drilling range: 15.60 - 65.00 mm<br>                     | <b>Type 61</b><br>Solid drill head setting of drill diameter by stop plate<br><br>drilling range: 15.65 - 36.20 mm<br>           | <b>Type 70A</b><br>Solid drill head diameter will be manufactured as per order<br><br>drilling range: 25.00 - 65.00 mm<br>  | <b>Type 64</b><br>Solid drill head setting of drill diameter by stop plate<br><br>drilling range: 28.71 - 74.99 mm<br> |   |  |                | <b>Type 43A/B/F</b><br>Solid drill head 1-start or 4-start connection thread or flange mounting setting of drill diameter by stop plate<br><br>drilling range: 60.00 - 368.99 mm<br> | <b>Type 62</b><br>Solid drill head setting of drill diameter by stop plate<br><br>drilling range: 28.71 - 74.99 mm<br> | <b>Type 43E</b><br>Solid drill head setting of drill diameter by stop plate<br><br>drilling range: 60.00 - 188.99 mm<br> | 4-start connection thread external |  |  |
|                        | Type 120 / 123 also available cutting edge with PCD   |   |  |   |   |  |  |   |  |   |   |   |   |   | 4-start connection thread external  |   |  |   |   |  |                |   |   |   |                                    |  |  |
| Counterboring tools    | <b>Type 113-02</b><br>Single flute counterboring tool solid carbide<br><br>diameter range: 0.500 - 10.000 mm<br>   | <b>Type 115</b><br>Single flute counterboring tool with solid carbide tip, chips forward (round tube)<br><br>diameter range: 2.000 - 51.200 mm<br> | <b>Type 115-01</b><br>Single flute stepped counterboring tool with solid carbide tip<br><br>diameter range: 2.000 - 51.200 mm<br>                               | <b>Type 115-03</b><br>Single flute counterboring tool with guiding pilot with solid carbide tip<br><br>diameter range: 4.000 - 12.000 mm<br>     | <b>Type 115-04</b><br>Single flute counterboring tool with guiding pilot steel body with inserted carbide cutting blade and bearing pads<br><br>diameter range: 12.001 - 60.006 mm<br>                          | <b>Type 125</b><br>Twin fluted counterboring tool with solid carbide head<br><br>diameter range: 4.000 - 40.000 mm<br>  | <b>Type 125-03</b><br>Twin fluted counterboring tool with guiding pilot with solid carbide tip and steel shank<br><br>diameter range: 6.000 - 40.000 mm<br>   | <b>Type 13A/B</b><br>Counterboring head 1-start or 4-start connection thread, for boring depth up to 30 x dia.<br><br>drilling range: 28.50 - 74.99 mm<br>       | <b>Type 34 / Type 54</b><br>Counterboring head 1-start or 4-start connection thread or flange mounting<br><br>drilling range: 44.00 - 353.99 mm<br>                 | <b>Type 35A/B/F</b><br>Counterboring head 1-start or 4-start connection thread or flange mounting, large adjustment range<br><br>drilling range: 61.00 - 498.99 mm<br>                   | <b>Type 36 / Type 56</b><br>Counterboring head multi-cutter 1-start or 4-start connection thread or flange mounting<br><br>drilling range: 60.00 - 250.00 mm<br>       | <b>Type 33A/B/F</b><br>Counterboring head multi-cutter 1-start or 4-start connection thread or flange mounting, large adjustment range<br><br>drilling range: 159.00 - 498.99 mm<br> | with add. fibre guide pads for boring depth up to 100 x dia.  |   |   | <b>Type 38 / Type 58</b><br>Pull boring head 1-start or 4-start connection thread<br><br>drilling range: 20.00 - 222.99 mm<br> | <b>Type 13E</b><br>Counterboring head setting of drill diameter by stop plate<br><br>drilling range: 28.71 - 74.99 mm<br> | <b>Type 35E</b><br>Counterboring head large adjustment range<br><br>drilling range: 61.00 - 198.99 mm<br>            | 4-start connection thread external  |  |                |   |   |   |                                    |  |  |
|                        |   |   |  |   |   |  |  |   |  |   |   |   |   |   |   |   |  |   |   |  |                |   |   |   |                                    |  |  |
