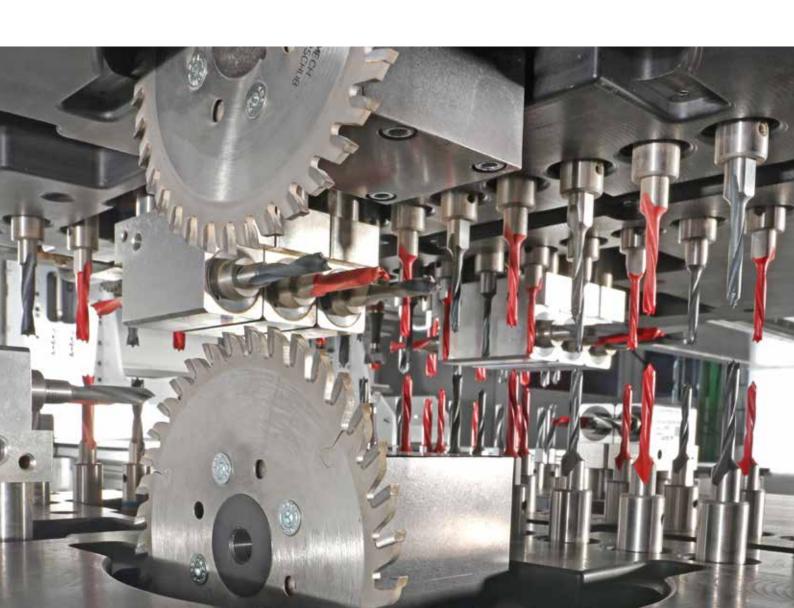
HE HOMAG

Industrial solutions for you.

Our drilling and hardware insertion technology

Machines and concepts for industrial production

YOUR SOLUTION







Be on the safe side with HOMAG

You should not experiment with investment in a new machine or plant. Rely on the competence, experience and reliability of a strong partner – rely on HOMAG.

YOUR SOLUTION

MORE: HOMAG.COM



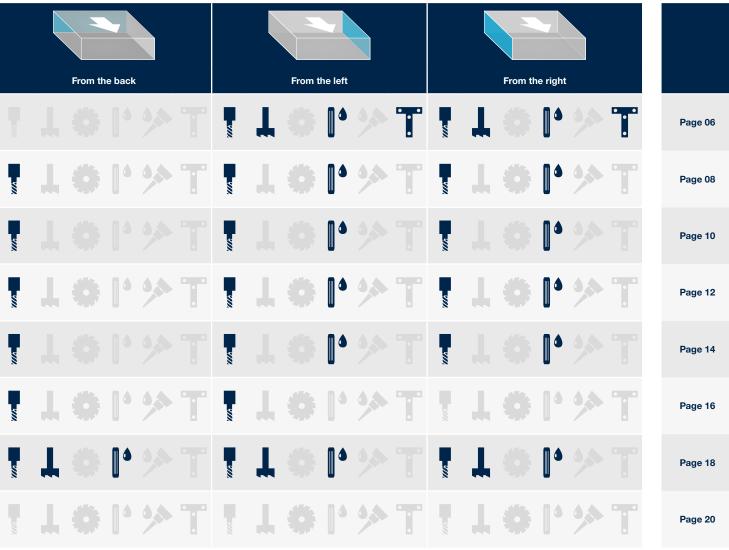
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DRILLTEQ | Everything at a glance

	From the top		
	From the top	From the bottom	From the front
DRILLTEQ C-300	TAPINT		
DRILLTEQ C-500	TAPPAT	LOPAT	LOPYT
DRILLTEQ C-600	TLOPPT		LOIST
DRILLTEQ C-800	TAPPAT	LOPAT	LOPYT
DRILLTEQ H-600	TAPPAT	TLOPYT	LOPYT
DRILLTEQ L-200	TAPPAT	LOPAT	LOPYT
DRILLTEQ L-500	TAPPAT	TAPPYT	TASIST
DRILLTEQ L-800	TLOPPT	LAPPAT	TLOPYT

















DRILLTEQ C-300 – Ideal for cross edge processing

The throughfeed machine enables simultaneous processing of the two cross edges of a workpiece. With its modular design, the DRILLTEQ C-300 is the ideal supplement to other machines and can be integrated into machine lines immediately or at a later point in time.

The machine is suitable for series production of furniture as well as batch size 1 processing.





Drilling

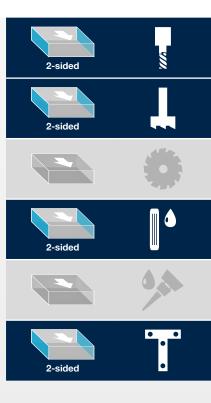
Horizontal drilling with up to 104 drilling spindles



Doweling

Dowel insertion with up to 32 doweling units





100%

flexible processing in the cross edge

DRILLTEQ C-500 – A passion for drilling

The focus of the DRILLTEQ C-500 cross throughfeed machine is on drilling workpieces. With the maximum expansion stage of the machine, workpieces can be processed on six sides. The interchangeable drilling gear also allows the product program to be changed quickly and easily.

changed quickly and easily.

The machine is particularly suitable for a batch size in excess of 250 parts.





