

**botek**<sup>®</sup>

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:  
0.500 - 12.000 mm



## Type 113-01

**Solid carbide stepped drill**  
kidney-shaped coolant channel

diameter range:  
1.500 - ... mm



## Type 113-HP

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

diameter range:  
0.700 - 12.000 mm



## Type 113-HP-M

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

diameter range:  
2.000 - 12.000 mm



## Type 110

**Single flute gundrill** with brazed solid carbide tip

1 coolant hole kidney-shaped coolant channel  
diameter range 1.850 - 7.059 mm

2 coolant holes  
diameter range 7.060 - 51.200 mm



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

Counterboring tools

## Type 01

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

drilling range: 9.90 - 43.99 mm



## Type 07

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

drilling range: 25.00 - 50.99 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: 37.00 - 74.99 mm



## Type 07A

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

drilling range: 51.00 - 113.99 mm



Trepanning tools

## Type 113-02

**Single flute counterboring tool**  
solid carbide

diameter range: 0.500 - 12.000 mm



## Type 115

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

diameter range: 1.85 - 51.200 mm



## Type 115-01

**Single flute stepped counterboring tool**  
with solid carbide tip

diameter range: 1.85 - 51.200 mm



## Type 115-03

**Single flute counterboring tool**  
with guiding pilot  
with solid carbide tip

diameter range: 1.85 - 51.200 mm



## Type 114

**Trepanning gundrill**  
carbide tip for producing annular drill holes

outer diameter range:  
11.000 - 50.000 mm



Accessories

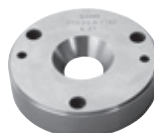
## Rotating coolant connector

for deep hole drilling tools with internal coolant supply

diameter range:  
9.900 - 115.000 mm  
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: 0.800 - 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: 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: 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: 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:  
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:  
2.000 - 51.200 mm



## Type 120

### Twin fluted drills

with solid carbide head, larger dia. on request

diameter range:  
4.500 - 43.009 mm



## Type 122

### Twin fluted stepped solid drilling tool with solid carbide head

diameter range:  
4.500 - 43.009 mm



## Type 123

### Solid carbide 2-fluted drill coolant fed double margin

diameter range:  
2.800 - 32.000 mm



## Type 123-01

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

diameter range: 2.000 - 32.000 mm



## Type 123-02

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

diameter range: 2.000 - 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

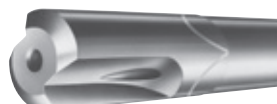
diameter range: 12.001 - 60.006 mm



## Type 125

Twin fluted counterboring tool with solid carbide head

diameter range: 4.000 - 40.000 mm



## Type 125-03

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

diameter range: 5.000 - 40.000 mm



## Type 08

Trepanning tool drilling range: 25.00 - 100.00 mm



## Type 09

Core Cutter drilling range: 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	<b>Type 20</b> drilling range: 14.51 - 36.99 mm brazed type, disposable 	<b>Type 11</b> drilling range: 14.55 - 36.99 mm 	<b>Type 12</b> drilling range: 28.50 - 74.99 mm 	<b>Type 43B</b> drilling range: 60.00 - 149.99 mm 	<b>Type 43B</b> drilling range: 149.00 - 168.99 mm 
	4-start connection / flange mounting	<b>Type 14</b> drilling range: 15.60 - 65.00 mm brazed type, disposable 	<b>Type 61</b> drilling range: 15.65 - 36.20 mm 	<b>Type 64</b> drilling range: 28.71 - 74.99 mm 	<b>Type 43A</b> drilling range: 60.00 - 149.99 mm 	<b>Type 43A/F</b> drilling range: 43A: 149.00 - 198.99 mm 43F: 199.00 - 368.99 mm with flange mounting 
Counterboring tools / Trepanning tools	1-start connection	<b>Type 13B</b> drilling range: 28.50 - 74.99 mm 	<b>Type 35B</b> drilling range: 61.00 - 498.99 mm 	<b>Type 34</b> drilling range: 44.00 - 353.99 mm 	<b>Type 38</b> drilling range: 20.00 - 222.99 mm 	
	4-start connection / flange mounting	<b>Type 13A</b> drilling range: 28.50 - 74.99 mm 	<b>Type 35A</b> drilling range: 61.00 - 223.99 mm 	<b>Type 35F</b> drilling range: 224.00 - 498.99 mm 	<b>Type 54</b> drilling range: 47.00 - 353.99 mm 	<b>Type 58</b> drilling range: 20.00 - 222.99 mm 
Form drilling tools	1 + 4-start connection / flange mounting	<b>Type 99</b> Drilling ground 90° 	<b>Type 99</b> Cone Cone with or without guide pin 	<b>Type 99</b> Full radius Partial radius 	<b>Type 99</b> Counterboring head multi-cutter Chips forward drilling range: 60.00 - 250.00 mm 	
		<b>Type 25</b> Drill tube with 1-start connection thread external 	<b>Type 45</b> Drill tube with 4-start connection thread internal 	<b>Type 45</b> Drill tube flange mounting from tube diameter 190 mm 	<b>Type 29</b> Adapter 	<b>Type 29</b> Guide adapter 
		<b>Type 91</b> Boza Clamping cone up to 600 mm 	<b>Type 91</b> Boza Face sealing up to 600 mm 	<b>Type 91</b> Drill tube drivers Collet style drilling diameter 12- 56 mm 	<b>Type 91</b> Drill tube drivers Split bush style from drilling diameter 62 mm 	<b>Type 91</b> Vibration dampers for rotating tools drilling diameter 12-226 mm 
		Detailed information can be found in the catalogue Deep hole drilling tools System BTA				

