

# **SSB F Super VT Series**

# **DRILLING MACHINES**

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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 m<sup>2</sup> 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.







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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.



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











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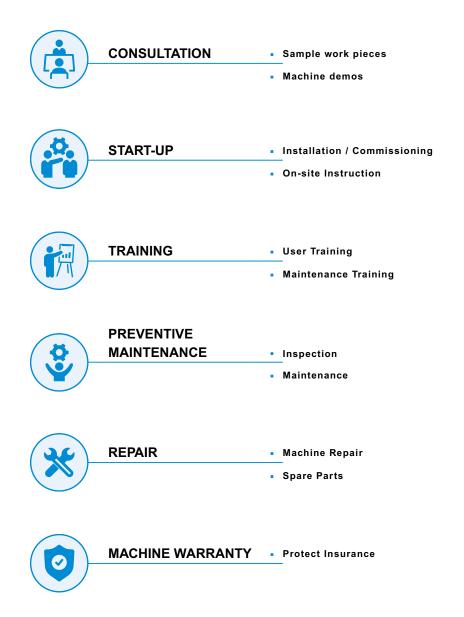
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KNUTH Technical Service Help Desk
KNUTH Parts Service

Tel. +49 4321 609-273 Tel. +49 4321 609-229 service@knuth.de ersatzteile@knuth.de

Our Service Help Desk is available 24/7 online at: knuth.de/servicedesk



# **SSB F Super VT Series**

Drilling machines with modern inverter and touchscreen technology



TOUCHSCREEN CONTROL PANEL WITH ADVANCED FUNCTIONS

**INFINITELY VARIABLE SPEED CONTROL** 

**AUTOMATIC FEED WITH MANUAL TRANSMISSION** 

**MOTORIZED TABLE HEIGHT ADJUSTMENT** 

# SSB F Super VT Series Column Drilling Machines

#### Models

SSB 40 F Super VT SSB 50 F Super VT

- SSB Super VT Series drill presses are the right choice for any workshop, from maintenance to finishing. These rugged drill presses feature a touchscreen control panel display that also provides user support for selecting the right operating parameters.
- The spindle speed is infinitely variable, and the quill feed features a rugged manual transmission. The setup table has motorized vertical movement for easier handling of heavy parts
- These drill presses are ideal for costum and small-series machining, but also for maintenance and in the steel and industrial construction sector.



# **SSB F Super VT Series**

### Drilling machines with modern inverter and touchscreen technology

### **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 applications, such as metalworking and fabrication.

### Working table



- This versatile drilling machine features a ±45° table swivel capability, allowing you to easily drill angled holes.
- The table can also be rotated around the column centre line to make room for tall workpieces.



 The large work table provides a stable and secure platform for your workpieces, and the table height adjustment via a powerful motorized drive makes it easy to position the table at the desired height.



# **SSB F Super VT Series**

### Drilling machines with modern inverter and touchscreen technology

#### **Main Features**

#### Headstock



- This drilling machine features a high-power 2-step 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 rive run in an oil bath for maximum reliability and minimum wear. All transmission parts inside the headstock are made of special wearresistant meterial, ensuring long life.



- This automatic drillling machine features an electromagnetic clutch that controls the automatic drill feed.
- This can be switche on and off from the button on the handle, and there are several different feed rates to choose from.
- In manual operation, the exact drilling depth can be set using the stop system on the capstan handle.

#### Spindle



- The touchscreen interface allows you to easily enter the desired drilling depth.
- The automatic feed switches off when reaching the selected drilling depth, which prevents the drill bit from over-traveling and damaging the workpiece.



 This series has integrated threading function. Once activated, the machine changes automatically the direction of rotation of the spindle when the selected depth is reached.



# **SSB F Super VT Series**

### Drilling machines with modern inverter and touchscreen technology

#### **Machine Control**

#### Intuitive all-in-one-touchscreen

- This drilling machine features a rugged 8" touchscreen specially designed for heavy daily workshop use. The touchscreen is intuitive and easy to use, requiring no programming knowledge.
- Easy handling of the machine ensures effortless operation and increases productivity.