Drilling gear

- Easily interchangeable (including retrospectively)
- Customer-specific solutions for 1-cycle drilling gear



Horizontal dowel inserting in the cross edge

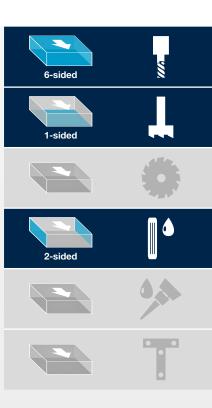
 Dowel insertion with up to 32 doweling units



Clamping bridges

Swivelable or not swivelable





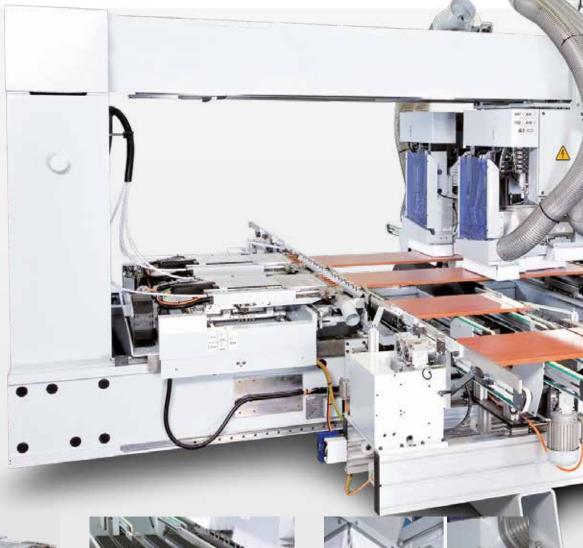
 $2 \frac{100\%}{\text{machines with }} \frac{100\%}{\text{drilling,}}$

up to $\mathbf{38}_{\mathsf{parts/minute}}$

DRILLTEQ C-600 – Complete processing, including grooving and trimming

The DRILLTEQ C-600 stands out with a range of processing options, in particular for small batch sizes and a complex processing program in cross throughfeed. Both trimming and grooving can be performed on the workpiece surface and hardware can be added. Up to two workpieces (with identical processing content and identical dimensions) can be processed in a single clamp.

The machine is particularly suitable for small series with a batch size from 10 – 300 parts.





Horizontal drilling and doweling

- Individually selectable High-Speed drilling spindles provide high performance
- Up to four doweling units possible on each side



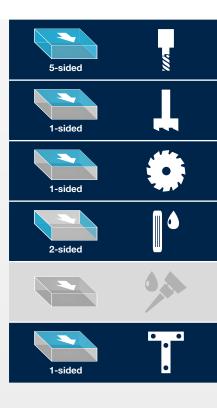
NC-support system

- NC-controlled support system for the highest degree of processing accuracy
- Optional vacuum system available

HSK spindle

- Tool changing system via HSK interface
- Optionally with 3-fold pick-up





 $1_{\text{Shutter groove in}}30_{\text{seconds}}$ Pure drilling with up to $3-6_{\text{parts/minute}}$

DRILLTEQ C-800 – Pure dynamics

The DRILLTEQ C-800, which has been designed for small series, is the answer for dynamic drilling on five sides as well as dowel insertion in the cross edges of a workpiece. Individual drilling patterns can be processed quickly and precisely.

The machine is particularly suitable for small series and series production of furniture with a batch size of 20-500 parts or more.





Horizontal drilling and doweling

 Separate processing for even more output



Fence and guide system

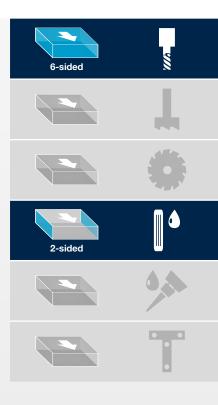
- For precise positioning of workpieces
- Provides vertical drilling in edge zone from top



Drilling supports from top and bottom

- High quality of every drilling operation (example through holes)
- Higher productivity
- Automatic spindle clamping system





Up to 5,000 parts per shift

with up to 32 doweling units

and up to 674 individually accessible drilling spindles

DRILLTEQ H-600 – There's no limit to flexibility

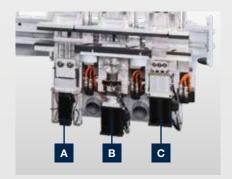
A range of cleverly combined equipment ensures flexible processing options. With an additional unit, even six-sided processing is possible. The DRILLTEQ H-600 offers diverse connection options, from manual feeding to fully automated processes.





powerTouch2

Easy operation and programming



Aggregate for processing of 6th side

- Complete processing of the workpiece
- Routing aggregate with 2 spindles (A)
- Corner notching saw (0° / 90° / 180°) (B)
- Drilling aggregate with 3 spindles (C)



CNC-controlled clamping system

- Quick and precise no setting times
- Integrated measuring system for workpiece length
- Integrated control system for workpiece thickness



 $104_{\text{individually selectable drilling spindles}}$ $1,700_{\text{drillings in less than}}3_{\text{minutes}}$

DRILLTEQ L-200 – Ideal for processing carcase sides

Strong heart – strong performance. For our DRILLTEQ L-200 this means more than drilling and hardware insertion. Combined with the HOMAG high-speed drilling gear and the proven hardware components, the machine is the basis for precisely the performance that you need. Professionally designed with fully developed components your individual requirements can be realized.



High-speed drilling gear

- Single-head or split-head arrangement
- Automatic spindle clamping system
- Extendable by grooving saws etc.

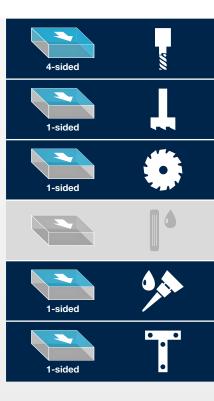
Routing aggregate (left/right hand rotation)

- Routing of roller shutter grooves, counter sinking of blank-looking fronts or similar
- HSK routing aggregate with tool changer possible

