

botek[®]

DEEP HOLE DRILLING SYSTEMS
SOLID CARBIDE TOOLS



botek^{24H} Product line

**Express Production Line –
Delivery within 24 h**

(if all components are in stock
or by arrangement)

botek Assistant



Google Play



App Store

Single flute gundrills / Twin fluted drills

Solid drilling tools

Type 113

Solid carbide gundrill
kidney-shaped coolant channel

diameter range:
0.0197 - 0.4724"
[0.500 - 12.000 mm]



Type 113-01

Solid carbide stepped drill
kidney-shaped coolant channel

diameter range:
0.0591 - ..."
[1.500 - ... mm]



Type 113-HP

Solid carbide gundrill
High performance
tool design alternative to carbide twist drills

diameter range:
0.0276 - 0.4724"
[0.700 - 12.000 mm]



Type 113-HP-M

Solid carbide gundrill
High performance
tool design for the usage with MQL

diameter range:
0.0787 - 0.4724"
[2.000 - 12.000 mm]



Type 110

Single flute gundrill with brazed solid carbide tip
1 coolant hole kidney-shaped coolant channel
diameter range 0.0728 - 0.2779"
[1.850 - 7.059 mm]
2 coolant holes
diameter range 0.2780 - 2.0157"
[7.060 - 51.200 mm]

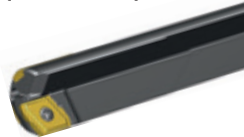


Type 113 / 110 / 112 also available with PCD cutting edge (from Ø 4.0 mm)

Type 01T

Deep hole drilling tool
with indexable insert and guide pads, with adjustment range

diameter range:
0.4724 - 0.7082"
[12.00 - 17.99 mm]



Type 01

Deep hole drilling tool
with indexable inserts and guide pads, setting of drill diameter by stop plate

drilling range:
0.7086 - 1.7319"
[18.00 - 43.99 mm]



Type 02

Deep hole drilling tool
with indexable inserts and guide pads, setting of drill diameter by stop plate, larger dia. on request

drilling range:
1.4567 - 2.9524"
[37.00 - 74.99 mm]
2.9527 - 4.3303"
[75.00 - 109.99 mm]



Type 07

Deep hole drilling tool
with indexable inserts and guide pads, diameter will be manufactured as per order

drilling range:
0.9842 - 2.0075"
[25.00 - 50.99 mm]



Type 07A

Deep hole drilling tool
with indexable inserts and guide pads, diameter will be manufactured as per order

drilling range:
2.0079 - 4.4878"
[51.00 - 113.99 mm]



Counterboring tools

Type 113-02

Single flute counterboring tool
solid carbide

diameter range: 0.0197 - 0.4724"
[0.500 - 12.000 mm]



Type 115

Single flute counterboring tool
with solid carbide tip, chips forward (round tube)

diameter range: 0.0728 - 2.0157"
[1.850 - 51.200 mm]



Type 115-01

Single flute stepped counterboring tool
with solid carbide tip

diameter range: 0.0728 - 2.0157"
[1.850 - 51.200 mm]



Type 115-03

Single flute counterboring tool
with guiding pilot
with solid carbide tip

diameter range: 0.0728 - 2.0157"
[1.850 - 51.200 mm]



Trepanning tools

Type 114

Trepanning gundrill
carbide tip for producing annular drill holes

outer diameter range:
0.4331 - 1.9685"
[11.000 - 50.000 mm]



Accessories

Rotating coolant connector

for deep hole drilling tools with internal coolant supply

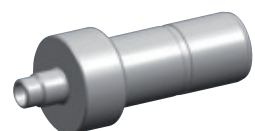
diameter range:
0.3898 - 4.5276"
[9.900 - 115.000 mm]
0.0984 - 0.9843"
[2.500 - 25.000 mm]



Clamping cone 170-02



Drill bush holder 170-03



Machining centres

Type 153-02

Solid carbide pilot drill
not coolant fed /
point angle 140°
3 x D (drill flute length)

diameter range: 0.0315 - 1.0236"
[0.800 - 26.000 mm]



