



processing modules

for wood, plastics and light metals



- Overview
- ## Processing modules
- Drilling modules
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 - RESBOR
 - Multi-spindle drilling heads

Ayen Processing modules

For use in special machines or as a stand-alone solution for the processing of wood, plastics or light metals, we offer processing modules for drilling, milling, sawing or cutting. We also hold a wide range of multi-spindle drilling heads or special drilling heads for individual drilling patterns.

The special feature of our processing modules is the thrust shaft, which extends from the rotor of the motor. This means that the entire unit is not moved for the processing stroke, but can be permanently installed, eliminating the need for an additional slide.

Available accessories

Electro-pneumatic modules

- **Oil brake cylinder**
for tear-free through-hole drilling thanks to inhibited drill feed and yet high rapid traverse rate
- **Pneumatic control valve**
for pneumatic activation of the module
- **Solenoid control valve**
electric activation of the module
- **Limit switch**
drilling depth adjustment and resetting
- **Chip removing device**
manually, time- or path-dependent

RPM-ÖEV in home position



RPM-ÖEV drilling stroke



Ayen Drilling modules

Our drilling modules are based on many years of experience and have been continuously developed and optimized based on individual customer solutions. We offer a wide range of drive capacities, feed rates, throttling devices, chip removal controls and fastening options, covering numerous areas of application. Combined with our multi-spindle drilling heads, you have a perfectly coordinated team for your individual drilling pattern.

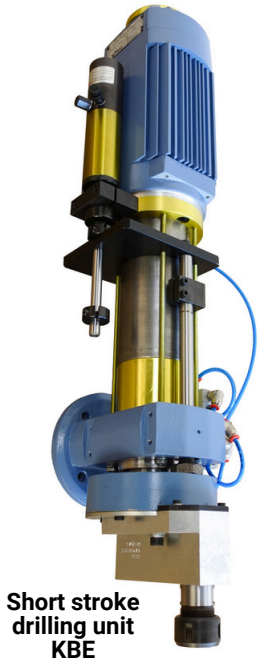
	Values
Power	0.74 1.47 2.21 kW
Stroke	88 150 200 250 mm
Oil brake stroke	70 140 200 250 mm

Further accessories: see processing modules

Versions

Drilling modules

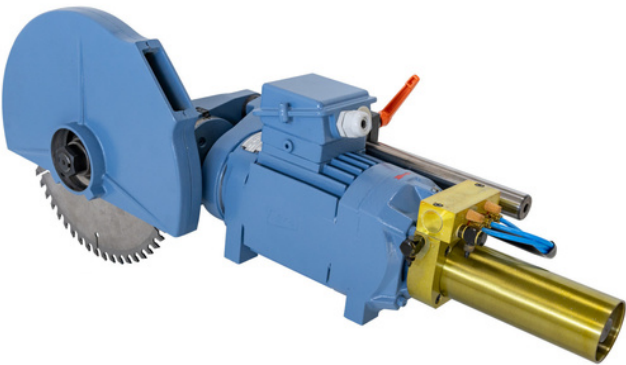
- **RM**
plain rib motor without pneumatic feed
- **RPM**
electro-pneumatic drilling unit for any drilling task
- **KBE**
short stroke drilling unit with compact build for limited space and short stroke movements, see picture left



Short stroke drilling unit KBE

Ayen Milling and sawing modules

Our electro-pneumatic milling and sawing units of the PSM, PSMK and KFE series have a compact design and work according to the same thrust shaft principle as our drilling units. The motor is fixed in position, only the motor spindle with the processing head extends for the processing stroke. The angle head, which drives the saw blade, is connected via a collet device. This allows the saw to cut in a dipping mode. The stroke movement is carried out by the pneumatic feed cylinder. The feed movement can be regulated by attaching an appropriate oil brake cylinder.



Ayen Cutting modules

A special version of the PSMKH series is designed as a cutting unit for circular knives. Among other things, it is used for cutting hoses or rubber profiles to length. Our circular knife cutting unit is deployed in the hose and profile industry for rubber, plastic or Teflon (e.g. hydraulic or high-pressure hoses), in the fabric and foam industry, in the paper and cardboard industry and in the film and adhesive tape industry.

All-electric thrust shaft drilling unit

RESBOR

In regards to maximum energy efficiency with minimized conversion losses, designed as a stand-alone solution and suitable for use in automated systems, we have developed the all-electric RESBOR drilling module for and with our customers.

Thanks to its wide range of functions and simple operation, RESBOR outperforms conventional pneumatic drilling modules. All functions of our thrust shaft drilling modules, such as oil brake cylinder, chip removal device and other extensions, can be implemented within just one device.

RESBOR is flexible and future-proof: purchased today as a stand-alone solution - with extensive drilling tasks, even for small batch sizes quickly deployed - and used tomorrow for automated processing challenges in your company. This makes the purchase more cost-effective than specialized units for the respective task.

Advantages RESBOR

- **Energy saving**
no conversion losses due to compressed air generation
- **Integrated regulation and control module**
allows controlled, uniform force development during the entire drilling process
- **Versatile and expendable**
see following page



Equipment RESBOR

- **Drilling motor RM22**
with 1.5 kW, 230/400 V, 5.5/3.2 A
50 Hz, 2,800 rpm
- **150 mm stroke**
continuous
- **Tool holder**
collet chuck device
- **Synchronous servomotor**
for feed motion
- **Digital power amplifier**
for control of servomotor
- **Integrated control system**
with 7" touch display
- **Standard programming**
manual mode with approach to
the workpiece surface,
automatic mode with choice of
feed speed, drilling depth and
chip removal control



Extension options RESBOR

- **Multi-spindle drilling heads**
- **Linear axes**
- **Alternative drilling stroke**
- **Simultaneous application**
of up to 40 Ayen thrust shaft drilling units,
multiple axes can be controlled at the same time
- **Programming options**
almost unlimited; with the help of our experts, we
can solve any control problem

DS32-7



Multi-spindle

Drilling heads

Like all our products, the multi-spindle drilling heads are developed with a focus on extreme durability. An Ayen multi-spindle drilling head will remain a long-lasting companion in your workshop or production facility. Specialized for woodworking, our drilling heads are also used in machining centers of well-known suppliers.

Whether as a standard product in a 32 mm grid or with your individual drilling pattern - we can meet any requirement. The drilling heads are optionally available with a cylindrical drive shank for use with our drilling units or with a suitable hollow shank taper for your machining center.

Masterpieces start
with precision



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Ayen

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