Horizontal drilling aggregate

 Special aggregate, e.g. for deep cable drills





drilling gears process

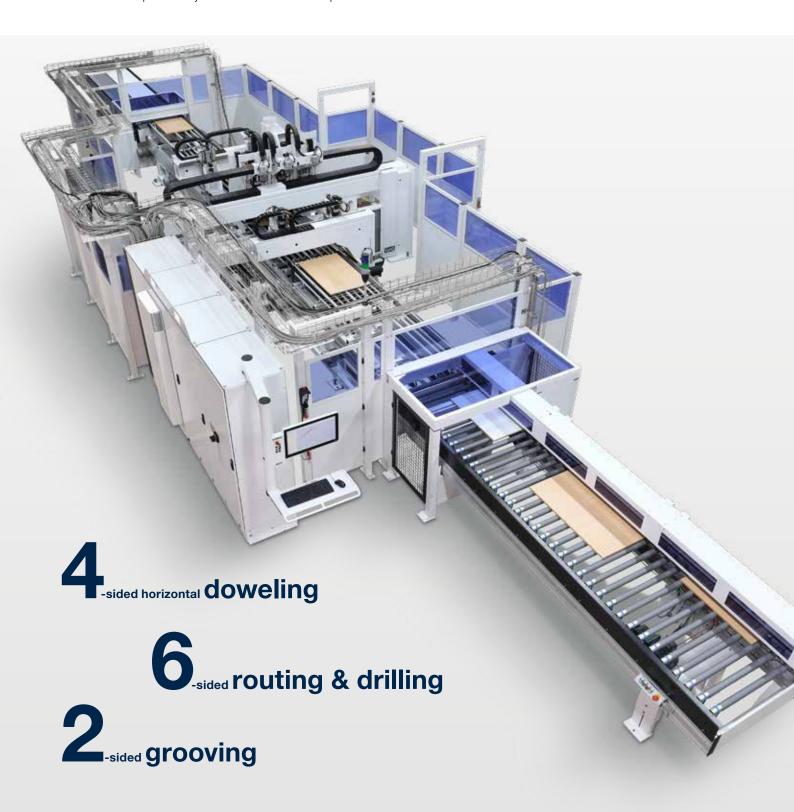
simultaneously or workpieces and

 $1,200_{\text{parts per shift}}$

DRILLTEQ L-500 – 6-Side-processing for universal applications

Complete processing in one throughfeed. Drilling, routing, grooving, dowel inserting, hardware inserting – at the top, bottom, front, rear, left and right. The DRILLTEQ L-500 offers individual combinations of all processing options. With secure, precise and fast clamped workpiece transport.

The machine is particularly suitable for batch size 1 production.





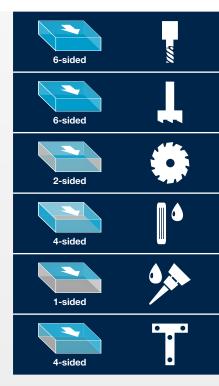
High-speed drilling gear

- Vertical drilling aggregates above and below with individually selectable drilling spindles, horizontal drilling spindles in X and Y direction.
- Grooving saw aggregates above and below
- Expandable by routing aggregates
- Automatic spindle clamping system



Unit carrier with central dust extraction

- Heavy gantry with independently movable unit carriers
- Unit carrier for routing, drilling, dowelling and hardware inserting
- Efficient dust extraction by central extraction channel for all units





Workpiece handling with clamping system

- Allows 6-sided processing also in the edge zone
- Depending on processing, the workpiece is positioned with 4 clamps or held with 2 clamps and additional clamped laterally

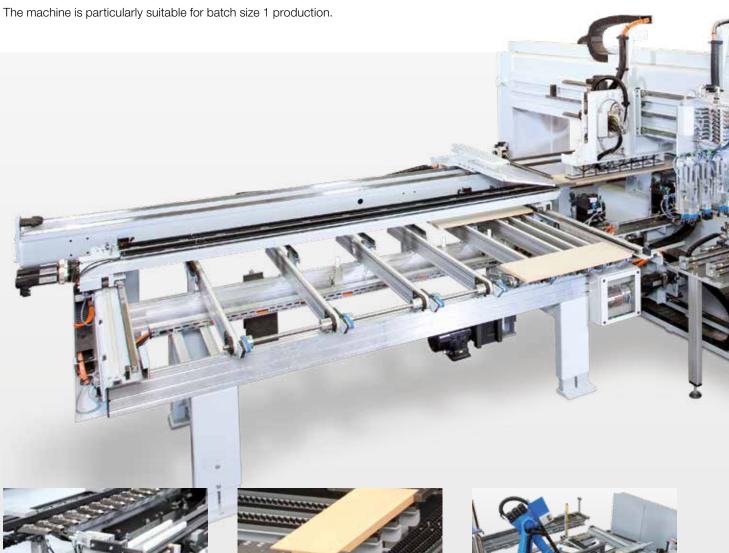


Inserting of dowels or hardware

- Units for pressing in or screwing on hardware
- Multiple tool unit for gluing and dowel inserting (with glue flow monitoring)

DRILLTEQ L-800 – Gentle handling of your fronts

The finest pieces of an item of furniture are in good hands here. The DRILLTEQ L-800 treats them exactly as they should be treated – gently, professionally and efficiently. This is irrespective of whether the fronts only need to be drilled or have hardware to be inserted as well.



Inserting hardware

- Hinges, sleeve couplers, stop buffers, adapters,...
- Press in or screw on
- Feeding solutions to meet your requirements: vibration conveyors, bar magazines, pick & place system

Workpiece handling with clamping system

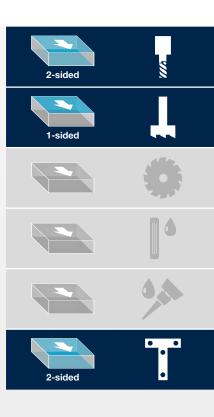
- Highly dynamic and precise positioning of workpieces with 140 m/min
- Permanent workpiece support by surface-friendly brush systems
- Also for profiled fronts



Autonomous production cells

- Complete solution with automated feed from a picking trolley
- Also features an automated trolley change

