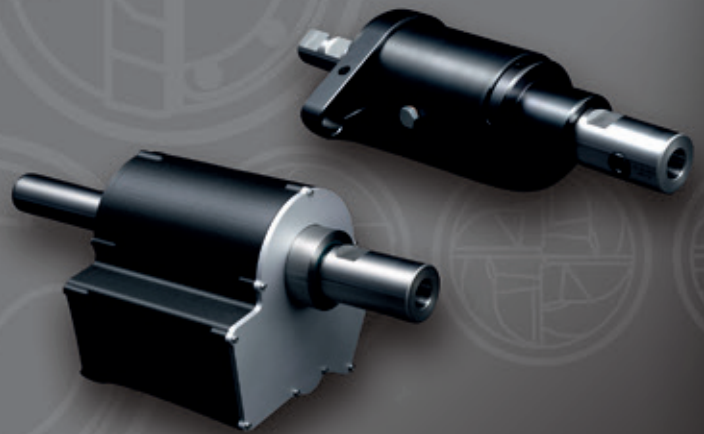


Axial-Pulsator

For efficient and reliable use
of our tools on steel and materials
that produce long chips

botek



How It Works:

A defined reciprocating motion of the drilling tool in the drilling direction produces an increasing and decreasing chip thickness. When the chip thickness reaches "0," this inevitably leads to chip breakage. The pulsator stroke is generated mechanically and optimally adapted to the tool or the drilling process.

Installation:

The mounting of the Axial-Pulsator in the tool drive or machine spindle is designed and manufactured according to customer specifications (steep taper, cylindrical shank, flange, etc.). The pulsator housing must be secured against rotation on the machine side. Depending on the pulsator size and application, lubrication is provided either by a filling with oil or by a compressed air maintenance unit using oil-enriched compressed air. The pulsator can generally be used with all machine types featuring a rotating machine spindle and controlled feed. Installation can be carried out by the user with minimal effort.

Benefits:

The Axial-Pulsator offers significant potential for optimization when machining materials that produce long chips. By specifically generating short chips, feed rates can be increased considerably – for example, by a factor of four when machining copper.

In steel machining as well, feed rates of 500 to 1,000 mm/min can be achieved in combination with straight-fluted solid carbide two fluted drills featuring optimized tool geometry. With single flute drills, significantly higher feed rates are also possible, depending on the material and process conditions.

When used in conjunction with botek tools, the Axial-Pulsator generally ensures more efficient and reliable machining without compromising tool life. For materials that produce long chips, the optimized chip formation can significantly increase tool life.



Axial-Pulsator Type 2000

Pulsator sizes:

Pulsator	Type 1000	Type 2000	Type 3000
Diameter range	to 4 mm	4-12 mm	12-25 mm*
Max. speed	11,000	6,000	2,500
Weight**	1.3 kg	4.4 kg	19.5 kg

* In non-ferrous metals up to 30 mm

** Weight depends on the machine and tool holder

Your benefits at a glance:

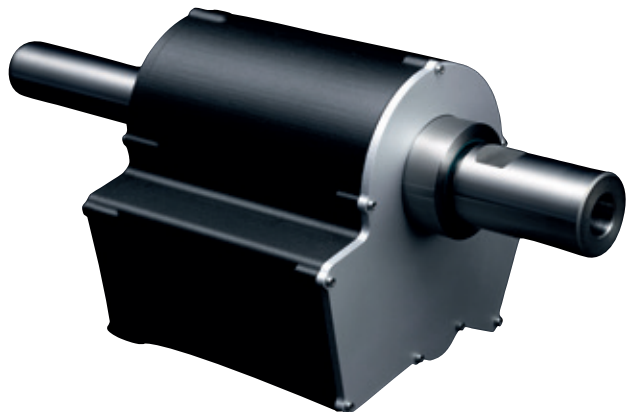
- Higher feed rates in materials that produce long chips
- Controlled chip formation
- High process reliability
- Longer tool life in materials that produce long chips
- Lower sensitivity to material variations

New: Electrically Adjustable Pulsator (e-Pulsator)

With the electrically adjustable Axial-Pulsators – Types 1000e, 2000e, and 3000e – botek is expanding its pulsator portfolio with a particularly flexible solution.

Thanks to the electric stroke adjustment, the e-Pulsators can be optimally adapted to different drilling processes directly on the machine. The stroke is adjusted via a tablet or smartphone connected via Bluetooth.

This enables the versatile use of a single pulsator for various machining tasks and targeted process optimization – for greater flexibility and higher efficiency.



Axial-Pulsator Type 2000e

e-Pulsator sizes:

Pulsator	Type 1000e	Type 2000e	Type 3000e
Diameter range	to 4 mm	4-12 mm	12-25 mm*
Max. speed	11,000	6,000	2,500
Weight**	2 kg	4.8 kg	20.5 kg

botek®

DEEP HOLE DRILLING SYSTEMS
SOLID CARBIDE TOOLS

botek Präzisionsbohrtechnik GmbH
Längenfeldstraße 4 · 72585 Riederich · Germany
P +49 7123 3808-0 · E-Mail Info@botek.de · www.botek.de

