

DRILLTEQ D-510

Complete processing in the edge area.

The clever combination of drilling, doweling and routing.



Building living spaces.

From furniture to homes: The future is built with wood.

Together, HOMAG, WEINMANN, SYSTEM TM and KALLESOE provide comprehensive production solutions for manufacturers of optimized timber, engineered wood, timber construction, interior fittings, furniture and more. With over 500 years of combined experience in machinery engineering, automation systems, and software technology, our focus is on building strong partnerships that enhance your productivity, precision, and profitability.

This is how we are Building living spaces. Together, with you.

HOMAG – YOUR SOLUTION



High-precision CNC solutions.

Dimensional accuracy, repeat accuracy, fits – precision is the top priority in CNC machining. That's why we offer superior technology and individual equipment for the high-precision production of furniture, interior fittings and construction elements – with three, four or five axes.

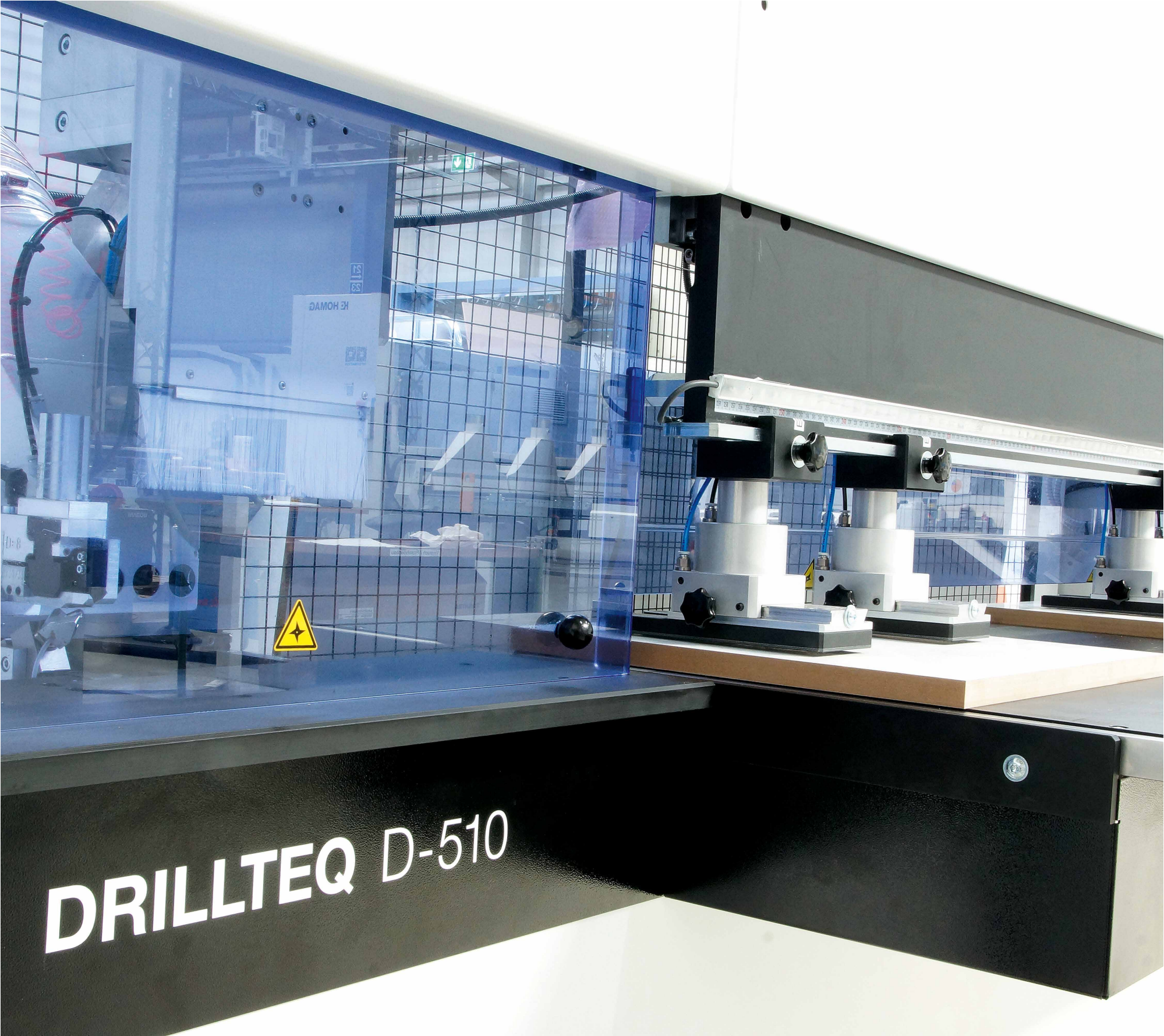
To ensure that your individual furniture transforms rooms into living spaces in the future, too.