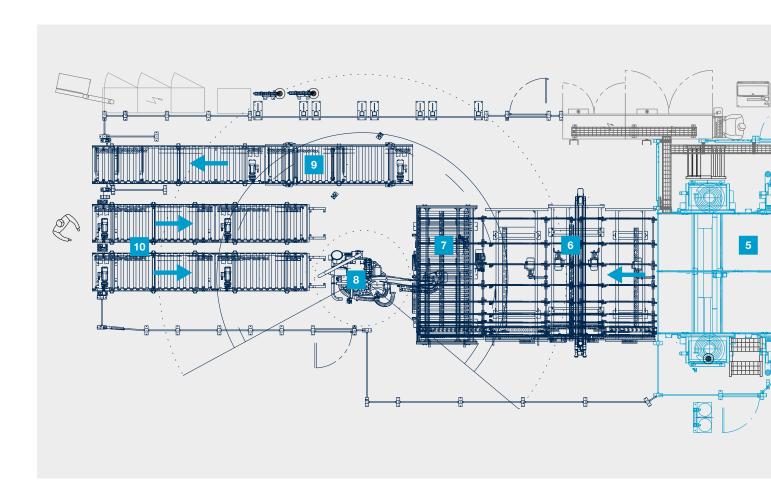




100% automatic feed of hardware

2-3 parts/minute

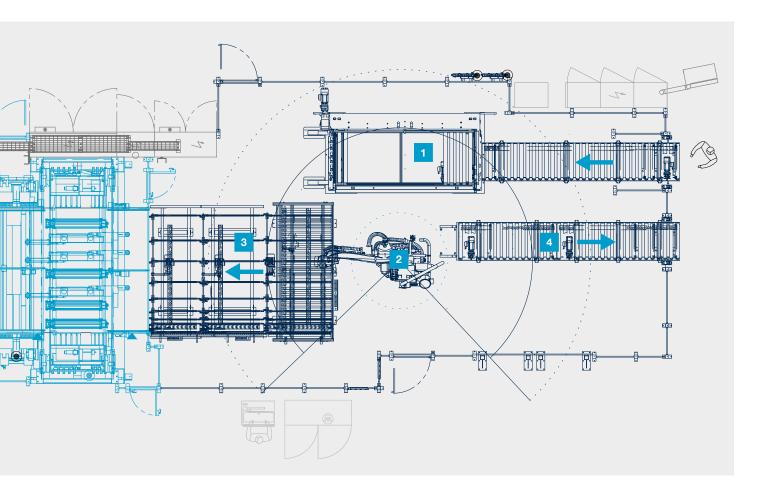
Drilling and dowelling plant for small series and serial production with robot handling



- 1 Feeding station for the subsequent process
- 2 Feeding by RKR180 robot
- 3 Workpiece separation
- 4 Removal of empty stack supports
- 5 Processing machine DRILLTEQ C-800
 - Vertical drilling from above and below
 - Horizontal drilling into the three narrow surfaces (X+/X-/Y+)
 - Gluing/dowel inserting into the two narrow surfaces (X+/X-)

- 6 Brush cleaning from above and below
- 7 Workpiece collecting
- 8 Stacking by RKR180 robot
- 9 Stacking position for the previous process
- 10 Supply of empty stack supports



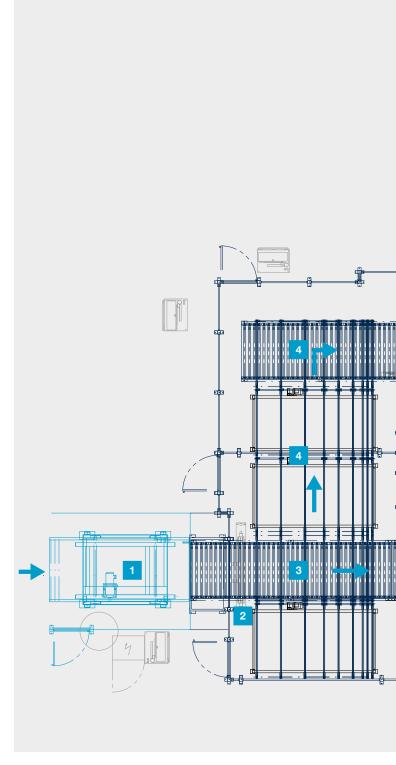




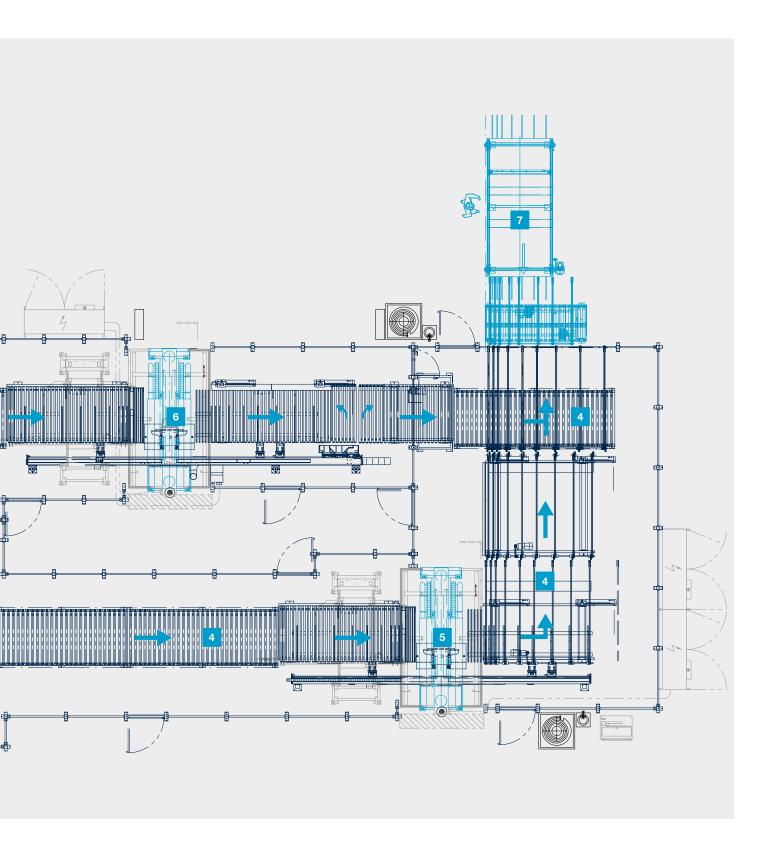
Batch size 1: Universal cabinet processing

