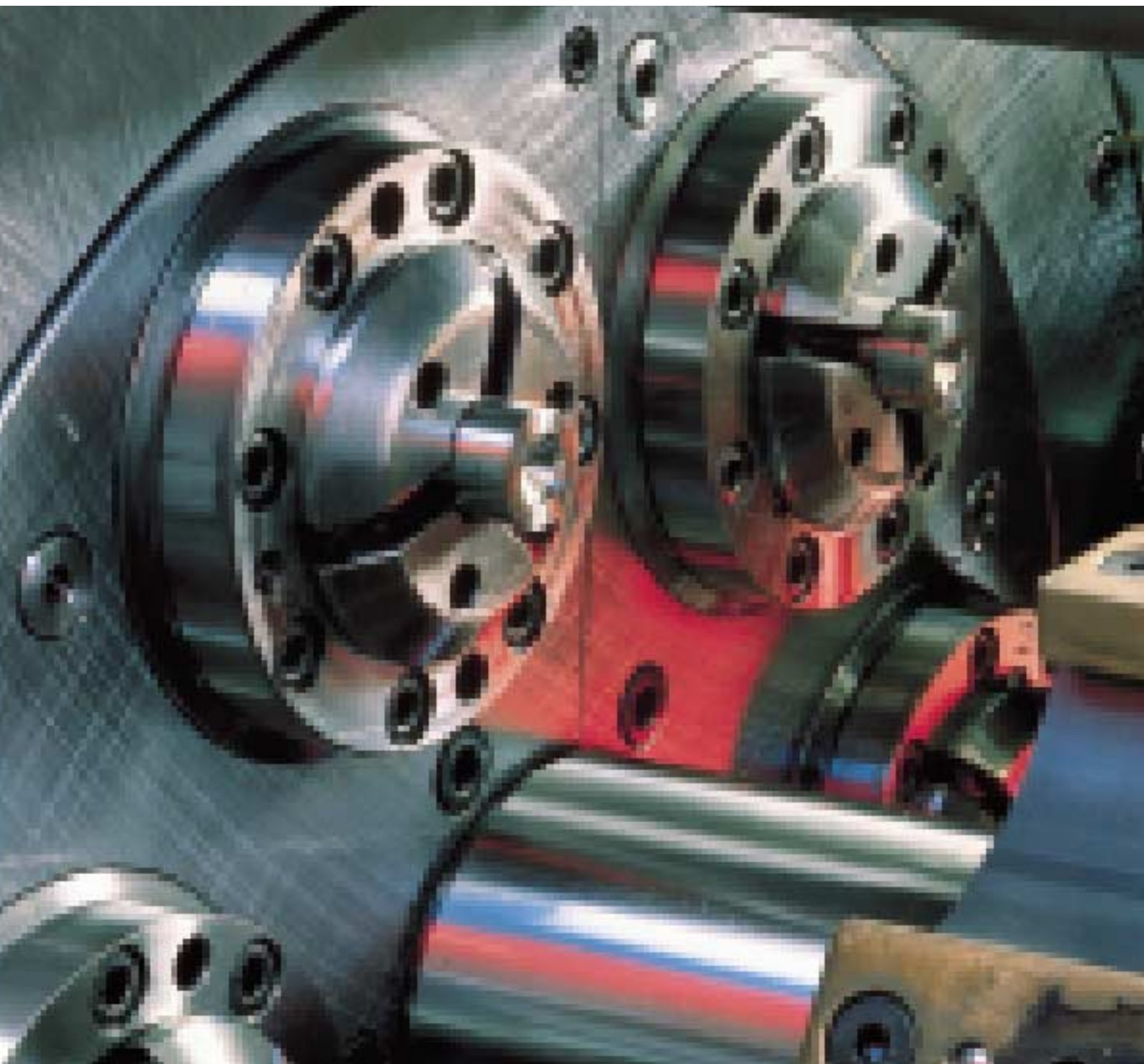


# The Most Efficient Chucking System for your Multi Spindle Automatics



A selection of typical work-pieces for machining on a multi spindle automatic machine.