Building living spaces.

Building precision.

**A millimeter
off is a world
apart.**





Complete processing in the edge area

Whether as individual machine or complementary product in connection with a CNC processing center – the DRILLTEQ D-510 allows complete and precise processing in the edge area by the clever combination of drilling, doweling and routing.

YOUR SOLUTION

[MORE: HOMAG.COM](https://www.homag.com)



DRILLTEQ D-510

CONTENTS

06	Highlights
08	Configurations
10	Drilling Routing
11	Dowel insertion
12	Stops and workpiece handling
13	intelliGuide Classic
14	Insertion of Cam Connector
15	Application examples
16	Apps and digital assistants
18	Hardware – Software
19	Everything at a glance
20	Special configuration
24	Life Cycle Services
27	Technical data

The highlights at a glance



Space-saving

- Sliding door allows easy access for maintenance or cleaning



Solid & sturdy

- Stable frame construction for highest quality demands



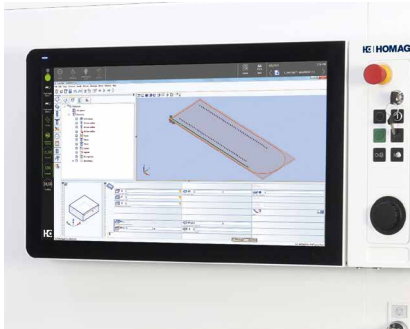
Precise

- Closed linear guides and gear racks in X for maximum precision during processing



Practical

- Quick tool change at the front of the machine thanks to adjustable Makrolon panes



Intuitive

- Intuitive thanks to powerTouch2



DRILLTEQ D-510 with a working field of 1,250 mm



DRILLTEQ D-510 with a working field of 2,500 mm

Configurations at a glance



- 1 Horizontal drilling**
- For precise processing by using proven components from our industrial sector
 - Up to 5 individually selectable drilling spindles with 32 mm pitch

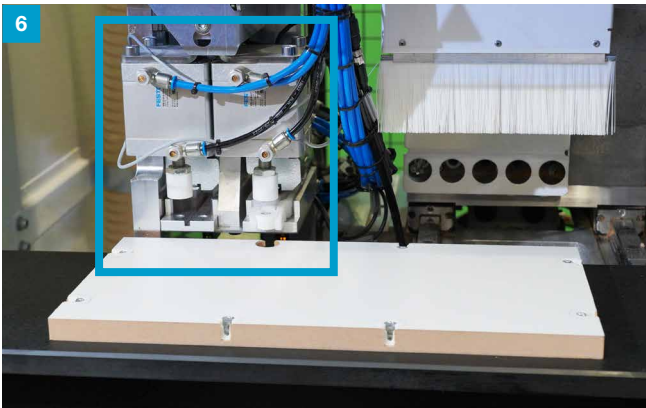
- 2 Vertical drilling**
- For precise processing by using proven components from our industrial sector
 - Up to 5 individually selectable drilling spindles with 32 mm pitch
 - Travel range in Y-direction: 0 – 50 mm (at drill diameter up to 20 mm)
 - Through holes possible

- 3 Dowel insertion**
- Glue injector with adjustable glue amount and glue flow control
 - The installation can be used with pre-glued dowels and water
 - 32 mm distance from the drilling spindle