# System Ejector

Solid drilling tools

Counterboring tools

Machining centres

Single cutting edge

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

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

generally

## Type 70B

drilling range:  
25.00 - 65.00 mm



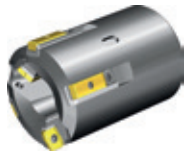
## Type 70A

drilling range:  
25.00 - 65.00 mm



## Type 28

drilling range:  
55.00 - 412.99 mm



## Type 48

drilling range:  
55.00 - 197.99 mm  
198.00 - 412.99 mm with flange mounting



## Type 99

Core cutter  
for cores up to max Ø 60 mm



## Type 91

Measuring device  
up to 500 mm



## Type 91

Vibration dampers  
for non-rotating tools  
drilling diameter  
130-514 mm



## Type 15

drilling range:  
18.40 - 65.00 mm



## Type 60

drilling range:  
18.40 - 36.20 mm



## Type 70E

drilling range:  
25.00 - 65.00 mm



## Type 62

drilling range:  
28.71 - 74.99 mm



## Type 43E

drilling range:  
60.00 - 149.99 mm



## Type 43E

drilling range:  
149.00 - 188.99 mm



## Type 13E

drilling range:  
28.71 - 74.99 mm



## Type 35E

drilling range:  
61.00 - 198.99 mm



## Type 52

drilling range:  
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



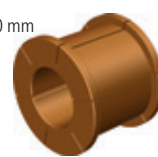
## Type 91

Vibration dampers  
for rotating tools  
drilling range  
18.00-166.00 mm



## Type 91

Vibration dampers  
for non-rotating tools  
drilling range  
18.00-166.00 mm



## Type 91

Measuring device  
up to 500 mm



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: 3.000 - 20.000 mm



## Type B300

**Tap size end mill**  
solid carbide, DIN 8378, 3-fluted  
30° helix, 90° countersink

diameter range: 2.500 - 10.200 mm



## Type B301

**Tap size end mill**  
solid carbide, DIN 8378, 3-fluted  
30° helix, 180° countersink

diameter range: 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: 3.000 - 14.000 mm



## Type 158-01

**Solid carbide twist drill**  
2 margins / coolant fed (available on request)  
Point angle 140°

diameter range: 3.000 - 14.000 mm



Milling

## Type P300

**Insert pocket and end mill**  
solid carbide, 3-fluted

diameter range: 0.800 - 32.000 mm



## Type F244...F251

**Ball nose end mill**  
solid carbide, DIN 6527  
+ botek standard, 2-fluted

diameter range: 1.500 - 32.000 mm



## Type F341...F347

**Ball nose end mill**  
solid carbide, DIN 6527  
+ botek standard, 3-fluted  
30° helix

diameter range: 1.500 - 32.000 mm



## Type F440...F445

**Ball nose end mill**  
solid carbide, DIN 6527  
+ botek standard  
4-fluted

diameter range:  
1.500 - 32.000 mm



## Type F20

**Solid carbide cutter**  
DIN 6527 +  
botek standard  
2-fluted

diameter range:  
1.500 - 32.000 mm



## Type F30

**Solid carbide cutter**  
DIN 6527 +  
botek standard  
3-fluted

diameter range:  
1.500 - 32.000 mm

## Type F40

**Solid carbide cutter**  
DIN 6527 +  
botek standard  
4-fluted

diameter range:  
1.500 - 32.000 mm

## Type F005-01

**Insert pocket and end mill**  
solid carbide, 3-fluted

diameter range:  
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:  
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.**

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

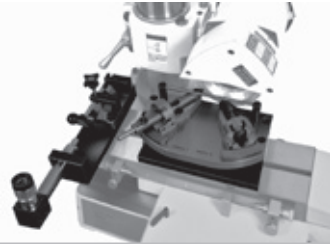
Whether individual bores or the complete machining of an entire component – we show you innovative machining concepts and design the appropriate process including tools in close coordination with you.

## Type PS

### Sharpening fixture

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

diameter range: Ø 0.500 - 6.000 mm



## Type ZS

### Sharpening fixture

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

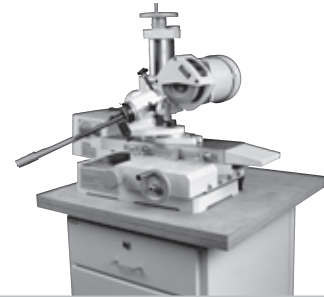
diameter range: Ø 2.000 - 50.000 mm



## 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 1.850 mm to 12.000 mm and tool lengths up to approx. 1000 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 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.**

## 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 BAZ

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](mailto: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/](http://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
- shortened 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/](http://www.botech.de/en/download/)



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