- 1 Workpiece buffer
- 2 Throughfeed scanner
- 3 Workpiece distribution
- 4 Workpiece transport
- 5 Processing machine DRILLTEQ H-600
 - Vertical drilling from above and below
 - Horizontal drilling into three narrow surfaces (X+/X-/Y-)
 - Routing from above and below
 - Grooving (0°/90°) from above and from below
 - Gluing/dowel inserting into two narrow surfaces (X+/X-)
- 6 Processing machine DRILLTEQ H-600
 - Vertical drilling from above and below
 - Horizontal drilling into four narrow surfaces
 - Routing from above and below
 - Grooving (0°/90°) from above and from below
 - Gluing/dowel inserting into two narrow surfaces (X+/X-)
- Workpiece buffer (hedgehog buffer)

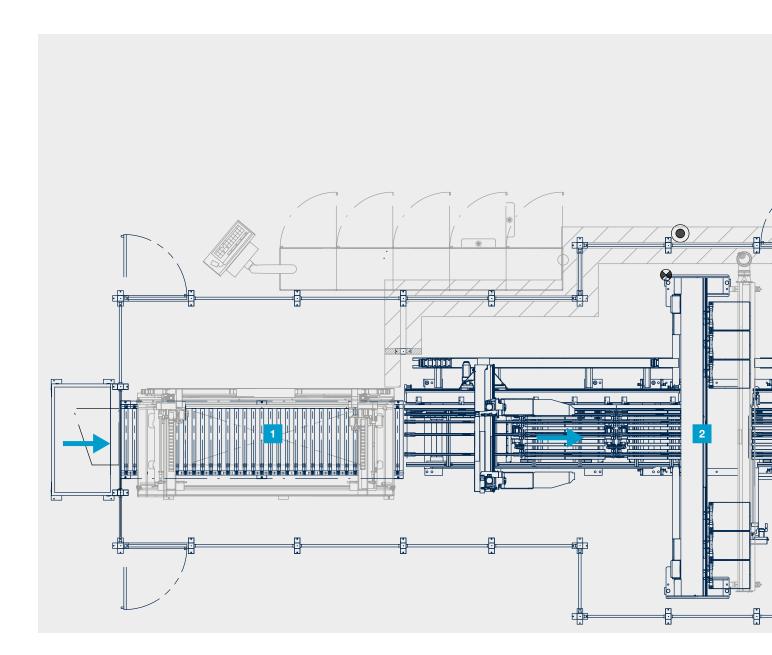








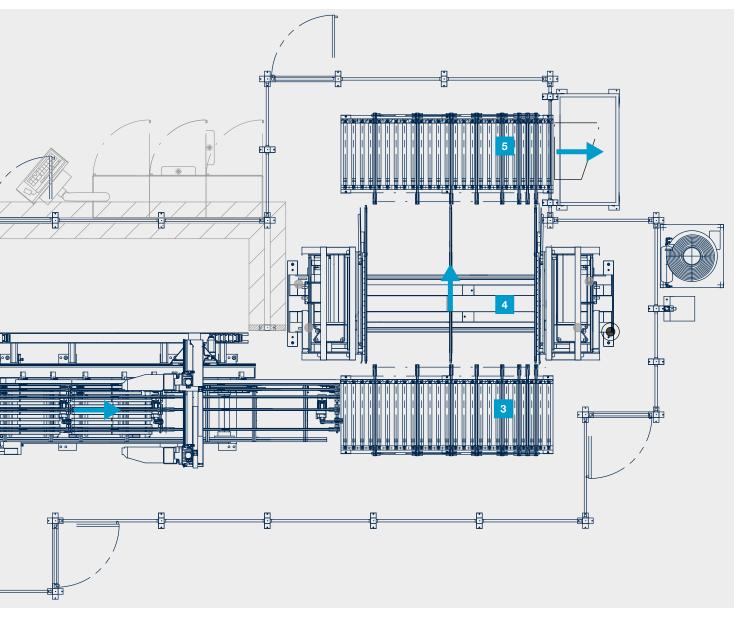
Batch size 1: High-performance cabinet production

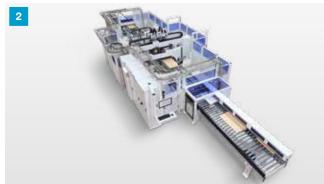


- 1 Workpiece measurement
- 2 Processing machine DRILLTEQ L-500
 - Vertical drilling from above and below
 - Vertical routing from above and below
 - Grooving (0°/90°/180°) from above and from below
 - Horizontal drilling into two narrow surfaces (Y+/Y-)

- 3 Angular transfer
- 4 Processing machine DRILLTEQ C-300
 - Horizontal drilling into three narrow surfaces (X+/X-)
 - Gluing/dowel inserting into two narrow surfaces (X+/X-)
- 5 Angular transfer