Type 153-03

Solid carbide pilot drill
coolant fed /
point angle 140°
3 x D (drill flute length)
5 x D on request

diameter range: 0.0787 - 1.0236"
[2.000 - 26.000 mm]



Type 158-07

Solid carbide pilot drill
not coolant fed /
point angle 145°
3 x D (drill flute length)

diameter range: 0.1181 - 0.5512"
[3.000 - 14.000 mm]



Type 158-08

Solid carbide pilot drill
coolant fed /
point angle 145°
3 x D (drill flute length)
5 x D on request

diameter range: 0.1181 - 0.5512"
[3.000 - 14.000 mm]



Single flute and Twin fluted gundrills are highly suitable for drilling on modern CNC machining centres.

Single flute gundrills / Twin fluted drills

Type 111

Single flute gundrill
drill head made of a steel body with inserted carbide cutting blade and bearing pads
diameter range:
0.2283 - 1.2598"
[5.800 - 32.000 mm]



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
diameter range:
0.0787 - 2.0157"
[2.000 - 51.200 mm]



Type 120

Twin fluted drills
with solid carbide head, larger dia. on request

diameter range:
0.1772 - 1.6933"
[4.500 - 43.009 mm]



Type 120-HP

Twin fluted drills
with brazed carbide head
High performance tool design

diameter range:
0.1772 - 1.0433"
[4.500 - 26.500 mm]



Type 122

Twin fluted stepped solid drilling tool
with solid carbide head

diameter range:
0.1772 - 1.6933"
[4.500 - 43.009 mm]



Type 123

Solid carbide 2-fluted drill
coolant fed double margin

diameter range:
0.1102 - 1.2598"
[2.800 - 32.000 mm]



Type 123-01

Solid carbide 2-fluted drill
for taps, coolant fed, step angle 90°

diameter range:
0.0787 - 1.2598"
[2.000 - 32.000 mm]



Type 123-02

Solid carbide 2-fluted step drill
for taps, coolant fed, step angle 180°

diameter range:
0.0787 - 1.2598"
[2.000 - 32.000 mm]



Type 123-04

Twin fluted drills
solid carbide design for stainless steel

diameter range:
0.2362 - 0.629921"
[6.000 - 16.000 mm]



Type 123-HP

Twin fluted drills
solid carbide design
High performance tool design

diameter range:
0.1102 - 1.2598"
[2.800 - 32.000 mm]



Type 120 / 123 also available cutting edge with PCD

Type 115-04

Single flute counterboring tool with guiding pilot
steel body with inserted carbide cutting blade and bearing pads

diameter range: 0.4725 - 2.3624"
[12.001 - 60.006 mm]



Type 125

Twin fluted counterboring tool
with solid carbide head

diameter range:
0.1575 - 1.5748"
[4.000 - 40.000 mm]



Type 125-03

Twin fluted counterboring tool with guiding pilot
with solid carbide tip and steel shank

diameter range: 0.1968 - 1.5748"
[5.000 - 40.000 mm]



Type 08

Trepanning tool
drilling range:
0.9843 - 3.9370"
[25.00 - 100.00 mm]



Type 09

Core Cutter
drilling range:
1.4567 - 2.7559"
[37.00 - 70.00 mm]



Drill bushings 170-04

according to DIN 179 A extended, made of steel, hardened throughout.
Special design on request.



Whipguide bushings

with and without hole or formed type





















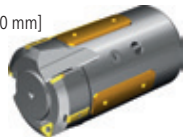










Sealing disc 170-07



PCD tipped Single flute / Twin flute gundrills and form boring tools are also available.