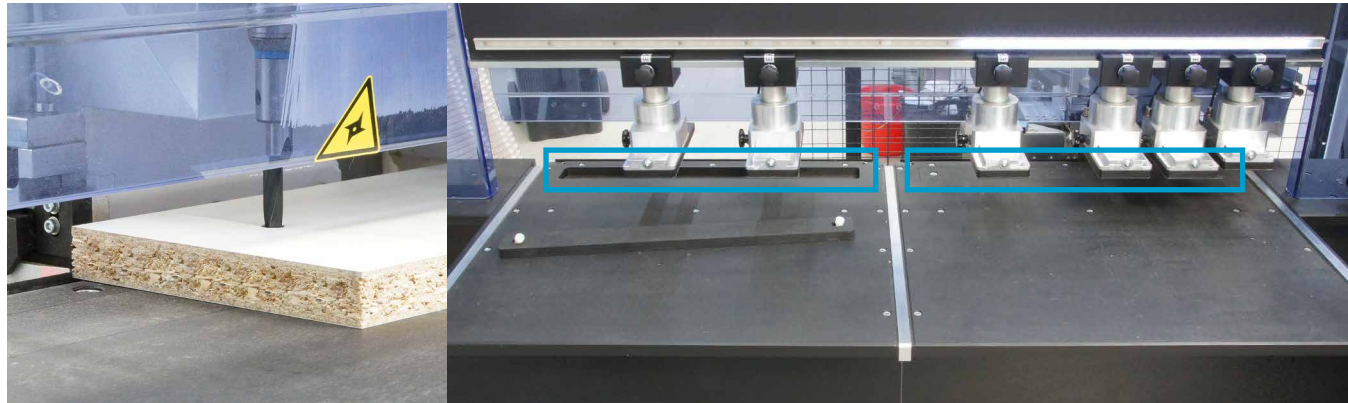
- 4 Horizontal routing**
- A provisioning stroke of up to 80 mm allows routing at depth (e.g. Tiomos H, Salice Air, lock case etc.)
 - Powerful, robust and proven routing spindle with 3.6 kW routing capacity

- 5 Vertical routing**
- A provisioning stroke of up to 50 mm allows routing operations into the front side of the workpiece (e.g. Clamex)
 - Efficient, solid and proven routing spindles 3,6 kW routing capacity

- 6 Setting fixtures**
- Installation space for individual solutions for setting fittings and hinges (e.g. sleeves, eccentrics, Cabineo etc.)



Drilling – Pure passion



Horizontal and vertical drilling

- 2 exchangeable wear strips in the machine table make through holes possible without damaging the machine table
- Proven technology that is also used in industrial lines
- Optionally 3 or 5 drilling spindles

Routing – Precise processing



Example equipment:

Clamex processing, horizontal and vertical



Example equipment:

Pocket routing and Clamex processing, horizontal

Horizontal and vertical routing

- Proven routing spindle with 3.6 kW routing capacity
- 24.000 min⁻¹
- Router change with SolidFix tool holder

Dowel insertion – Well joined



Doweling unit

- Precise insertion of dowels with or without glue
- Choose your solution from 15 dowel dimensions
- Up to 2 fixed units per machine



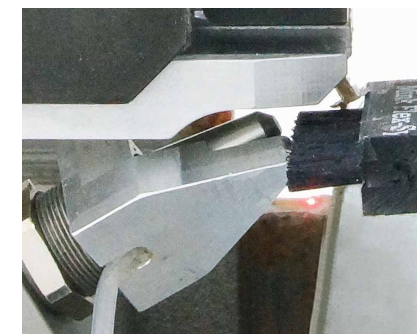
Vibrating conveyor

- For automatic and reliable feed of dowels with the following dimensions:
 - Ø 5 mm → L = 30 mm, 35 mm, 40 mm
 - Ø 6 mm → L = 30 mm, 35 mm, 40 mm
 - Ø 8 mm → L = 30 mm, 35 mm, 40 mm
 - Ø 10 mm → L = 30 mm, 35 mm, 40 mm, 50 mm, 60 mm
 - Ø 12 mm → L = 40 mm, 50 mm, 60 mm



Optional glue low pressure pump or glue high pressure pump

- Double membrane pump, low-noise level and compact
- Incl. sensor for monitoring the glue supply and evaluating the results
- Option: High pressure pump for processing with high viscosity glue