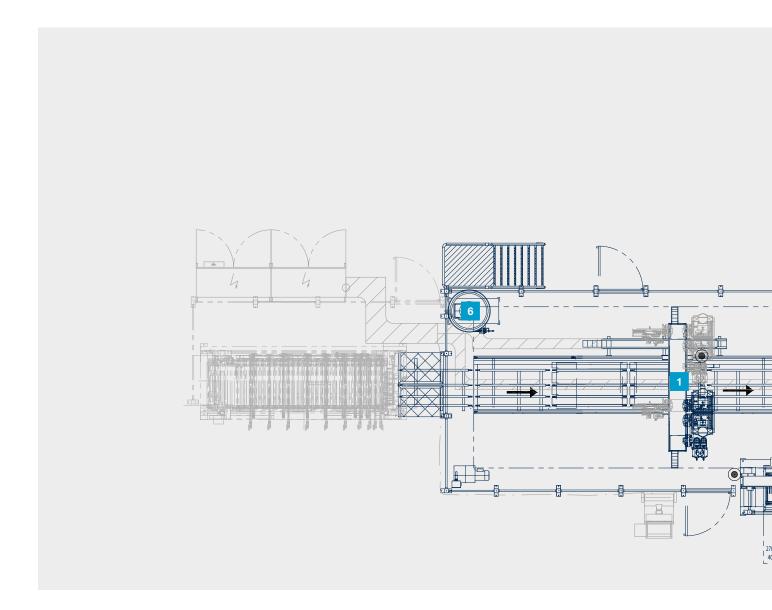








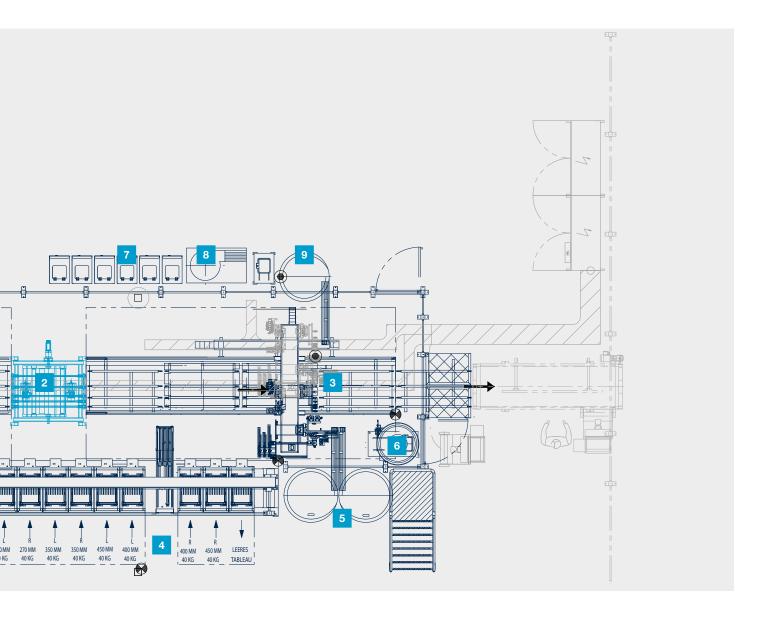
Batch size 1: Complete side processing (including hardware inserting)



- 1 Processing machine DRILLTEQ L-200
 - Vertical drilling from above
 - Horizontal drilling into three narrow surfaces (X+/X-)
 - Grooving (0°/180°) from above
 - Routing from above
 - Inserting of mounting plates (variant A) from above
- 2 Turning station

- 3 Processing machine DRILLTEQ L-200
 - Inserting of mounting plates (variant B) from above
 - Inserting of glue beads from above
 - Inserting of top cabinet hangers from above
 - Screwing on brackets from above
 - Screwing on drawer slides (in 4 lengths) from above
- 4 Magazine for drawer slides





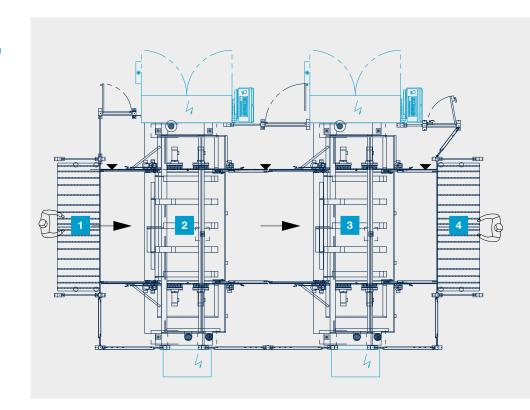
- 5 Vibration conveyor for top cabinet hangers
- 6 Vibration conveyor for mounting plates
- 7 Vibration conveyor for EURO screws
- 8 Vibration conveyor for glue beads
- 9 Vibration conveyor for rear wall brackets



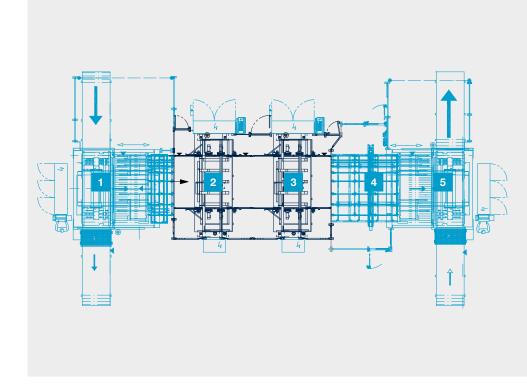
Concepts for series production

PROCESS CONTENTS

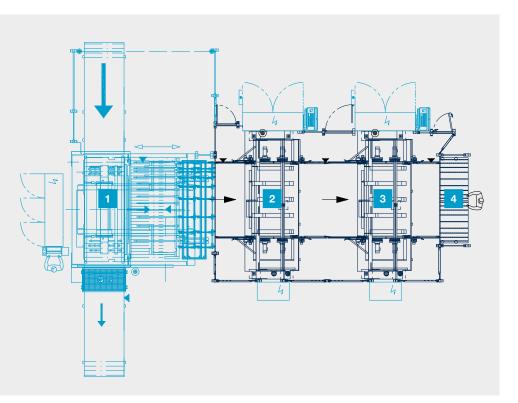
- 1 Manual workpiece feeding
- Processing machine
 DRILLTEQ C-500
 - Vertical drilling from above and below
 - Horizontal drilling into four narrow surfaces (X+/X-/Y+/Y-)
- Processing machine DRILLTEQ C-500
 - Vertical drilling from above and below
 - Horizontal drilling into four narrow surfaces (X+/X-/Y+/Y-)
 - Optional dowel inserting
- 4 Manual workpiece stacking



