

SSB 60 F Super VT PRO

COLUMN DRILLING MACHINE

Summary	Page
Company Overview	2
Services	3
Series highlights	4
Main Features	5
Intuitive all-in-one touchscreen	9
Technical Data	10
Standard Equipment	11



www.knuth.com



KNUTH Machine Tools is a leading supplier of conventional and CNC machine tools. KNUTH is a global company with a presence in more than 30 countries.

In an area of 16.000 m² at our headquarters in Wasbek, Germany, we keep a complete selection of machines for all areas of machining and metal working ready for demos and quick delivery.



Open for you 24/7: Take a virtual tour through our warehouses, spare parts warehouses and workshop with Google Street View.

Quality Assurance for your KNUTH Machine

Quality by KNUTH Certified Quality Assurance

More than 1400 machines are shipped annually from our headquarters in Wasbek, Germany. Every machine has to pass a series of tests in our 5-level quality assurance process that covers everything from incoming quality control to alignment testing, and from functional, technical and geometric accuracy tests to the final acceptance test. These tests are conducted by our master technicians who use a dedicated customized data processing system for this purpose.

An ISO 9001 certified quality management system ensures continuous control and improvement of all quality-relevant activities. Design, development and precision of each individual machine are documented exactly in detailed inspection protocols and acceptance test logs.

All-Encompassing KNUTH Service Worldwide Reliability

Trust our global qualified staff take care of everything from installation and maintenance to repairs and upgrades quickly and professionally.









The Process of Making a KNUTH Machine Tool



KNUTH Machines in Action

Visit our YouTube page to experience machines in action before the real-life test on site

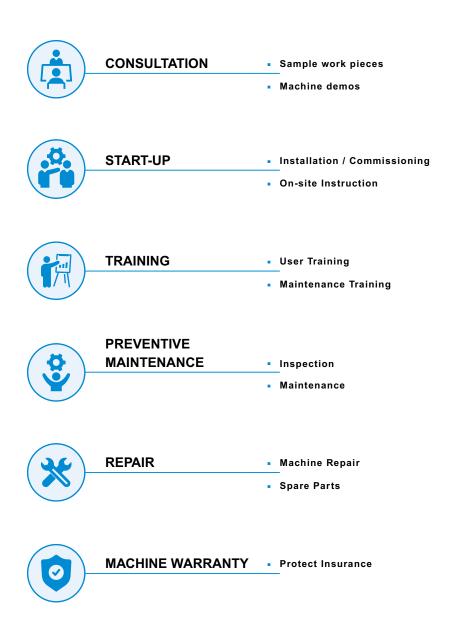
Subscribe to our YouTube channel - Go to KNUTH Machine Tools!



Complete Service by KNUTH

Reliable service from a single source

We provide highly qualified technicians and engineers all over the world to ensure reliable service from one central source. And our global supplier network ensures prompt availability of replacement parts and consumables at a local level.



KNUTH Technical Service Help DeskTel. +49 4321 609-273service@knuth.deKNUTH Parts ServiceTel. +49 4321 609-229ersatzteile@knuth.deOur Service Help Desk is available 24/7 online at: knuth.de/servicedeskservice@knuth.de



Colum Drilling Machine **SSB 60 F Super VT PRO** Powerful drill with touchscreen and servo quill feed



TOUCHSCREEN CONTROL PANEL WITH ADDITIONAL FEATURES

INFINITELY VARIABLE SPEED CONTROL

SERVO MOTOR FOR QUILL FEED

MOTORIZED TABLE HEIGHT ADJUSTMENT

- The SSB 60 F Super VT drilling machines are the servo-conventional solution for every workshop.
- This machine offers an electronically controlled servo quill feed with a large touchscreen operating display, which also supports the user in selecting the correct machining parameters. Feed and speed are infinitely variable. The entire design of the machine is very solid and the drilling performance is superior.
- This drilling machine is ideal for single and small series production, especially in the maintenance of large systems and in steel construction and workshops.