System BTA

Solid drilling tools	1-start connection	Type 20 drilling range: 0.571-1.456" [14.51 - 36.99 mm] brazed type, disposable 	Type 11 drilling range: 0.573-1.456" [14.55 - 36.99 mm] 	Type 12 drilling range: 1.122-2.952" [28.50 - 74.99 mm] 	Type 43B drilling range: 2.362-5.905" [60.00 - 149.99 mm] 	Type 43B drilling range: 5.866-6.653" [149.00 - 168.99 mm] 
	4-start connection / flange mounting	Type 14 drilling range: 0.614-2.559" [15.60 - 65.00 mm] brazed type, disposable 	Type 61 drilling range: 0.616-1.425" [15.65 - 36.20 mm] 	Type 64 drilling range: 1.130-2.952" [28.71 - 74.99 mm] 	Type 43A drilling range: 2.362-5.905" [60.00 - 149.99 mm] 	Type 43A/F drilling range: 43A: 5.866-7.834" [149.00 - 198.99 mm] 43F: 7.835-14.527" with flange mounting [199.00 - 368.99 mm] 
Counterboring tools / Trepanning tools	1-start connection	Type 13B drilling range: 1.122-2.952" [28.50 - 74.99 mm] 	Type 35B drilling range: 2.402-19.645" [61.00 - 498.99 mm] 	Type 34 drilling range: 1.732-13.937" [44.00 - 353.99 mm] 		Type 38 drilling range: 0.787-8.779" [20.00 - 222.99 mm] 
	4-start connection / flange mounting	Type 13A drilling range: 1.122-2.952" [28.50 - 74.99 mm] 	Type 35A drilling range: 2.402-8.819" [61.00 - 223.99 mm] 	Type 35F drilling range: 8.819-19.645" [224.00 - 498.99 mm] 	Type 54 drilling range: 1.850-13.937" [47.00 - 353.99 mm] 	Type 58 drilling range: 0.787-8.779" [20.00 - 222.99 mm] 
Form drilling tools	1 + 4-start connection / flange mounting	Type 99 Drilling ground 90° 	Type 99 Cone Cone with or without guide pin 	Type 99 Full radius Partial radius 	Type 99 Counterboring head multi-cutter Chips forward drilling range: 2.362-9.843" [60.00 - 250.00 mm] 	
Machining centres		Type 25 Drill tube with 1-start connection thread external 	Type 45 Drill tube with 4-start connection thread internal 	Type 45 Drill tube flange mounting from 7.480" [from 190 mm] 	Type 29 Adapter 	Type 29 Guide adapter 
		Type 91 Boza Clamping cone up to 23.622" [up to 600 mm] 	Type 91 Boza Face sealing up to 23.622" [up to 600 mm] 	Type 91 Drill tube drivers Collet style drilling diameter 0.472-2.205" [12 - 56 mm] 	Type 91 Drill tube drivers Split bush style from 2.441" [from 62 mm] 	Type 91 Vibration dampers for rotating tools drilling diameter 0.472-8.898" [12-226 mm] 

Detailed information can be found in the catalogue Deep hole drilling tools System BTA

System Ejector

Type 70B

drilling range:
0.984 - 2.559"
[25.00 - 65.00 mm]



Type 70A

drilling range:
0.984 - 2.559"
[25.00 - 65.00 mm]



Type 28

drilling range:
2.165 - 16.259"
[55.00 - 412.99 mm]



Type 48

drilling range:
2.165 - 7.795"
[55.00 - 197.99 mm]
7.795 - 16.259"
[198.00 - 412.99 mm
with flange mounting]



Type 99

Core cutter
up to 2.362"
[up to 60.00 mm]



Type 91

Measuring device
up to 19.685"
[up to 500.00 mm]



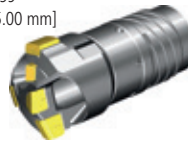
Type 91

Vibration dampers
for non-rotating tools
drilling diameter
5.118 - 20.236"
[130.00 - 514.00 mm]



Type 15

drilling range:
0.724 - 2.559"
[18.40 - 65.00 mm]



Type 60

drilling range:
0.724 - 1.425"
[18.40 - 36.20 mm]



Type 70E

drilling range:
0.984 - 2.559"
[25.00 - 65.00 mm]



Type 62

drilling range:
1.130 - 2.952"
[28.71 - 74.99 mm]



Type 43E

drilling range:
2.362 - 5.905"
[60.00 - 149.99 mm]



Type 43E

drilling range:
5.866 - 7.441"
[149.00 - 188.99 mm]



Type 13E

drilling range:
1.130 - 2.952"
[28.71 - 74.99 mm]



