



Maschinenbau

***Automatic.
Rational.
Exakt.***



Automatic stop and positioning system

*Automatic and programmable CNC stop
and positioning system*

EXAKT ELG/DC

EXAKT NC

Roller conveyors and circumferential gaging paths

EXAKT NC

Automatic stop and positioning system

High precision is required at workstations at which workpieces are cut to length, drilled, milled or processed in any other way.

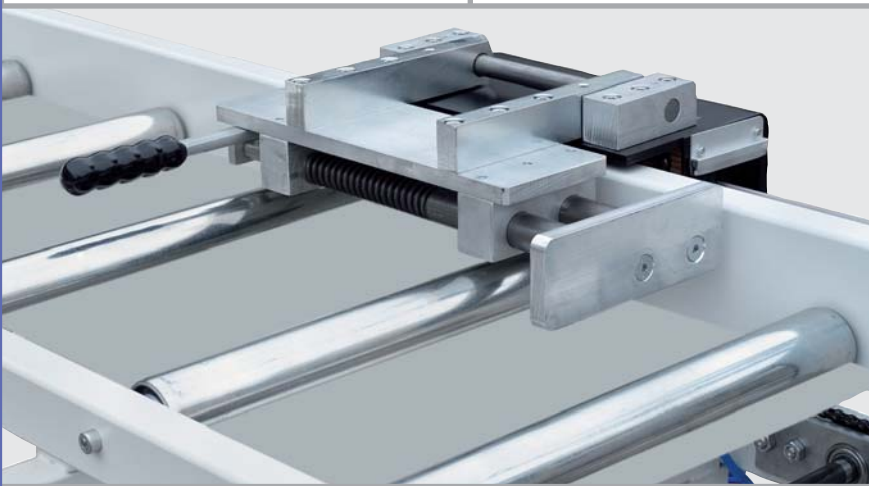
EXAKT roller conveyors and circumferential gaging paths with the measuring systems NC and ELG/DC can be combined with machine tools.

The firm connection of both units guarantees constantly exact working results.



A programmable pusher or stop system is the core of the measuring system EXAKT NC.

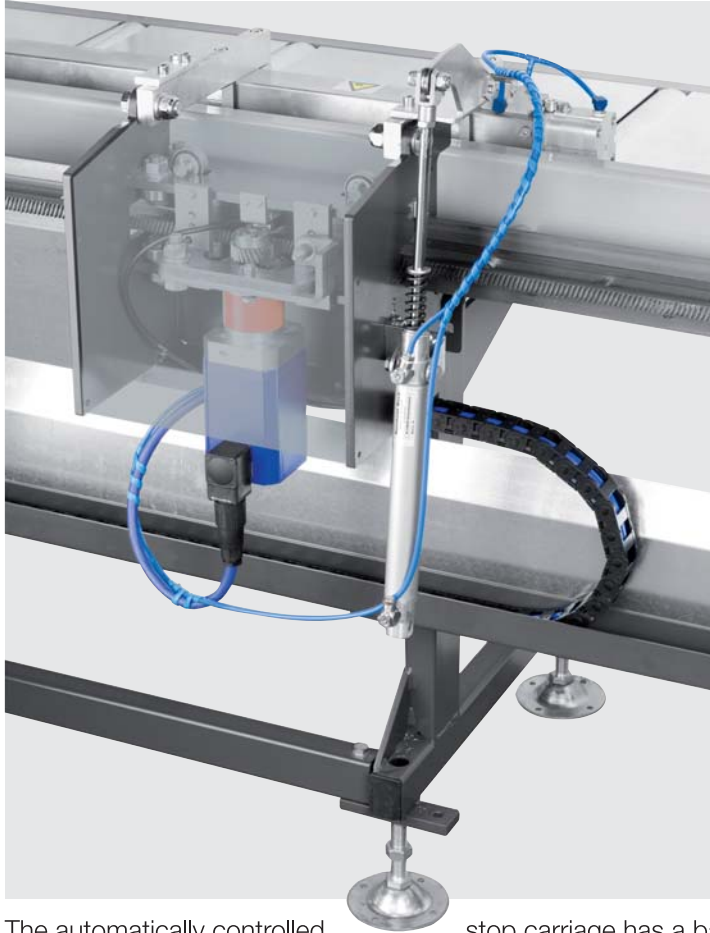
The stable, electronically controlled stop carriage drives to the intended point and pushes or pulls the workpiece to be processed to the desired processing position.