# Change over now – your instant advantage

**T**o manufacture every day the same components in a mass production process with multi spindle automatic machines, has become a rare luxury.

Today's production methods require flexibility to cope with the numerous variation of product.

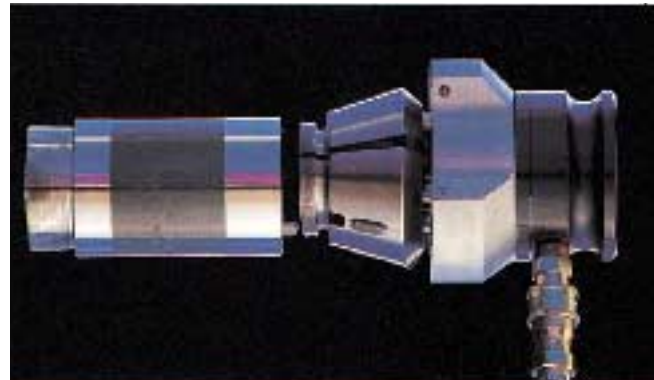
The reduction of set-up time, the need to maintain high precision and extending the possibility of a complete machining process has become a important necessity.

The expectation for the performance of the tools used has increased accordingly.

By developing the SPANNTOP chucking system and the adjustable RS feedfinger system as well as the PILOTOP bar guiding system, our company has contributed significantly to the efficiency improvement of the multi spindle automatic.

Investments, beneficial to the enduser!

The SPANNTOP-system is providing a quick change over to a different component diameter.



The adjustable RS feedfinger collet has become an indispensable tool for the user of multi spindle automatics.



The PILOTOP system can be connected to an automatic bar loading magazine.

# SPANNTOP – the Top-Chucking

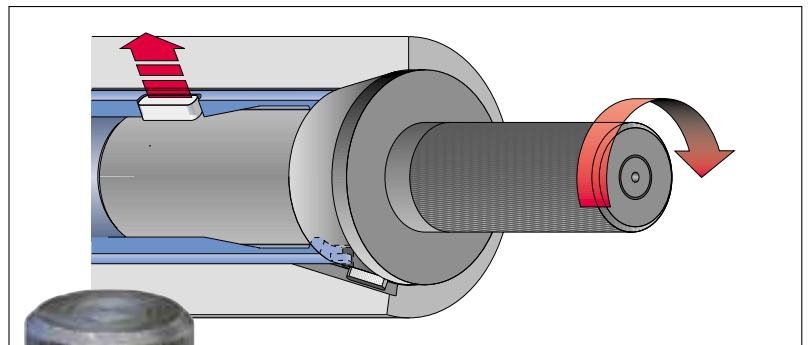
The system consists of a flexible clamping part - the clamping head and a rigid tube adapter, the basic body. Both parts are assembled and connected via a coupling, to build one clamping unit. The outer contour of this unit is similar to the conventional spring collet.

The SPANNTOP clamping system is easy to install into the machine spindle. The pins of the changing fixture are inserted into the corresponding holes in the clamping head.

The clamping segments are compressed to engage and disengage the coupling.

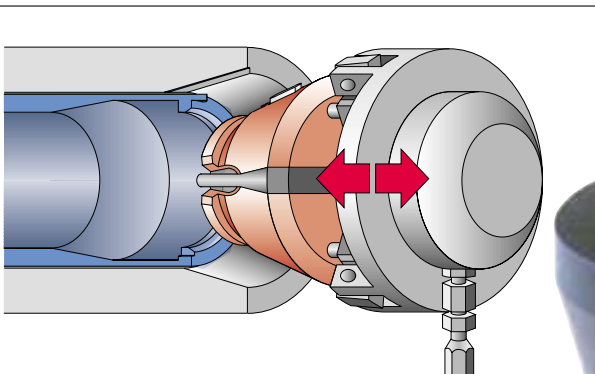
To assemble or disassemble the basic body, an installation plug is available. The installation plug provides a solid connection between the spindle and the basic body keyway index.