Column Drilling Machines

Models SSB 60 F Super VT PRO



Column Drilling Machine **SSB 60 F Super VT PRO** Powerful drill with touchscreen and servo quill feed

Main Features

Machine Construction



- This heavy-duty drilling machine is built with a solid cast iron construction for maximum rigidity and durability.
- The thick-walled columns provide added stability and strength, while the large throat allows for the drilling of large workpieces.



- The base, column, table, and gear head are all made of premium high-quality cast iron, which ensures years of reliable performance.
- This machine is ideal for demanding industrial appliactions, such as metalworking and fabrication

Working Table



- The drilling machine's heavy-duty steel table, providing a solid foundation for your work.
- The table height adjustment is motorized, making it easy to position the table at the desired height for comfortable and accurate drilling.



 The table can be rotated in three ways to give you flexibility when drilling holes: vertically, horizontally, and around the column. This gives you a lot of flexibility when drilling holes in different positions.



Colum Drilling Machine **SSB 60 F Super VT PRO** Powerful drill with touchscreen and servo quill feed

Main Features

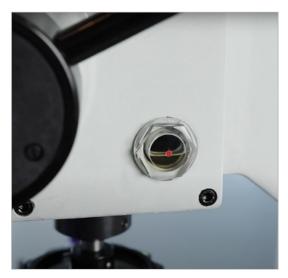
Headstock



 This drilling machine features a high-toque motor and an inverter-controlled spindle speed for smooth and efficient drilling.



 The spindle speed can be adjusted in two gear stages, providing a wide range of speeds for different materials and applications.



- The gears of the main spindle drive run in an oil bath for maximum reliability and minimum wear.
- All transmission parts inside the headstock are made of special wear-resistant material, ensuring long life.



• Spindle adjustments are made through the wide touchscreen, which provides a convenient and intuitive way to control the machine.



Column Drilling Machine **SSB 60 F Super VT PRO** Powerful drill with touchscreen and servo quill feed

Main Features

Improved drilling and tapping operations



- This drilling machine features a dedicated servo motor for automatic drilling, ensuring precise and consistent results.
- The infinitely adjustable automatic drilling feed allows you to control the feed depth, making it ideal for a variety of materials and applications.



- This model features an electromagnetic clutch that controls the automatic drill feed.
- In manual operation, the exact drilling depth can be set using the stop system on the capstan handle.



 The tapping process is performed with automatic feed and the spindle speed is synchronized with the thread leads to ensures that the thread is done accurately.



- The desired operation can be selected from the touchscreen interface.
- The build-in assist system automatically adjusts the rpm and feed based on hole/tap size and material to ensure accurate and consistent results.



Colum Drilling Machine
SSB 60 F Super VT PRO

Powerful drill with touchscreen and servo quill feed

Machine Control

Intuitive all-in-one 12" touchscreen

 This drilling machine features a new design concept that replaces traditional buttons and levers with integrated electronics. This makes the machine more intuitive and easy to use, being operated through a 12-inch touchscreen that is specially designed for heavy daily workshop use.



- The build-in operating hour counter aids in monitoring serice intervals and in cost calculation, helping you to keep your machine in top condition.
- Measuring units for input and display can be selected by the operator (mm or inch), making it versatile for a variety of applications.

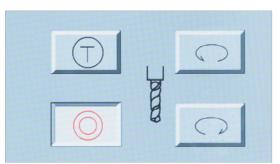


• The electronic depth stop can be easily set up and the current position shown on the screen.

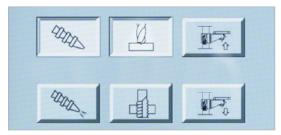


 The machine functions are self-explanatory and does not require a lot of instruction:

 spindle functions: start/stop, jog, direction of rotation



ii. additional functions: cooling system ON/OFF, drilling/tapping switch, table height adjustment





Column Drilling Machine

SSB 60 F Super VT PRO

Powerful drill with touchscreen and servo quill feed

Machine Control

Intuitive all-in-one 12" touchscreen

Standard functions

- Spindle speed adjustment // Spindle speed display
- Spindle direction of rotation
- · Setting the drilling depth // Quill position display
- Switching between Drilling/Tapping
- Table height positioning
- Coolant system ON/OFF
- Changing the unit measurement mm/inch
- Counter for working hours

Advanced functions

- Drilling/tapping assist system
- Stepless automatic quill feed
- Chip brake function
- Troubleshooting

Drilling assist system

The built-in drilling assist system helps the operator by automatically selecting the correct machining technology values, such as the spindle speed and feed, depending on the drill diameter and material.