The stop is sprung mounted and can be folded backwards if necessary.



Sprung mounted and adjustable stop arm.



The automatically controlled stop carriage has a ball bearing guide (12-fold). The drive is realised through a powerful servomotor with planet gear with little clearance.

The distance is measured directly at the stop carriage way.

Perfection down to the detail

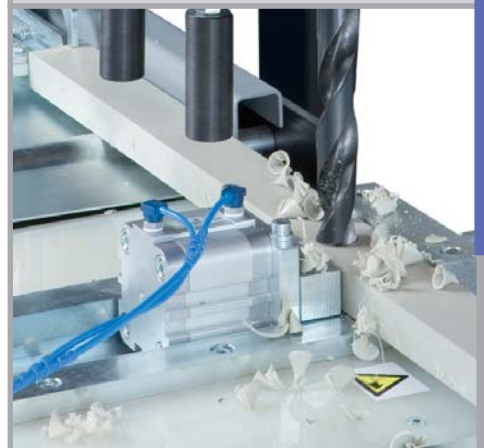
Fully developed and field-tested technology is a feature of the roller conveyor and circumferential gaging path systems EXAKT also in the versions NC and ELG/DC.

Exact working results and easy handling played a significant role during the development.



During the drilling process the workpiece is clamped pneumatically and directly below the drill spindle.

As an option, it can also be clamped vertically.



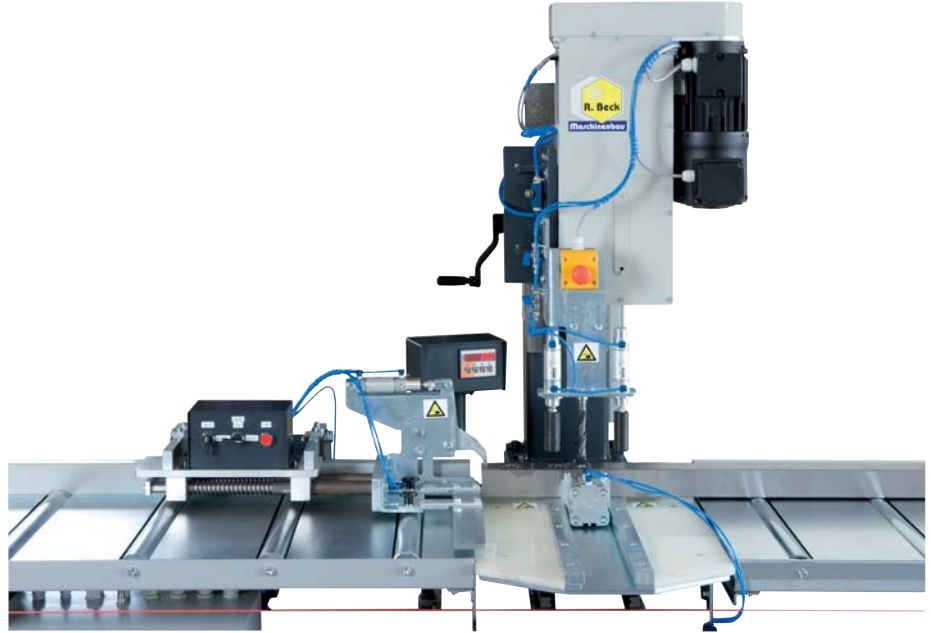
Automatic and programmable CNC stop and positioning system



CNC controlled drilling system equipped with a hydro-pneumatic drilling unit. The drilling units can be delivered either in the make type B 63/125 or type B 100/140.

Drillings of up to 12 mm and 125 mm stroke (type B 63) and up to 20 mm and 140 mm stroke (type B 100) are in steel (ST 50).

The drilling units can optionally be equipped with a feed rapid motion mechanism (snap action mechanism) which is an advantage especially in case of drilling section tubes. The drilling units are based on a stable grey cast iron support and can be adjusted in the y- and z-axis. The traverse path in the y-axis is 250 mm with digital display. The traverse path in the z-axis is 300 mm and is displayed via a scale.



The material feed unit with stop plate can optionally be equipped with a sophisticated gripping system (figure). Through this equipment it is possible to position drillings close to the ends of the workpieces.