It is not recommended to assemble the clamping head and basic body directly, without the use of the installation plug as this may overstress the clamping head.

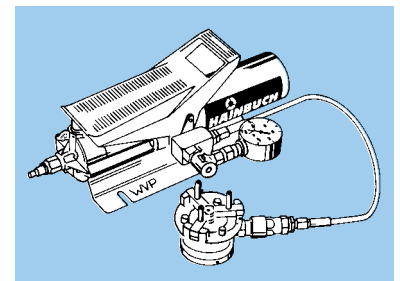
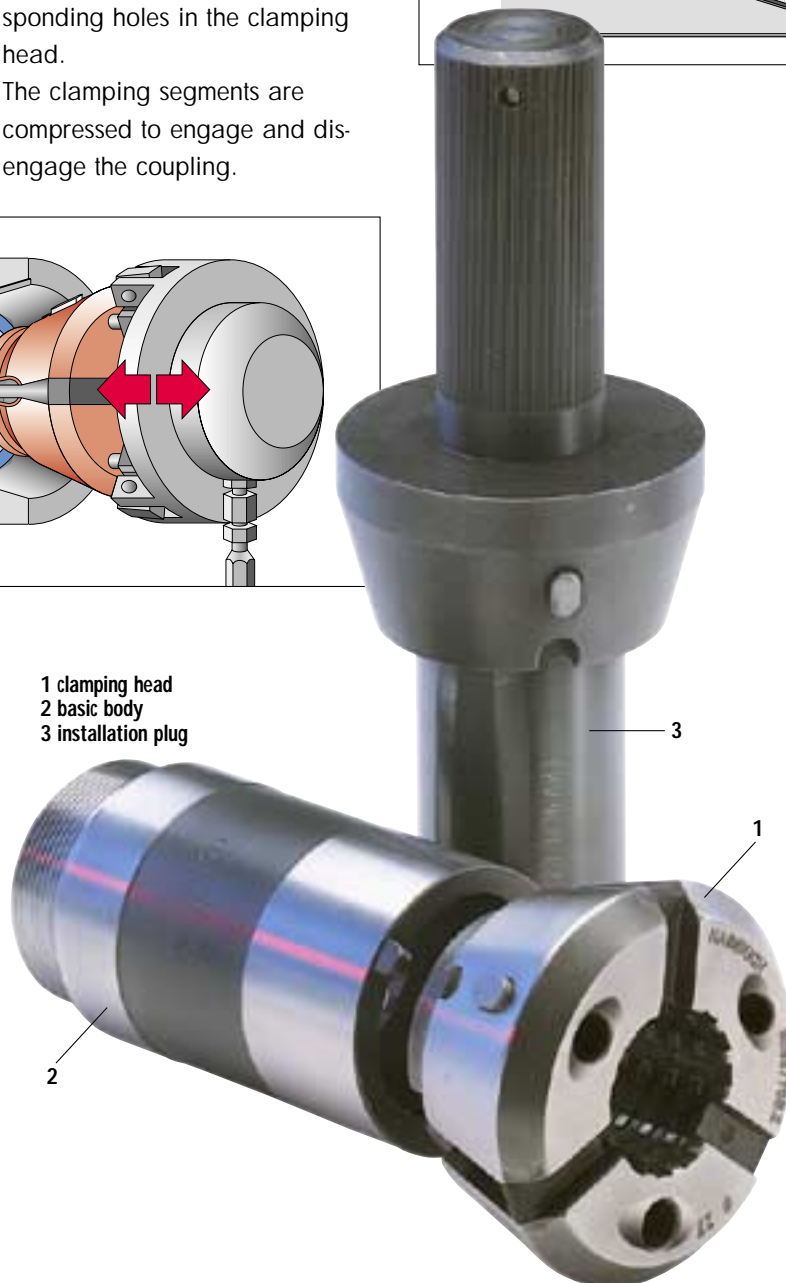


## Changing the Clamping Head

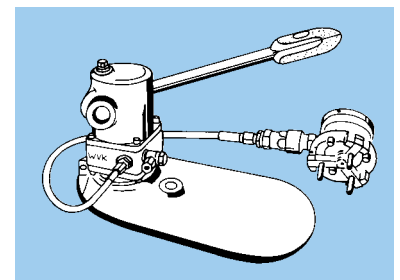
The clamping head is removed or inserted into the spindle, within the restricted space of the working area, using the compact changing fixture, conveniently operated by hydraulics. The required hydraulic pressure is provided by the pneumatic/hydraulic pressure converter, or where compressed air is not available, an hydraulic foot pump can be supplied.