Cleaning device for glue injector

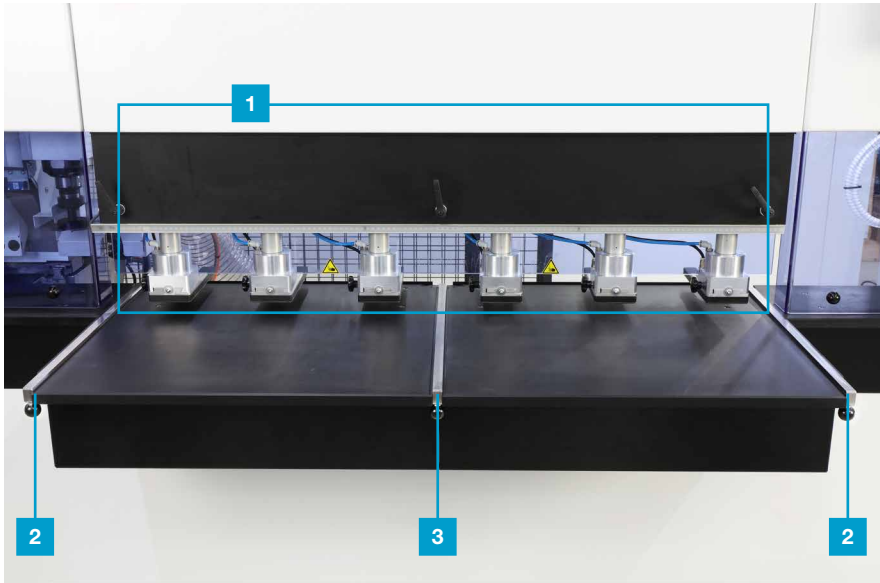
- For lasting quality without glue rests an automatic cleaning of the glue nozzle is carried out after adjustable intervals.



Glue collection tray

- The feeding device can be cleaned by air blowing. The collection tray is easily accessible and very low maintenance.

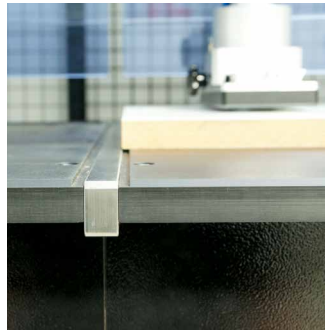
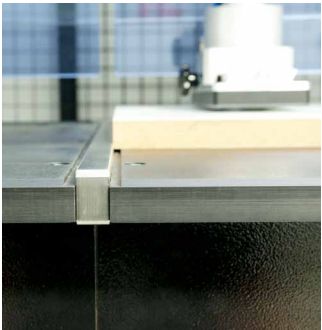
Stops and workpiece handling



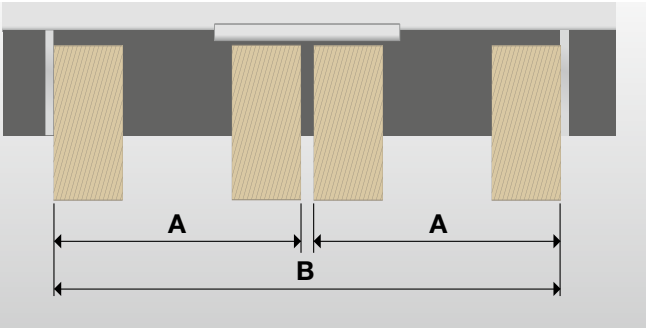
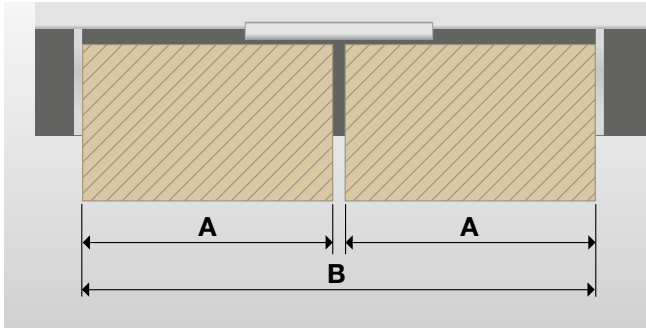
- 1 Adjustable clamping cylinders**
 - Up to 8 adjustable clamping cylinders enable a secure and gentle fixing of the workpieces
 - Simple adjustment via operating terminal
- 2 Lateral stops**
 - Left and right on the machine table
- 3 Center stop**
 - For the processing of up to 4 workpieces with one clamping



- Support table**
- For better handling of large workpieces
 - Can be moved across the entire width of the machine
 - Width 400 mm and length 1200 mm



- Automatic adjustment of the stops**
- Adjustable to 3.5 – 8 mm above table level



- Alternating field assignment | 4-fold workpiece processing**
- Depending on the workpiece dimensions the DRILLTEQ D-510 machines can be fed with up to 4 workpieces
 - For machine length 1,250 mm: **A:** 620 mm | **B:** 1,250 mm
 - For machine length 2,500 mm: **A:** 1,240 mm | **B:** 2,500 mm



intelliGuide Classic

OPTICAL LED ASSISTANCE SYSTEM to assist the machine operator in the processing of workpieces. The LED bar lights in the areas where the workpieces are to be positioned. The length of the illuminated areas corresponds to the length of the workpieces to be positioned. Once the positioning is correct, the color of the LED bar changes.