- The current speed is displayed on the touchscreen and is infinitely variable, allowing you to fine-tune the drilling process for the best results.
- The electronic depth stop can be easily set up and the current position shown on the screen.
- The built-in operating hour counter aids in monitoring service intervals and in cost calculation, helping you to keep your machine in top condition.

#### Machine functions controlled from touchscreen

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

 Measuring units for input and display can be selected by the operator (mm or inch), making it versatile for a variety of applications.



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

| Tool DIA   |     | AXIS SPEED |      | MATERIAL |       |  |
|------------|-----|------------|------|----------|-------|--|
| 1          | 16  |            | 275  |          | STEEL |  |
| Processing | Dia | Casting    |      | Steel    |       |  |
| methods    | mm  | r/mm       | mm/r | r/mm     | mm/r  |  |
|            | 6   | 850        | 0.2  | 850      | 0.1   |  |
|            | 8   | 660        | 0.2  | 660      | 0.1   |  |
|            | 12  | 420        | 0.2  | 420      | 0.2   |  |
|            | 16  | 275        | 0.2  | 275      | 0.2   |  |
|            | 20  | 275        | 0.2  | 275      | 0.2   |  |
|            | 25  | 185        | 0.3  | 185      | 0.2   |  |
|            | 32  | 120        | 0.3  | 120      | 0.2   |  |
| Drilling   | 40  | 120        | 0.3  | 120      | 0.2   |  |
|            | 50  | 78         | 0.3  | 78       | 0.2   |  |



# SSB F Super VT Series Drilling machines with modern inverter and touchscreen technology

### **Technical Data**

| Technical Data                         |       | SSB 40 F<br>Super VT | SSB 50 F<br>Super VT                    |
|--|-------|----------------------|---|
| Working Area                           |       |                      |   |
| Drilling capacity                      | mm    | 40                   | 50                                      |
| Tapping capacity, steel                |       | M 24                 | M 30                                    |
| Table set up area                      | mm    | 540 x 440            | 570 x 460                               |
| Quill stroke                           | mm    | 190                  | 200                                     |
| Manual table travel                    | mm    | 540                  | 530                                     |
| Powered table travel                   | mm    | 430                  | 410                                     |
| Table swivel range (max.)              |       | ± 50°                | ± 45°                                   |
| Column diameter                        | mm    | 140                  | 180                                     |
| Spindle nose-to-table surface distance | mm    | 595                  | 550                                     |
| Spindle nose-to-foot distance          | mm    | 1195                 | 1175                                    |
| Throat                                 | mm    | 340                  | 360                                     |
| Headstock                              |       |                      |   |
| Speed range                            | 1/min | 60 - 2600            | 50 - 2200                               |
| Spindle mount                          |       | MK 4                 | MK 4                                    |
| Feed                                   |       |                      |   |
| Quill feeds                            | mm/R  | 0,1; 0,2; 0,3; 0,4   | 0,08; 0,12; 0,17; 0,24; 0,35; 0,500 (6) |
| Drive Capacity                         |       |                      |   |
| Motor rating main drive                | kW    | 2                    | 2,2                                     |
| Measures and Weights                   |       |                      |   |
| Length                                 | m     | 0,88                 | 1,15                                    |
| Width                                  | m     | 0,64                 | 0,68                                    |
| Height                                 | m     | 2,23                 | 2,36                                    |
| Weight                                 | kg    | 565                  | 650                                     |
|  |       |                      |   |

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



# **SSB F Super VT Series**

### Drilling machines with modern inverter and touchscreen technology

### **Standard Equipment**

#### Touchscreen controller



 Intuitive all-in-one 8" touchscreen with build-in drilling assist system for effortless operation and increased productivity.

#### **Thread cutting function**



 When the selected thread depth is reached, the machine automatically changes the dicrection of rotation of the main spindle.

#### **Automatic spindle feeds**



- Automatic drill feeds controlled by electromagnetic clutch
- 4 drilling feeds for SSB F 40 Super VT
- 6 drilling feeds for SSB F 50 Super VT

# Motorised table height adjustment



 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: MT4 / MT3
- Reduction sleeve: MT4 / MT2
- Reduction sleeve: MT3 / MT1
- Drift bolt.

#### **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.

#### **Operator instructions**



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



## **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

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