- 1 clamping head
- 2 basic body
- 3 installation plug



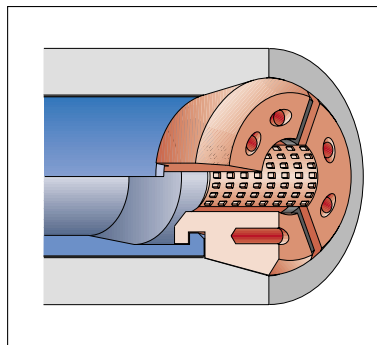
...with pneumatic pressure converter



...with foot pump

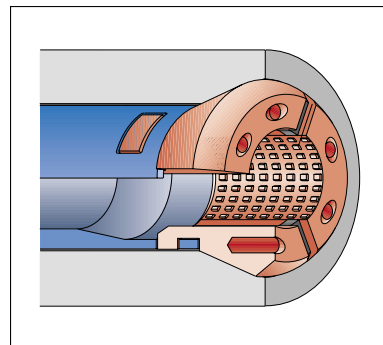
## The system BZ

Generally, the original coupling is utilized where there is no space or wallthickness restriction.



## The system ZW

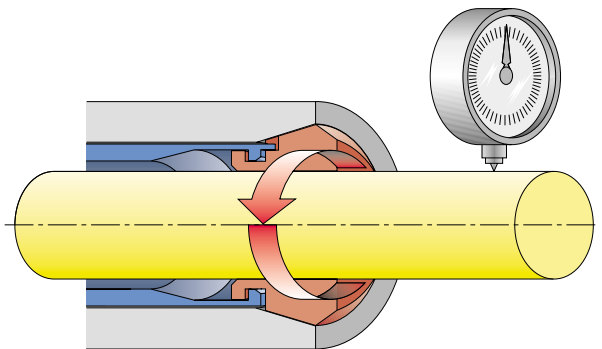
This coupling design was specially made for the multi spindle automatic. It provide a bigger material through-passage with the same outer contour as the BZ system.



## Precision

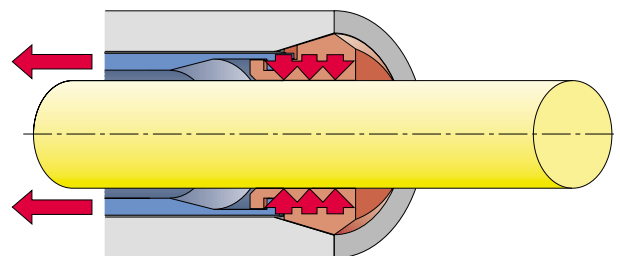
The clamping head is made of three or six rigid steel segments which are vulcanised together to form one set. The elasticity is provided by a specially selected rubber, which is resistant to most commonly used coolants.

A conventional collet needs be deformed in order to clamp the workpiece, the concentricity, manufactured by grinding, cannot be positively guaranteed.



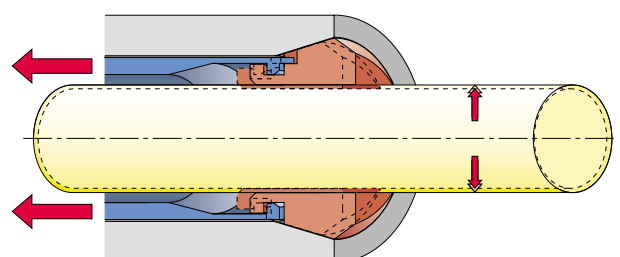
## Gripping force/ Rigidity

The SPANNTOP chucking system has a large contact area over the whole taper surface, therefore the surface pressure is reduced and the clamping force transmitted more efficiently.