Your benefit

- Increased efficiency by faster operating procedures
- Error prevention by continuous visual control
- Improved ease of use





A camera system recognizes and checks the position of the connectors



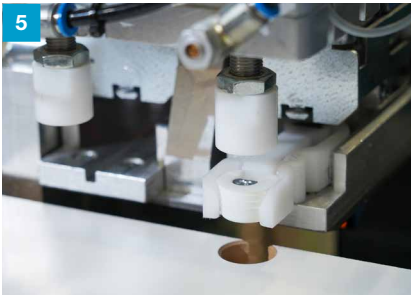
The vibrating plate rotates the connectors into the correct position



The robot separates the connectors and fills the magazines on the machine



Transfer of the connectors to the hardware insertion unit



Pressing the Cam Connectors into the pre-drilled position using a punch

Insertion of Cam Connector

The innovative DRILLTEQ D-510 uses state-of-the-art technology to insert the cam lock furniture connector. The combination of vision system and robotics enables the connectors to be separated and automated – the connector is inserted into the workpiece with a precise fit using a punch. A must-have for achieving professional results, optimizing processes and saving costs at the same time.

More application examples



- Rebate; e.g. for a back panel
- Planar drilling operations



- Continuous rebate
- Planar drilling operations for eccentric connecting fitting
- Classical dowel holes in the front
- Illustration shows the Minifix connector from Häfele



- Drilling processing to complement a nesting machine
- Illustration shows the Cabineo nesting connector from Lamello



- Continuous rebate
- Front side routing with T-slot routing cutter
- Illustration shows the removable Clamex P-connector from Lamello



- Planar routing for integrated and high-quality hinges or fittings
- Illustration shows the Tiomos H-hinge from GRASS



- Front side routing for integrated and high-quality hinges or fittings
- Planar routing with T-slot routing cutter
- Illustration shows the removable Clamex P-connector from Lamello and the Tiomos H-hinge from GRASS

Apps and digital assistants.

Quick and easy support in your machine environment.

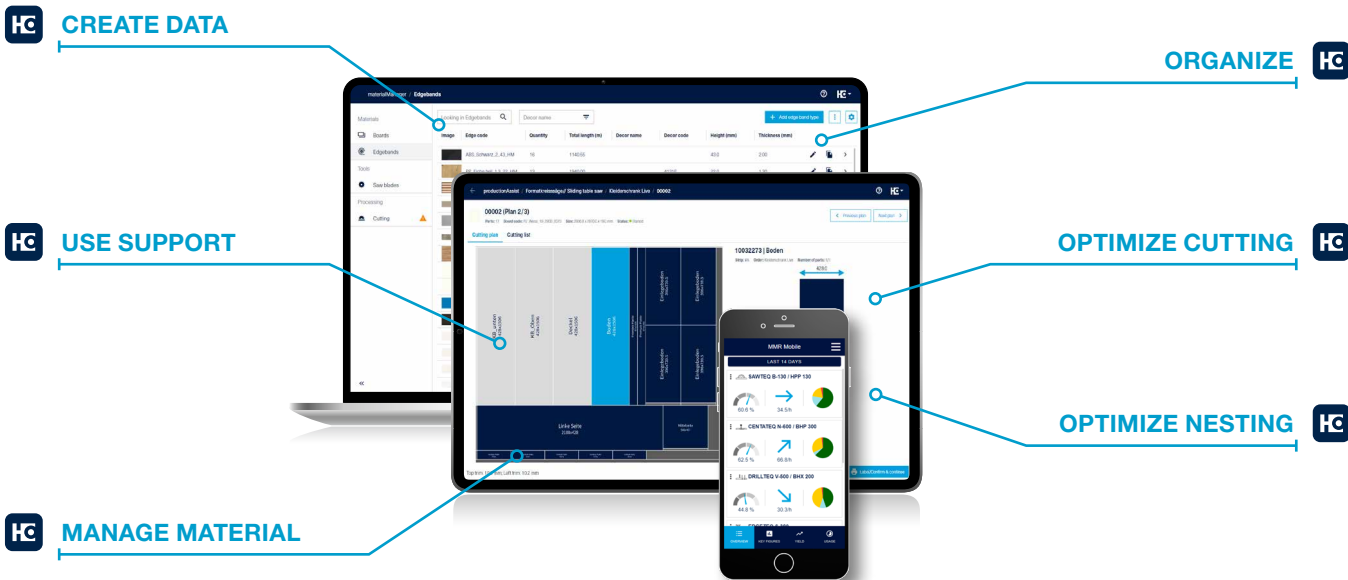
Some people still use pen and paper to create their cutting patterns. But they look at their smartphone if they want to know what the weather is like – instead of looking out of the window. We asked ourselves: why not combine the best of both? Our apps and digital solutions make your everyday work easier: machines, material, tools, cutting patterns, components – you always have everything in your pocket or on your desk.

