

# HOMAG DRILLTEQ D - 500/260 12

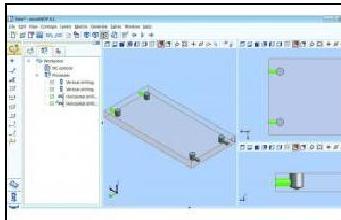
## Drill and Dowel Machine

The DRILLTEQ D-Series is a perfect complement to a nested-based CNC machining center, or it can function independently for horizontal drilling, gluing, and dowel insertion. It minimizes set-up times and maximizes production times. Solid steel construction is combined with a vibration absorbing base. Each model comes with Windows 7-based software, fiber-optic cables for communication between the drive system and the machine control, and Web-based diagnostics.



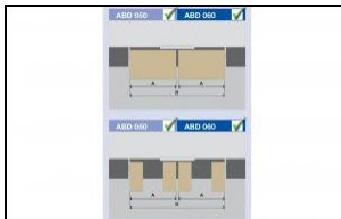
Product image is for illustration purposes only. Delivered machine may not be the same color or have the same markings as shown in the picture above.

# Features & Details: HOMAG DRILLTEQ D - Series



## Easy-to-learn interface

The DRILLTEQ D-Series features the woodWOP CNC programming system. With over 30,000 installations, the woodWOP system is one of the most commonly used. For those with previous woodWOP experience, ramp up time on the machine is brief. The interface also enables integration with most third-party design programs.



## Graphics enhance ease and accuracy

woodWOP graphics capabilities, paired with a Windows 7 based control, provides an easy-to-operate machine. A large graphics area with a view of the workpiece is the centerpiece. Drilling can quickly and easily be programmed by entering the machining parameters. A view of the workpiece is displayed realistically in the graphics area. This guarantees highest programming safety and permanent control during program generation. Part orientation is provided for the operator on the machine control and via visual lights on the machine itself to tell the operator which zone is next for the part.

## Robust, sturdy design

DRILLTEQ D-Series machines are the most robust in their class. The rigid frame design ensures a vibration-free platform with a low noise level, and the machine will hold very tight tolerances for many years.

## Features & Details: **HOMAG DRILLTEQ D - Series** (continued)

### **Less vibration, higher-quality parts**

In addition to its strength and weight, the DRILLTEQ D-Series has been engineered with HOMAG's patented mineral cast SorbTech material, further enhancing its ability to shield the workpiece from vibration. SorbTech absorbs vibrations up to 80% faster than conventional cast steel constructions. Less vibration means higher quality finished parts and increased machine life.

### **Precision and reliability**

Profiled linear guides ensure precise tracking over time. The attachment points on the linear guides are also covered to ensure that dust and debris do not get compacted, which can lead to premature failure of guide rails and bearings.



### **Little things make a big difference**

Rigid and oversized clamping cylinders ensure proper part hold down. Their adjustable design allows clamping pressure to be focused at the drill line, where it is needed most. A rubber pad at the bottom of the clamp prevents scratching, and a rubber knob cleverly built into the leading edge of the clamp provides positive pressure between the part and reference fence to ensure accuracy.



### **Saves time and effort, prevents errors**

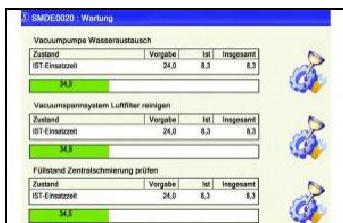
The closed loop gluing system is not exposed to air. It's not necessary to purge the system of glue if not used for extended periods throughout the week. The glue flow control monitoring system prevents the operator from inserting dowels without glue or water.

## Features & Details: **HOMAG DRILLTEQ D - Series** (continued)



### Quick setup time

Pneumatic control of the center stop as well as left and right fences provide near-zero changeover times between one, two, and four references.



### Easy maintenance optimizes product life

The Schuler MDE Software enables complete operator-assisted maintenance of the entire machine. The software prompts the operator on needed maintenance in real time and provides graphic instructions. There's no need to rely only on paper manuals. Once maintenance is finished, the operator initials the work as complete. The interval resets itself and a log is created on the machine.

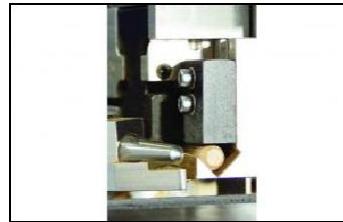
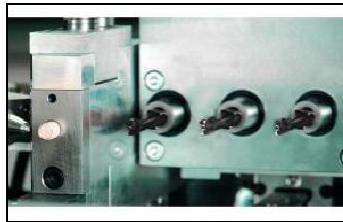


### Less down time

A large vibrating dowel hopper enables automatic dowel feeding. It prevents frequent refilling of the hopper, so the operator doesn't have to stop production as often.