CNC controlled drilling system with powerful bench drilling machine. The headstock's height can be adjusted (z-axis).

The drilling machine is mounted on a stable machine table. The drilling machine can be adjusted manually (optionally also motively) in the y-axis.

An NC controlled, powerful material feed unit in the x-axis pushes or pulls the workpiece into the desired processing position.

By means of the user-friendly CNC control programmes are saved and recalled if necessary.

Furthermore, the drilling depths can be

adjusted.

The automatic sequence of operation includes the functions pushing (or pulling) workpiece, pneumatic workpiece clamping directly below the drill spindle and drilling. In this way gang drillings can also be realised rationally.

The system includes a feed roller conveyor and a discharge roller conveyor.



EXAKT ELG/DC



Control P 8511

The one-axis position control of the type P 8511 is a control on one axis whose operation is extremely simple.

This control together with the motive drive unit at the stop carriage works as automatic stop and positioning system. When the desired position is achieved, a robust, pneumatic shear brake automatically fixes the stop carriage.

The exactness of positioning is ± 0.1 mm per meter. The stop carriage is positioned fully automatic by simple input of measures at the control and by pushing the start button. A clear display gives information on the actual and target value and the current number of items.

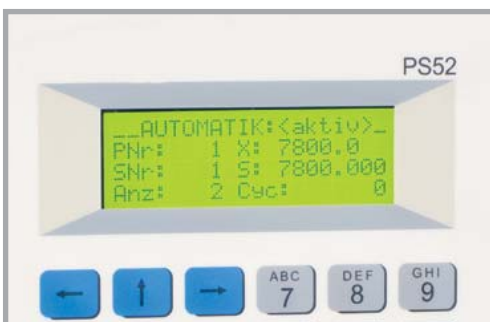
Additionally, the control can be adapted to incremental dimension functions.



CNC control PS 52

The CNC control PS 52 can be programmed easily in a few logical steps.

The concerned target value and the related number of items are saved.



Up to 99 programmes with a maximum of 3,000 data sets can be saved in the control unit and recalled at any time at the push of a button.



Two controls available

The programming can be carried out directly at the system or is realised through direct feeding of data via a serial interface. Both options are open to the user.





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EXAKT NC / EXAKT ELG/DC

EXAKT NC material feed units and stop systems can be delivered with bench drilling machines, hydro-pneumatic drilling units, saws or punching machines of various makes and expansion stages.

Modular expansion stages:

- | | |
|---|------------------|
| - control unit CNC control PS 52 | Item-No. NC 01 |
| - control unit one-axis control P 8511 | Item-No. BELG-01 |
| - stop carriage with servomotor and planet gear | Item-No. NC 03 |
| - stop carriage with 24 V DC gear motor and pneumatic brake | Item-No. BELG-02 |
| - stop arm at the stop carriage: | |
| standard | Item-No. NC 04.1 |
| sprung fixed | Item-No. NC 04.2 |
| sprung adjustable | Item-No. NC 04.3 |
| - gripping system at the stop plate: | |
| mechanical quick clamping device | Item-No. NC 04.4 |
| pneumatic clamping device | Item-No. NC 04.5 |
| - guiding profile for the stop carriage in the desired working length | |
| with rack, helically geared and magnetic tape measuring system | Item-No. NC 05 |
| - feed roller conveyor (side of loading) closed design, | |
| bearing capacity per meter of roller conveyor ca. 300 kg | |
| 300 mm width of the track | Item-No. NC 07.1 |
| 400 mm width of the track | Item-No. NC 07.2 |
| 500 mm width of the track | Item-No. NC 07.3 |
| - discharge roller conveyor (stop conveyor track) | |
| 300 mm width of the track | Item-No. NC 06.1 |
| 400 mm width of the track | Item-No. NC 06.2 |
| 500 mm width of the track | Item-No. NC 06.3 |

Machine tools on request:

- bench drilling machine, type BT 25 AV for drilling performance up to 25 mm
- bench drilling machine, type BT 35 AV for drilling performance up to 35 mm
- hydro-pneumatic drilling unit, type B 63/125 for max. drilling performance up to \varnothing of 12 mm
- hydro-pneumatic drilling unit, type B 100/140 for max. drilling performance up to \varnothing of 20 mm
- machine stand for the bench drilling machine or drilling units
- traverse path in the y-axis (bench drilling machine) or y- and z-axis (drilling unit)