Type 35E

drilling range:
2.402 - 7.834"
[61.00 - 198.99 mm]



Type 52

drilling range:
1.850 - 7.795"
[47.00 - 197.99 mm]



Type 97

Rotating connector



Type 97

Non-rotating connector



Type 97

Connecting sleeve Sealing sleeve



Type 55

Outer tube
with 4-start connection
thread internal



Type 55

Inner tube



Type 97

Rotating connector



Type 97

Non-rotating connector



Type 97

Connecting sleeve Sealing sleeve



Type 55

Outer tube
with 4-start connection
thread internal



Type 55

Inner tube



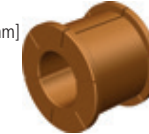
Type 91

Vibration dampers
for rotating tools
drilling range
0.709 - 6.535"
[18.00 - 166.00 mm]



Type 91

Vibration dampers
for non-rotating tools
drilling range
0.709 - 6.535"
[18.00 - 166.00 mm]



Type 91

Measuring device
up to 19.685"
[up to 500 mm]



Solid drilling tools

Counterboring tools

drilling range: 0.724 - 2.559" [18.40 - 65.00 mm]

Machining centres

drilling range: 2.559 - 7.441" [65.00 - 188.99 mm]

generally

Detailed information can be found in the catalogue Deep hole drilling tools System Ejector

Solid carbide drill / Milling / Reaming

Solid carbide drill

Type B200

Solid carbide drill

DIN 1897, 3-fluted
30° helix, 140° drill point

diameter range: 0.1181 - 0.7874"
[3.000 - 20.000 mm]



Type B300

Tap size end mill

solid carbide, DIN 8378, 3-fluted
30° helix, 90° countersink

diameter range: 0.0984 - 0.4016"
[2.500 - 10.200 mm]



Type B301

Tap size end mill

solid carbide, DIN 8378, 3-fluted
30° helix, 180° countersink

diameter range: 0.0276 - 1.2598"
[0.700 - 32.000 mm]



Type 158-00

Solid carbide twist drill

(high performance twist drill) 4 margins / coolant fed
Point angle 140°

diameter range: 0.1181 - 0.5512"
[3.000 - 14.000 mm]



Type 158-01

Solid carbide twist drill

2 margins / coolant fed (available on request)
Point angle 140°

diameter range: 0.1181 - 0.5512"
[3.000 - 14.000 mm]



Milling

Type P300

Insert pocket and end drill

solid carbide, 3-fluted

diameter range: 0.0315 - 1.2598"
[0.800 - 32.000 mm]



Type F244...F251

Ball nose end mill

solid carbide, DIN 6527
+ botek standard, 2-fluted

diameter range: 0.0591 - 1.2598"
[1.500 - 32.000 mm]



Type F341...F347

Ball nose end mill

solid carbide, DIN 6527
+ botek standard, 3-fluted
30° helix

diameter range: 0.0591 - 1.2598"
[1.500 - 32.000 mm]



Type F440...F445

Ball nose end mill

solid carbide, DIN 6527
+ botek standard
4-fluted

diameter range:
0.0591 - 1.2598"
[1.500 - 32.000 mm]



Type F20

Solid carbide cutter

DIN 6527
+ botek standard
2-fluted

diameter range:
0.0591 - 1.2598"
[1.500 - 32.000 mm]

Type F30

Solid carbide cutter

DIN 6527
+ botek standard
3-fluted

diameter range:
0.0591 - 1.2598"
[1.500 - 32.000 mm]



Type F40

Solid carbide cutter

DIN 6527
+ botek standard
4-fluted

diameter range:
0.0591 - 1.2598"
[1.500 - 32.000 mm]

Type F005-01

Insert pocket and end mill

solid carbide, 3-fluted

diameter range:
0.070 - 0.9843"
[1.800 - 25.000 mm]



Non standards also available.

Please contact your botek representative.

Technical hotline: Single flute gundrills / Twin fluted drills P: +49 7123 3808-300

Reaming

Type 140

4 cutting edges counterboring tool

with solid carbide tip

diameter range:
0.2362 - 1.5748"
[6.000 - 40.000 mm]



Type 160

6 cutting edges counterboring tool

with solid carbide tip

diameter range:
0.2362 - 1.5748"
[6.000 - 40.000 mm]



Special tools
on request.