# Features & Details:

## HOMAG DRILLTEQ D - 500/260



### General features

Maintenance-free motors with high-resolution optical encoders provide precision and accuracy. Digital drive control units guarantee high reliability.

- Solid steel frame construction
- SorbTech Main Beam
- Heavy Phenolic table surface
- CNC Positioning of the X, Y, and Z axes
- Digital AC servo motors
- Ball-screw drives in the Y- and Z-directions, and rack and pinion drive in the X-direction
- Automatic central oil lubrication of the pinion rod in the X-direction, as well as the linear guide-carriages of the X-, Y-, and Z-axes
- Side stops and central stop pneumatically lowerable with manual control by selection switch

### Equipment

- 1 vertical and 1 horizontal drilling aggregate, each with 3 individually-selectable spindles
- 1 doweling tool: 32 mm distance from the drilling spindle
- Glue injector with adjustable glue amount and cleaning device; engineered to spray glue as fast as water
- Standard dowel dimensions: 8 x 30 mm / 8 x 35 mm
- Vibrating hopper for automatic dowel feeding

Note: The machine will be delivered with a default dowel dimension 8 x 30 mm set by the manufacturer.

High-quality design and construction

## Features & Details: **HOMAG DRILLTEQ D - 500/260** (continued)

### **Part present detection**

Each of the four reference locations has a part present sensor so the machine knows if the part is located in the proper reference location and to allow the start of machining cycle.

### **Glue flow control**

This feature ensures that any interruption of the glue flow is displayed on the machine control as an error, preventing the operator from inserting dowels without glue.



### **Low pressure pump for glue**

Included is a double membrane pump 1:1 (6 bar) with a filter unit; the pump is compact and designed for reduced noise, low energy consumption, and suited to supply low viscous glue.

### **Pre-glued dowels**

This machine can install pre-glued dowels when used with a customer-supplied 10- to 15-liter distilled water container.

### **Central dust extraction**

An 80 mm (3.15") port is provided for connection to the dust extractor.

### **Energy saving mode**

### **Stand-by operation**

To save energy, the machine's ecoPlus button can be activated to start stand-by operation after a pre-set time while the machine is not processing.

- Primary power of drives is switched off
- Control voltage will be switched off after a pre-set time

### **Transformer for customer's supply voltage**

A multi-tap transformer is built into the machine facilitating a connection to the customer's electrical source for three-phase voltage of 208 V, 230/240 V, or 460/480 V.

### **Electrics**

According to UL regulations.

### **Safety and Protection Devices**

Interlocked rear safety gate, interlocked rear cover, front guarding, cycle start via foot pedal and start buttons.

## Precision, accuracy, reliability

### Manuals and control texts

- Standard manuals, CD, as well as .PDF versions containing operating and maintenance instructions are stored on the machine
- Display texts for powerControl operators
- Spare parts descriptions (CAD-drawings and wiring diagrams)

### Training

On site programming, machine operation and troubleshooting instruction is administered by a Stiles Field Service Representative at the time the machine is installed.



### Workforce Development

A well-trained workforce is essential to realizing the full capabilities of HOMAG equipment, safe and efficient machine operation, increased component and tooling life, and reduced maintenance costs. At the time of installation, basic machine programming, operation, and troubleshooting training is administered onsite by a Stiles Field Service Representative (FSR).

Additional training is available through Stiles University, the industry's only nationally accredited training program. With over twenty regularly-scheduled courses, Stiles University provides comprehensive, hands-on technical and application training as well as best practices designed to equip manufacturers with the skills and knowledge they need to thrive.

Designed to meet customer needs, sessions are offered at any of Stiles University's dedicated training centers nationwide, online, or onsite at the customer's facility (if a more specific, customized training is desired).

Explore upcoming course offerings and/or register online at [www.stilesuniversity.com](http://www.stilesuniversity.com) or contact [classes@stilesmachinery.com](mailto:classes@stilesmachinery.com) for more details.

# Machine Control & Software: **HOMAG DRILLTEQ D - Series**



## **powerControl: Innovative, ergonomic, state-of-the-art**

The DRILLTEQ D-Series features a Microsoft Windows based control complete with intuitive software. Having proven itself on more than 30,000 installations, the **woodWOP** programming system included with purchase is the heart of the machine and unmatched by any programming software provided with a machine today. The powerful drawing functions offered by **woodWOP** simplify programming for operators without CNC experience and provide the premium features required to satisfy advanced users. In addition to the **woodWOP** software within the machine control, a copy of the program is included for installation on an office PC for off-line programming.