EXCERPTS FROM YOUR FEEDBACK:

- Are there simple solutions that can eliminate various obstacles in my day-to-day work (e.g. when organizing materials or sorting parts)?
- Is there a way to slowly approach using digital assistants?
- Which tools can you try out simply and easily without having to invest huge sums of money straight away?

OUR ANSWER? SMART AND POWERFUL SOLUTIONS:

- ✓ Always low investment
- ✓ Always up to date (no updates necessary)
- ✓ Always easy to use (no complex software)
- ✓ Always helpful



THE ADVANTAGES AT A GLANCE

- No investment, update or maintenance costs
Low starting price, no unplanned financial expense
- Licenses are independent of the user
Any number of employees can use the application without incurring additional costs
- Independent of hardware and operating system
Can be used anywhere, anytime
- Open system – import possible from almost all systems (ERP, industry software, CAD/CAM, Excel, CSV)
No obligation to use specific software systems
- Simple, smart operation
Minimal training required
- More efficient production
Jobs completed more quickly, more safely and in higher quality



More information at
digital.homag.com

Hardware – Software

WITH THIS SOFTWARE PACKAGE YOU ARE »READY TO START«. You will receive one of the most established CNC programming systems, the woodWOP software, which has proven itself by more than 40,000 installations worldwide.



- Machine operation**
- Modern and simple control of the machine functions
 - TFT-Display
 - Provision of teleservice capability
 - Front USB-Schnittstelle
 - Ethernet connection 10/100 Mbit
- woodWOP**
- Worldwide established CNC programming system – already more than 40,000 installations
 - More safety and control in programming by 3D-presentations of all relevant elements

Please use our website!

Worldwide largest forum for woodWOP: forum.homag.com

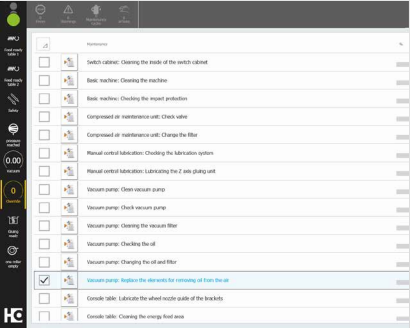


Further software options

- woodWOP for external PC
- woodAssembler



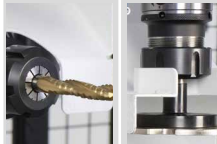
- Barcode connection (optional)**
- Barcodescanner / -software
 - Supported barcodes:
1D – Barcode, 2D – Data Matrix Code
 - Every workpiece is exactly identified for the further workpiece flow



- Machine Data Recording**
- Collecting and evaluating machine states via time meter and event meter

- tapio-ready**
- Simply “connect” the machine with tapio to use all innovative digital tapio products
 - The free use of tapio MachineBoard is included in the standard

Everything at a glance...