| Trepanning tools       | <b>Type 114</b><br>Trepanning gundrill carbide tip for producing annular drill holes outer diameter range: 11.000 - 50.000 mm<br>                        |   |  | <b>Type 08</b><br>Trepanning tool diameter range 25.00 - 100.00 mm<br>   |   | <b>Type 09</b><br>Core Cutter diameter range 37.00 - 70.00 mm<br>   |  | <b>Type 28 / Type 48</b><br>Trepanning head 1-start or 4-start connection thread or flange mounting<br><br>drilling range: 55.00 - 412.99 mm<br>                 |  |   |   |   |   |   | <b>Type 29 / Type 49</b><br>Core cutter for cores up to max. Ø 60.00 mm 1-start or 4-start connection thread<br>         |   |  |   |   |  |                |   |   |   |                                    |  |  |
|                        |   |   |  |   |   |  |  |   |  |   |   |   |   |   |   |   |  |   |   |  |                |   |   |   |                                    |  |  |
| Accessories            | <b>Rotating coolant connector</b><br>for deep hole drilling tools with internal coolant supply diameter range: 12.000 - 115.000 mm 3.000 - 25.000 mm<br> |   | <b>Clamping cone 170-02</b><br>   |   | <b>Drill bush holder 170-03</b><br>  |  | <b>Drill bushings 170-04</b><br>according to DIN 179 A extended, made of steel, hardened throughout<br>  |   | <b>Whipguide bushings</b><br>with and without hole or formed type<br>   |   | <b>Sealing disc 170-07</b><br>   |   | <b>Type 25</b><br>Drill tube with 1-start connection thread external<br>   | <b>Type 45</b><br>Drill tube with 4-start connection thread internal<br>   | <b>Drill tube drivers</b><br>(split style)<br>   | <b>Drill tube drivers</b><br>(collet style)<br>  | <b>Vibration dampers</b><br>  | <b>Type 55</b><br>Drill tube (outer tube) with 4-start connection thread internal<br>                                | <b>Type 55</b><br>Inner tube for all types of coolant connectors<br>   |  |                |   |   |   |                                    |  |  |
|                        |   |   |  |   |   |  |  |   |  |   |   |   |   |   |   |   |  |   |   |  |                |   |   |   |                                    |  |  |
| Machining centres      | <b>Type 153-02</b><br>Solid carbide pilot drill not coolant fed/point angle 140° 3 x D (drill flute length) diameter range: 0.800 - 26.000 mm<br>        |   | <b>Type 153-03</b><br>Solid carbide pilot drill coolant fed/point angle 140° 3 x D (drill flute length), 5 x D on request diameter range: 2.000 - 26.000 mm<br> |   | <b>Type 158-07</b><br>Solid carbide pilot drill not coolant fed/point angle 145° 3 x D (drill flute length) diameter range: 3.000 - 14.000 mm<br>  |  | <b>Type 158-08</b><br>Solid carbide pilot drill coolant fed/point angle 145° 3 x D (drill flute length), 5 x D on request diameter range: 3.000 - 14.000 mm<br>  |   | <b>Pressure heads (BOZA)</b><br>for rotating and non-rotating workpieces with clamping cones or face sealing<br>  |   |   |   |   |   |   | <b>Drill tube adaptor</b><br>  |  |   | <ul style="list-style-type: none"><li>- Drill bushings</li><li>- Wear pieces for drill tubes</li><li>- Guide pieces</li><li>- Drill head setting gauges</li><li>- Grinding arbors</li></ul>                   |  |                | <b>Rotating connector</b><br>  | <b>Non-rotating connector</b><br>  |   |                                    |  |  |
|                        | Single flute and twin fluted gundrills are highly suitable for drilling on modern CNC machining centres.  |   |  |   |   |  |  |   | Tools for Drilling System BTA are <b>not</b> recommended for the use on machining centres.   |   |   |   |   |   |   | Tools for Drilling System Ejector are highly suitable for drilling on modern CNC machining centres.   |  |   |   |  |                |   |   |   |                                    |  |  |