### **powerControl Hardware:**

- PLC control according to international standard IEC 61131
- Operating system Windows 7 (US) embedded
- Intel Core I5
- 21.5" Full HD, Multi-Touch display on swivel arm
- 1 SATA hard drive 160 GB minimum
- Central USB port
- Ethernet connection 10/100 MBIT RJ45 (without switch)
- Teleservice for remote diagnostic service
- UPS (Uninterruptable Power Supply)

Premium functionality that's easy to learn



### Machine software bundle

The PC85 Software Package with Graphical Operating Programs is pre-loaded on the machine and includes:

- woodWOP7: Programming software built upon a graphical, dialogue-oriented approach to generating CNC programs
- ABDWork: Modern and simple control of main machine functions via softkey
- Tool Data Base: A graphical operator guide to manage tool data
- Production List Software: For creation and management of product lists for manufacturing. Production sequences, target amounts, and processing information can be stored and recalled for future use.

### Barcode Control Package

The barcode control is prepared and connected to a barcode scanner and includes the software to read a barcode via the serial interface. The software allows for the following individual adaption of the barcode information:

- Program name
- Place number
- Modus for two places at the same time, e.g. for alternating processing

Additionally, it includes up to 4 variables (5-digit, in 1/10 mm). When using variables, the new NC-program is automatically generated after scanning through the production list.

### Further Functions

- Creation of production lists with help of the barcode
- A rated value can be passed on in the barcode

This package includes barcode scanner.



### Maintenance prompting software

Schuler MDE alerts operator to required maintenance

- Provides graphic instruction for complete machine maintenance
- Creates and saves maintenance log

### Powerful, simple, user-focused

#### Software for external PC

Requires a computer operating Windows 7 or 8. Single-seat licenses for the following programs:

- woodWOP 7 for simple generation of CNC programs

# Technical Specifications

**Dimensions** All equipment offered is made to metric standards. Dimensions shown in English measure are approximate and for comparison purposes only.

## GENERAL SPECIFICATIONS

X-axis Positioning Range	1428 mm (56.2")*
Y-axis Positioning Range	65 mm (-10 to +55 mm) / (2.56")
Z-axis Positioning Range	70 mm (-5 to +65 mm) / (2.76")
Vertical Spindles	3
Horizontal Spindles	3
Rotational Spindle Speed	6000 rpm maximum
CNC Control	PC-based with woodWop programming
Ambient Temperature Range (maximum)	35°C (95°F)
Foundation Concrete Thickness (minimum)	200 mm (8")
Manually Adjustable Clamping Cylinders	4**

\*2978 mm (117.0") for the /28 model

\*\*8 manually adjustable clamping cylinders for the /28 model

## DOWEL SPECIFICATIONS

Drill Shank Diameter	10 mm (0.39")
Total Length of Drill Bit	70 mm (2.75")
Dowel Driver	1
Dowel Diameter	8 mm (0.31")
Dowel Length	30 mm (1.25") or 35 mm (1.38")

## WORKPIECE SPECIFICATIONS

Supported Length (minimum)	20 mm (0.79")
Supported Length (maximum)	1250 mm (49.2")*
Width (minimum)	20 mm (0.79")
Width (maximum)	800 mm (31.5")
Thickness (minimum)	10 mm (0.39")
Thickness (maximum)	80 mm (3.15")

## Technical Specifications (continued)

\*2800 mm (110.25") for the /28 model

### ELECTRICAL

Operating Voltage	208/480 Volts / 3 Phase / 60 Hz
Amperage (Nominal)	25/11 Amps at 208/480 Volts
Control Voltage	24 Volts
Total Connected Load	7 kW

### DUST EXTRACTION

Connection Size(s)	80 mm (3.15") diameter
Air Velocity (minimum)	30 m/sec (98 ft/sec)
Static Pressure	3440 Pascal minimum
Air Volume	550 m <sup>3</sup> /h (324 cfm)

### COMPRESSED AIR

Connection Size(s)	1/2" Radius
Pressure Required	102 psi / 7 bar
Consumption / Volume	100 to 200 NL/min (0.88 to 0.44 cfm)

### MACHINE DIMENSIONS

Length	2531 mm (99.6")*
Width	1613 mm (63.5")
Height	2450 mm (96.5")
Approximate weight	1600 kg (3530 lb)**

\*Length is 4081 mm (160.7") for the /28 model

\*\*Approximate weight is 1600 kg (3530 lb) for the /28 model

# YOUR SOLUTION

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STILES MACHINERY INC. 3965 44TH STREET SE GRAND RAPIDS, MI 49512

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