Turnkey-Projects / Regrinding (Single flute gundrills) Axial-Pulsator / Coolant pressure gauging-kit

Turnkey

Regrinding (single flute gundrills)

Axial-Pulsator

Coolant pressure gauging-kit

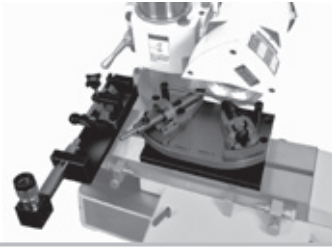
Whether individual bores or the complete machining of an entire component – we show you innovative machining concepts and design the appropriate process including tools in close coordination with you.

Type PS

Sharpening fixture

single flute gundrills can be reground on any good tool grinding machine.

diameter range Ø: 0.0197 - 0.2362"
[0.500 - 6.000 mm]



Type ZS

Sharpening fixture

single flute gundrills can be reground on any good tool grinding machine.

diameter range Ø: 0.0787 - 1.9685"
[2.000 - 50.000 mm]



MS 01

Bench top grinding machine

suitable for our sharpening fixtures.



MS 12-2

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 0.0728" [1.850 mm] to 0.4724" [12.000 mm] and tool lengths up to approx. 39.370" [1.000 mm].



MS 12-3

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 0.0728" [1.850 mm] to 0.4724" [12.000 mm] and tool lengths up to approx. 39.370" [1.000 mm].



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

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.



Coolant pressure gauging-kit

Coolant pressure gauging-kit for machining centres and deep hole drilling machines.



Coolant pressure gauging-kit machining centres

Coolant pressure gauging-kit for machining centres



Coolant pressure gauging-kit deep hole drilling machine

Coolant pressure gauging-kit for deep hole drilling machines



Express production line / Stock program / Service

Express production line: The product range contains the following tools:

- Single flute gundrills: Type 110/112/113/115/01/07
- Twin fluted drills: Type 120/122/123/123-01
- Twist drills: Type 158-00/158-01
- Special tools: Type B200/B300/B301/P300/F24/F34/F44/F20/F30/F40
- Pilot drills: Type 153-02/153-03/158-07/158-08/154-02/154-03

Contact: Stephan Falk (e-Mail: Eilfertigung@botech.de, T: +49 7123 3808-121)

Stock program:

- Single flute gundrills: Type 110/113/113-HP/01
- BTA/Ejector: Type 70A/70E
- Twist drills: Type 158
- Pilot drills: Type 153-02/153-03/158-08

For more information regarding our stock and express program please refer to our online-shop on www.botech.de/en/online-shop/

Customer trials

 in our research and development department:

- tool development specifically tailored to suit your application
- supportive when introducing the latest technology
- solving processing problems

Process layout: You submit us your drilling application and we will develop the whole process from engineering to finding the perfect tooling solution.

Process optimization: Our team of Application Engineers analyse and improve your process in your facility and coordinate all technical details.

Reduced manufacturing costs by:

- optimised cutting values
- improved tool life
- shortenend auxiliary process time
- maximized process capacity

The botech trial department assists you in all stages of the process with:

- Feasibility tests
- Optimization
- Instruction and training for your technicians

Regrinding: botech offers prompt and cost effective in house regrinding service.

Coating: botech offers prompt and cost effective in house coating service.

Technical hotline: Drill heads with exchangeable inserts, **P: +49 7123 3808-200**

Single flute gundrills / Twin fluted drills, Carbide twist drills, Solid carbide drills, Milling tools, Reamers, **P: +49 7123 3808-300**

You can download our catalogues on our website www.botech.de/en/download/

- Please see our application notes, www.botech.de/en/
- Our General Standard Terms and Conditions, which we assume as known, apply.
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- Subject to change. The manufacturer accepts no responsibility for misprints and other errors.

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DEEP HOLE DRILLING SYSTEMS
SOLID CARBIDE TOOLS

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