	Length of the processing field		Drilling gear				Routing		Features																
																									
	1,250 mm	2,500 mm	Horizontal with 3 spindles	Horizontal with 5 spindles	Vertical with 3 spindles	Vertical with 5 spindles	Horizontal	Vertical	Doweling unit	Gluing unit	Glue flow control	Cleaning device for glue injector	Vibrating conveyor	Special dimensions of the dowels	Add. doweling aggregate	Add. doweling chamber	Add. vibrations conveyor	Low-pressure glue pump	High-pressure glue pump	tapio-ready	powerTouch2	Barcode reading system	X-measuring system	Support table	Air-conditioning
DRILLTEQ D-510	✓		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	✓	✓	○	○	○	○
DRILLTEQ D-510		✓	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	✓	✓	○	○	○	○

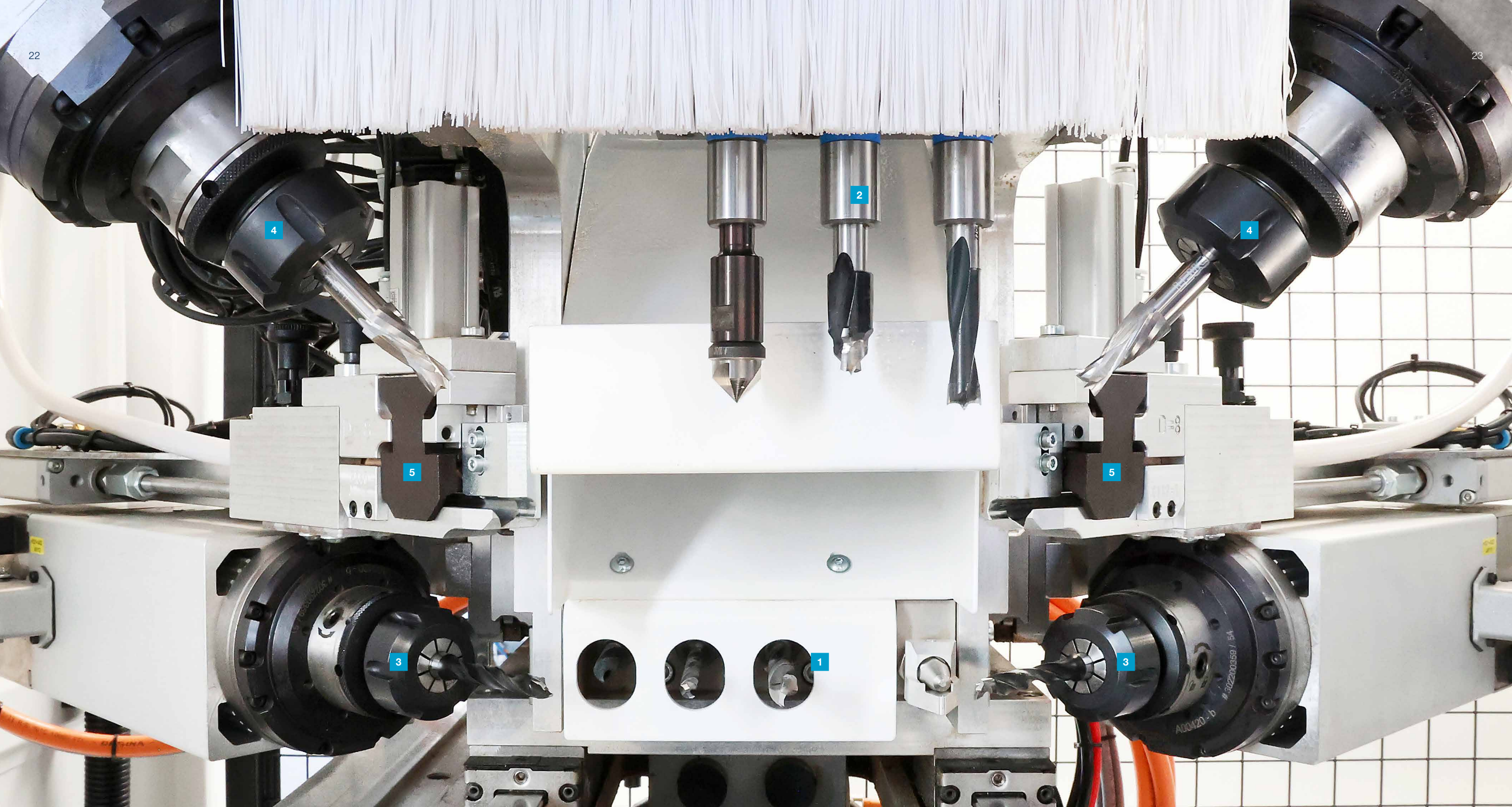


Special configuration for inclined processing

Drilling and dowelling at angles from 42° to 45°

In this model of DRILLTEQ D-510, the basic machine comes in a fixed configuration straight from the factory. Here, both the horizontal processing in the front side and the vertical processing in the edge area are inclined at an angle between 42° and 45°. In addition to the drilling of holes, the gluing and insertion of dowels is also possible. This characteristic offers new possibilities in the design of furniture and opens up access to innovative connection solutions.