- 1 FEEDTEQ C-500 Feeding
- Processing machine DRILLTEQ C-500
 - Vertical drilling from above and below
 - Horizontal drilling into four narrow surfaces (X+/X-/Y+/Y-)
- Processing machine
 DRILLTEQ C-500
 - Vertical drilling from above and below
 - Horizontal drilling into four narrow surfaces (X+/X-/Y+/Y-)
 - Optional dowel inserting
- 4 Brush cleaning from above and below
- 5 STACKTEQ C-500 Stacking







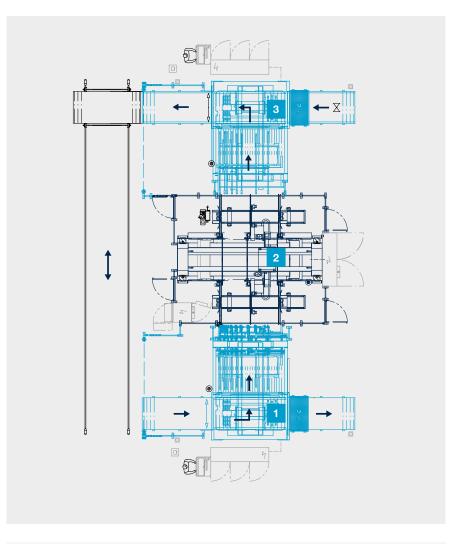
- FEEDTEQ C-500 Feeding
- Processing machine DRILLTEQ C-500
 - Vertical drilling from above and below
 - Horizontal drilling into four narrow surfaces (X+/X-/Y+/Y-)
- Processing machine DRILLTEQ C-500
 - Vertical drilling from above and below
 - Horizontal drilling into four narrow surfaces (X+/X-/Y+/Y-)
 - Optional dowel inserting
- 4 Manual workpiece stacking





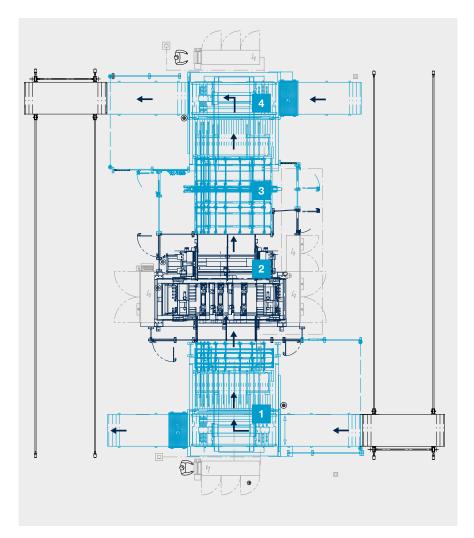
Concepts for small series production

- 1 FEEDTEQ C-500 Feeding
- Processing machine DRILLTEQ C-600
 - Vertical drilling from above
 - Horizontal drilling into four narrow surfaces (X+/X-/Y+/Y-)
 - Gluing/dowel inserting into two narrow surfaces (X+/X-)
 - Grooving (0°/90°) from above
 - Routing from above
- 3 STACKTEQ C-500 Stacking





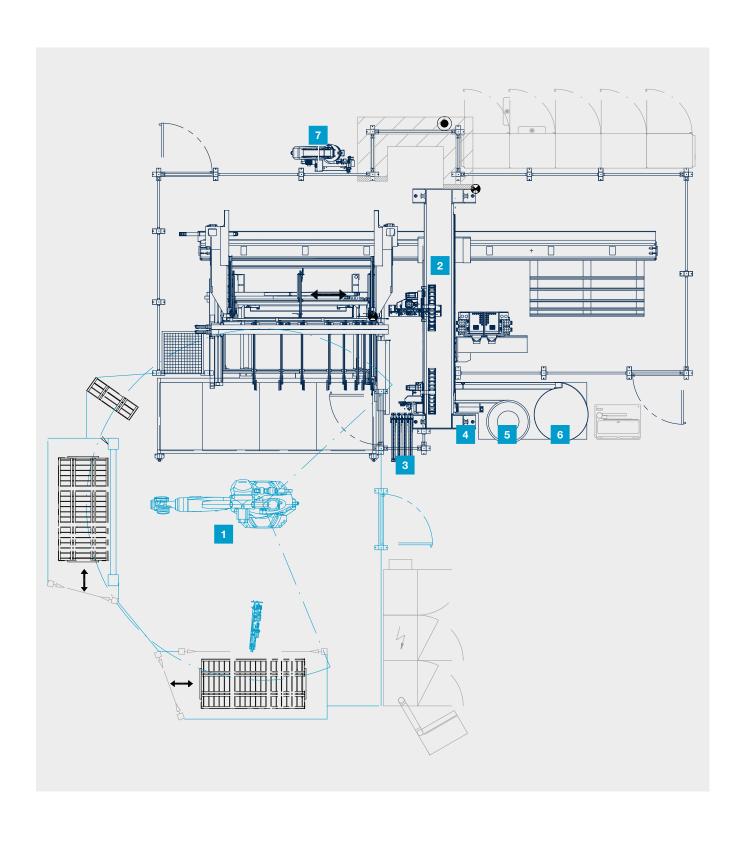




- 1 FEEDTEQ C-500 Feeding
- Processing machine DRILLTEQ C-800
 - Vertical drilling from above and below
 - Horizontal drilling into three narrow surfaces (X+/X-/Y-)
 - Optional dowel inserting
- Brush cleaning from above and below
- 4 STACKTEQ C-500 Stacking



Batch size 1: Front processing with hardware inserting and robot handling





- 1 Robot RKR 180
- 2 Processing machine DRILLTEQ L-800
 - Vertical drilling from above and below
 - Vertical trimming from above
 - Inserting of hinges (in two variants) from below
 - Inserting of drawer adapters (in two variants) from below
 - Inserting of stop buffers from below
- 3 Bar magazine for hinges

- 4 Linear conveyor for drawer adapters
- 5 Vibration conveyor for drawer adapters
- 6 Vibration conveyor for hinges
- 7 Vibration conveyor for stop buffers



HE LIFE CYCLE SERVICES

Optimal service and individual consultations are included in the purchase of our machines. We support you with service innovations and products which are especially tailored to your requirements. With short response times and fast customer solutions we guarantee consistently high availability and economic production – over the entire life cycle of your machine.