Stepless automatic quill feed

 This machine features an automatic quill feed that is powered by a dedicated servo-motor. This allows the feed rate to be automatically calculated based on the material and drilling/tapping diameter, to ensure that the feed rate is always set to the optimal value. Can also be adjusted manually if required.



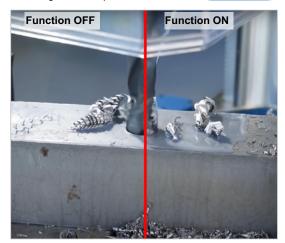
Chip Brake function

• The function is a very useful feature for deep drilling. It works by stopping the feed for a few seconds, but the spindle continues to rotate to break the chips

0

3

 This prevents the chips from building up and clogging the drill bit, which can damage the workpiece.



The number of times the chip breaking function is activated can be programmed (from 1 to 9), so you can set it up to brake the chips at equal intervals. For example, if you are drilling a hole 200 mm deep and you set the chips braking function to 4 times, the machine will brake every 50 mm. This helps to ensure that the drilling process is smooth and efficient.

Troubleshoting

 This machine has a built-in system that can detect problems. The lcon of the affected machine part will turn red which helps the user to quickly identify the problem.







Colum Drilling Machine SSB 60 F Super VT PRO Powerful drill with touchscreen and servo quill feed

Technical Data

Technical Data	SSB 60 F Super VT
Working Area	
Drilling capacity	60 mm
Tapping capacity, steel	M 42
Table set upp area	600 mm x 500 mm
Quill stroke	200 mm
Table swivel range (max.)	± 45°
Table stroke	528 mm
Column diameter	200 mm
Throat	370 mm
Spindle nose-to-foot distance	1123 mm
Spindle nose-to-table distance	520 mm
Headstock	
Speed range	50 - 316,316 - 200 1/min
Spindle mount	MK 5
Feed	
Quill feed	infinitely adjustable, up to 300 mm/R
Drive Capacity	
Motor rating main drive	4 kW
Motor rating for vertical table travel	0,37 kW
Motor rating coolant pump	0,16 kW
Measures and Weights	
Length	1,04 m
Width	0,6 m
Height	2,27 m
Weight	950 kg

* Due to the process of constant improvement, products and product's data can change without notice.



Column Drilling Machine

SSB 60 F Super VT PRO

Powerful drill with touchscreen and servo quill feed

Standard Equipment

Touchscreen controller



Intuitive all-in-one 12" touchscreen with built-in drilling assist system for effortless operation and increased productivity.

Automatic thread cutting function



The tapping process is performed with automatic feed and the spindle speed is synchronized with the thread leads.

Automatic drilling feed



- Dedicated AC servo motor for automatic quill feed.
- · Infinitely adjustable feed.

Motorized table height



The height adjustment of the table is done by motor and is conveniently controlled from the control panel

Accessory set for drilling



- · Contains:
- Drill chuck with key B16
- Reduction sleeve: MT5 / MT4
- Reduction sleeve: MT4 / MT 3
- Reduction sleeve: MT4 / MT2 - Reduction sleeve: MT3 / MT1
- Drift bolt

Operation Manual



- Installation instructions ٠
- Operation manual •
- Maintenance plans
- Electrical diagrams
- Spare parts lists ٠



Coolant system

The coolant system is activated on the touchscreen, keeping the drill bit cool and preventing it from overheating.

Protective shield



- With interlock system for increased • safety
- Height adjustable

LED work lamp



Rugged LED work light, with protection from sprayed water, is bright, energy-efficient, and promotes safe and productive work.



KNUTH Werkzeugmaschinen GmbH

Schmalenbrook 14 D-24647 Wasbek / Neumünster

Tel. +49 (0)4321 - 609-0 Fax +49 (0)4321 - 68900 E-Mail info@knuth.de

www.knuth.com

Subject to change without notice. Errors and omissions excepted.



V01/EN-07-2021