Special configuration for inclined processing – at a glance:

1 Horizontal drilling

- For precise processing by using proven components from our industrial sector
- Up to 3 individually selectable drilling spindles with 32 mm pitch

2 Vertical drilling

- For precise processing by using proven components from our industrial sector
- Up to 3 individually selectable drilling spindles with 32 mm pitch
- Travel range in Y-direction: 0 – 70 mm (at drill diameter up to 20 mm)
- Through holes possible

3 Horizontal drilling 42° – 45°

- A provisioning stroke of up to 50 mm allows drilling at depth
- Powerful, robust and proven spindle with 3.6 kW capacity

4 Vertical drilling 42° – 45°

- A provisioning stroke of up to 50 mm allows drilling operations into the front side of the workpiece
- Powerful, robust and proven spindle with 3.6 kW capacity

5 Dowel insertion

- Glue injector with adjustable glue amount and glue flow control
- The installation can be used with pre-glued dowels and water
- 32 mm distance from the drilling spindle

LIFE CYCLE SERVICES

Improved performance, more efficient processes, faster help, assurance of availability and smarter working

TEAM & COVERAGE

Largest global service network in the industry with over 1,350 personnel.

INSTALLATION & COMMISSIONING

For a smooth start, we only let proven experts manage your setup.

OPERATION & CONTROL

After teaching your personnel the intuitive control system, our clever apps help to make the operator's life much easier.

MAINTENANCE & SERVICING

To keep things running, we're happy to take a preventative approach. You decide how often and how intensively you want the support to be. As we all know, prevention is better than the cure.

eSHOP & ONLINE ADVANTAGE

A few clicks and it's fixed. Receive exclusive advantages by ordering spare parts online, depending on market availability. shop.homag.com

HOTLINE & READINESS

When there's an emergency, we're here. Direct by phone, digitally via app or video, or with on-site support. We are close to you with over 90 regional service organizations worldwide. With more than 35,000 spare parts immediately available, we can deliver 85% of your orders fast.

TRAINING & EDUCATION

With classroom, live online or eLearning training, we offer flexible options to help you get knowledge. We conduct over 4,000 customer training courses every year, and we even have our own training centers in 19 countries

MODERNIZATION & IMPROVEMENT

Our modernization program is tailored to your machines and processes. We can evaluate your data and situation and advise you on the next step.

ANALYSIS & SUSTAINABILITY

On request, we analyze all your processes with proven tools and procedures (LeanSixSigma). We have a large, certified team of experts for this purpose.

FINANCING & CONSULTING

We offer you tailor-made financing concepts worldwide. With more than 60 years of experience and a close partner network of prominent banks and insurance companies to help us to find the right solution for you, we're always transparent and reliable in processing.

Fast support:

94% resolution rate via our hotline

Close to you:

1,350 service experts worldwide

We get things moving:

Over 1,000 worldwide spare parts shipments each day

No one else has that:

Electronic documentation on over 150,000 machines, available in 28 languages

Technical Data



Impressions of the
DRILLTEQ D-510



TECHNICAL DATA			
DRILLTEQ D-510		1,250	2,500
Workpiece length*	mm	20–1,250	20–2,500
Workpiece width	mm	20–800	20–800
Workpiece thickness	mm	10–80	10–80
Compressed air connection	inch	R 1/2"	R 1/2"
Compressed air	bar	min. 7	min. 7
Total connected voltage	kW	approx. 11	approx. 11
Extraction connection	mm	1 x Ø 120	1 x Ø 120
Extraction speed	m/sec.	min. 30	min. 30
Supply voltage	A	25	25
Total machine weight	kg	approx. 1,600	approx. 2,000
Installation dimensions			
L	mm	3,200	4,530
W	mm	1,525	1,500
H (without vibration conveyor)	mm	2,060	1,880

* in the working field. Longer workpieces can be loaded.



HOMAG Group AG

info@homag.com
www.homag.com

YOUR SOLUTION