REMOTE SERVICE

- Hotline support via remote diagnosis by our trained experts regarding control, mechanics and process technology.
 Thus, more than 92% less on-site service required and consequently a faster solution for you!
- The ServiceBoard App helps to solve tasks in a fast, simple and concrete way. This is achieved by mobile live video diagnosis, automatic sending of service requests or the online spare parts catalog eParts.



SPARE PARTS SERVICE

- High spare parts availability and fast delivery.
- Ensuring quality by predefined spare parts and wear parts kits, comprising original spare parts.
- Identify and inquire for spare parts online under www.eParts.de 24/7, or buy even faster and more comfortably in the new HOMAG eShop (shop.homag.com).



MODERNIZATION

- Keep your machinery up to date and increase your productivity as well as your product quality, This is how you can meet tomorrow's requirements today!
- We support you with upgrades, modernization as well as individual consultancy and developments.



DIGITAL SERVICES

- serviceRemote the new remote service solution of the future! Fast restart of production because the remote service employee has extensive access to relevant physical data.
- serviceAssist provides help for selfhelp. The preventive solutions proposed in the new App are the combination of our experiences and existing machine data.



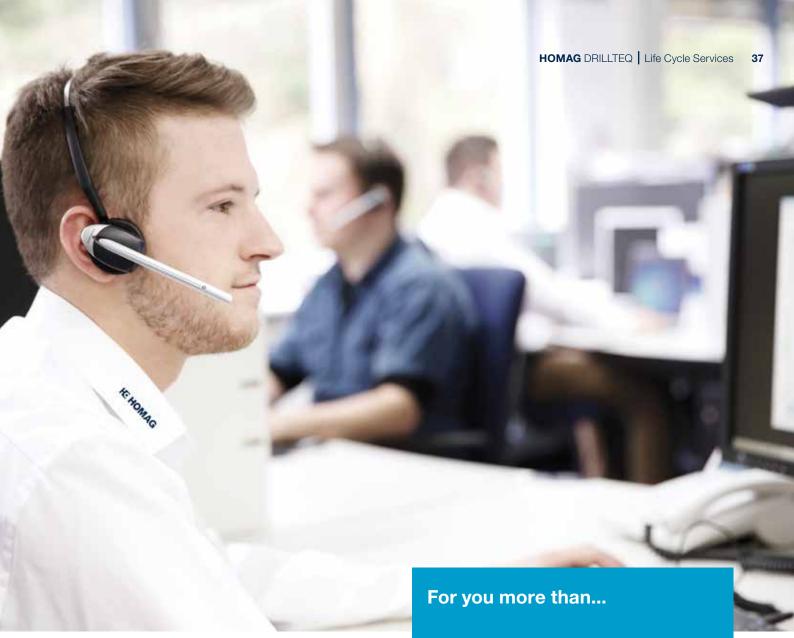
SOFTWARE

- Telephone support and consultancy through software support.
- Digitalization of your sample parts via 3D scanning saves time and money compared to new programming.
- Subsequent networking of your machinery with intelligent software solutions ranging from construction to production.



FIELD SERVICE

- Increased machine availability and product quality by certified service staff.
- Regular checks through maintenance/ inspection guarantee the highest quality of your products.
- We offer you the highest availability of technicians in order to reduce downtimes in case of unpredictable troubles.





TRAINING

- Thanks to training perfectly suited to your requirements, your machine operators can optimally operate and maintain the HOMAG machines.
- The training also includes customerspecific training documents with exercises proven in practice.
- Online training and webinars. Learn without traveling, meet your trainer in the digital classroom.

1,350

service employees worldwide

92%

less on-site service thanks to successful remote diagnosis

5,000 customers in trainings / year

150,000 machines, all electronically documented

in 28 different languages – in eParts

DRILLTEQ | Technical Data

		DRILLTEQ C-300	DRILLTEQ C-500	DRILLTEQ C-600
Min. workpiece length X	mm	250	200	250
Max. workpiece length X	mm	2,500 (3,000)	2,500 (3,000)	2,500 (3,000)
Min. workpiece width Y	mm	100	100	100
Max. workpiece width Y	mm	1,050	1,000	1 x 1,400 (or 2 x 600)
Min. workpiece thickness Z	mm	12	12	12
Max. workpiece thickness Z	mm	60	60	60
Batch size		Supplement to DRILLTEQ C-600 DRILLTEQ C-800 DRILLTEQ L-200 DRILLTEQ L-500	Series production, batch size > 250	Small series, batch size 10–300
Performance*	Parts/shift**	800–3,000	2.500–5,000	800–1,800
Set-up time***		5-10 sec.	5–30 min.	10-20 sec.

^{*} Dependent on changeovers and content

^{** 1} shift corresponds to 8 hours production time

^{***} From workpiece to workpiece

DRILLTEQ C-800	DRILLTEQ H-600	DRILLTEQ L-200	DRILLTEQ L-500	DRILLTEQ L-800
250	250	250	240	290
2,500 (3,000)	2,500 (3,100)	2,500 (3,000)	2,500 (3,000)	2,500
100	100	120	100	100
1,050	1,000	800 (1,300)	800 (1,200/1,600)	800
15	8	12	12	16
60	80	60	60	25
Small series, batch size 20–500	Batch size 1 for individual production + interlinking	Batch size 1 for individual production + interlinking	Batch size 1 for individual production + interlinking	Batch size 1 for individual production
2,500–5,000	500–800	600–1,200	500–800	500–1,200
10-20 sec.	0 sec.	0 sec.	0 sec.	0 sec.

HOMAG Group AG

info@homag.com www.homag.com **YOUR SOLUTION**