## Clamping range/ Parallel clamping

The elasticity of the clamping head allows the solid clamping of material with a wide diameter tolerance. The „gripping-jaws“ always clamp parallel.



# RS-Feedfinger System with adjustable feed-force

RS-feed finger, with adjustable feed force should always be included in today's modern repetition workshop. The challenges and requirements in terms of high feed rate, high spindle speed, different materials and high production reliability cannot be obtained without a flexible gripping system. The adjustable feed finger system provides economical advantages.

- The feed force is set to the required value; wear is therefore minimised.

- Feed marks are minimised or even eliminated.

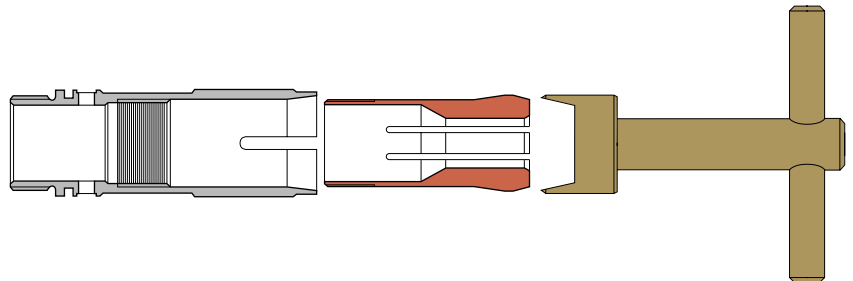
- The gripping contact to the material is all round the bar due to the multiple slotted inner collet.

- The feeding of the material bar is easier, which is important for working with automatic bar loading magazines.

- The bar pointing process can be obsolete.

- Reduced stock keeping of feed fingers, as one type of inner collet suits multi spindle machines of different brands.

- Longer service life of the feed finger, as the inner collet is repeatedly adjustable.



The principal is simple: The inner collet is screwed into the outer collet using a special key. The key compresses the collet segments, disengaging the inner collet from its locking position.

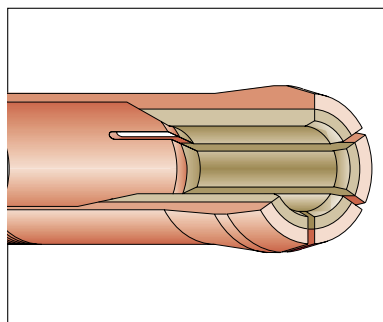
A marking on the inner collet, when screwed in, indicates on a scale on the outer collet the approximate feed force set. Pulling the key off from the inner collet will release the collet segments to slide back to their locking position.



1 inner collet  
2 outer collet  
3 key

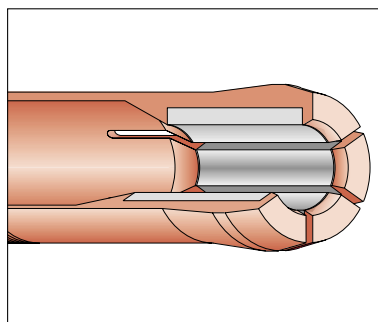
## KSB plastic coating

This coating is recommended whenever feed lines or scratches on the material surface must be prevented. Profiled clamping bores can also be plastic coated.



## OXK ceramic coating

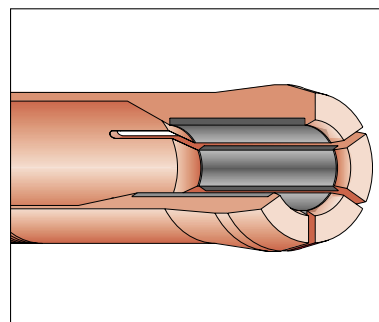
This extremely hard surface prevents the seizing of material to the clamping bore and minimises scratches on the material surface. Specially recommended when machining stainless steel. The extremely long life justifies their use in high volume mass production environments. Available for round clamping bores only.



## HM carbide coating

Recommended for similar applications as feed fingers with OXK ceramic coating. Available for profiled clamping bores.

Inner collets made of steel bronze or SPH are an economical alternative when machining stainless steel to prevent feed lines.



## Feed-force setting gauge

Short parts caused by worn conventional feed fingers giving inadequate feed force is both inconvenient and costly. Using our feed force setting gauge, in conjunction with the RS system enables 6 or 8 spindles be checked and adjusted to achieve the optimum feeding force.



Feed force setting gauge SP 130 up to max. clamping dia. 30 mm.

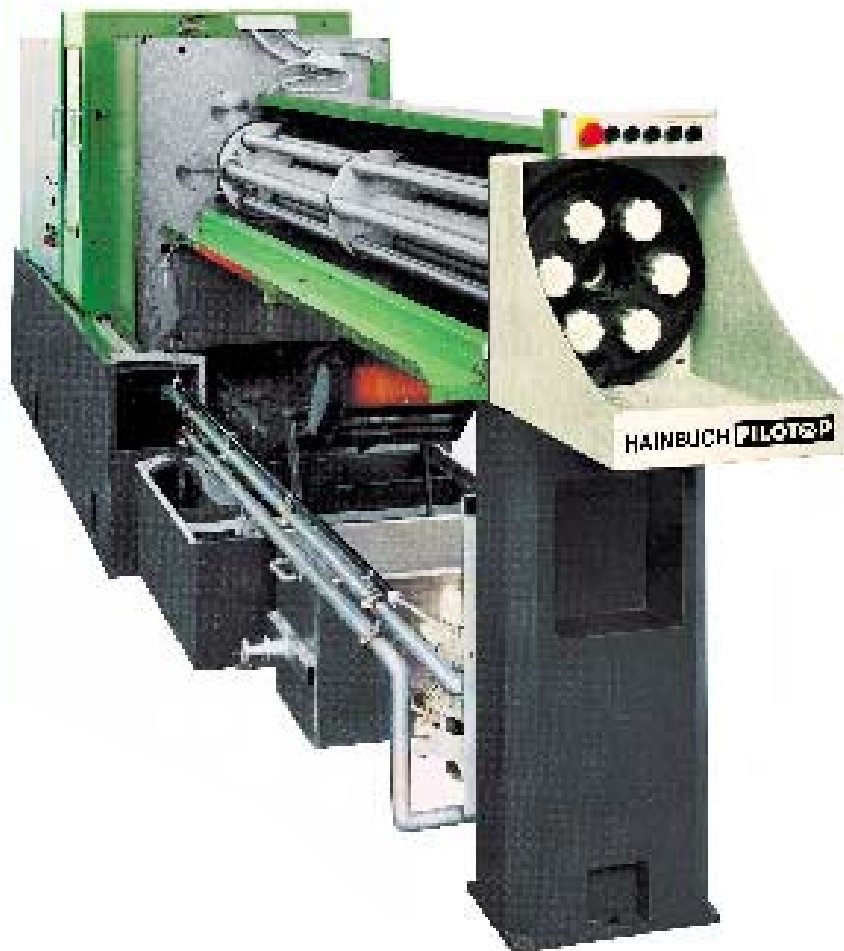


Feed force setting gauge SP 150 up to max. clamping dia. 100 mm.

# PILOTOP – A Quality Guide System

PILOTOP is a bar guiding system, based on the simple but effective hydro dynamic guide principle. The material, bar or tube is hydrodynamically centred in the stock tube using the coolant of the machine tool. The machine's vibration and noise level is reduced enabling the cutting speed to be multiplied. When machining profiled material, the profile edges are not damaged. The tool life can therefore be increased significantly.

Special PILOTOP information available on request.



Hainbuch GmbH  
Spannende Technik  
Postfach 1262 · D-71667 Marbach  
Erdmannhäuser Straße 57  
D-71672 Marbach  
Telefon 07144 / 907-0  
Telefax 07144 / 18826  
E-mail: [Verkauf@hainbuch.de](mailto:Verkauf@hainbuch.de)  
Internet: <http://www.hainbuch.de>