

Drilling and hardware insertion technology

Machines and concepts for industrial production.

DRILLTEQ C series / DRILLTEQ H series / DRILLTEQ L series





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

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CONTENTS

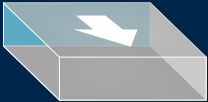
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DRILLTEQ | Everything at a glance



	 From the top	 From the bottom	 From the front
DRILLTEQ C-300			
DRILLTEQ C-500			
DRILLTEQ C-800			
DRILLTEQ H-600			
DRILLTEQ L-200			
DRILLTEQ L-500			
DRILLTEQ L-800			



 From the back	 From the left	 From the right	
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			Page 08
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Drilling	Routing	Grooving	Doweling & Gluing	Gluing	Hardware Insertion

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.



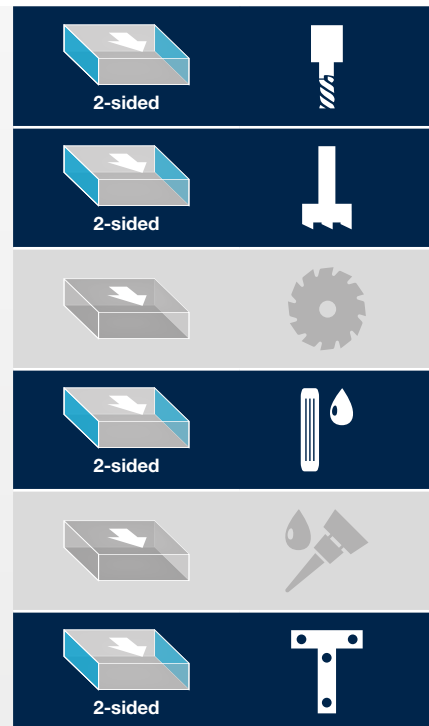
Drilling

- Horizontal drilling with up to 104 drilling spindles



Doweling

- Dowel insertion with up to 32 doweling units



Up to **104** individually accessible drilling spindles in the cross edge
 or up to **32** doweling units enable **100%**

flexible processing
 in the cross edge

DRILLTEQ C-500 – A passion for drilling

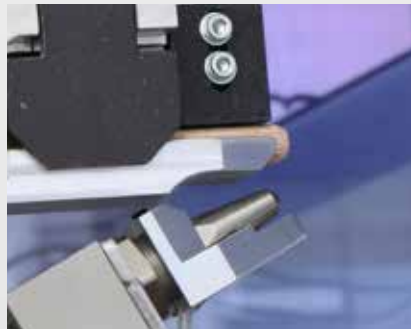
The focus of the DRILLTEQ C-500 cross throughfeed machine is on drilling workpieces. With the maximum expansion stage of the machine, workpieces can be processed on six sides. The interchangeable drilling gear also allows the product program to be changed quickly and easily.

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



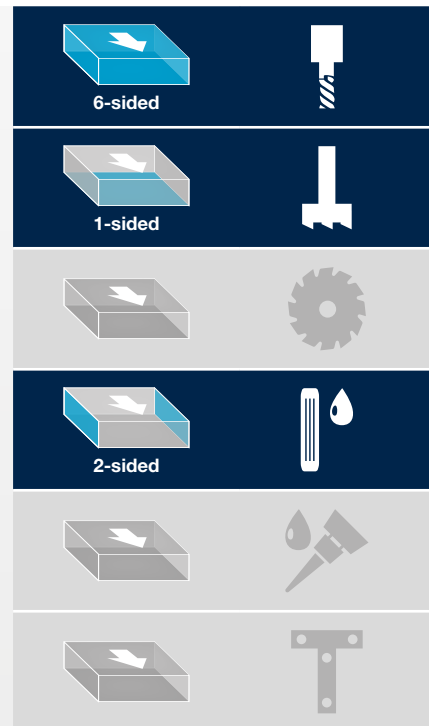
Horizontal dowel inserting in the cross edge

- Dowel insertion with up to 32 doweling units



Clamping bridges

- Swivelable or not swivelable



In a group of **2** machines with **100%** drilling,
up to **38** 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



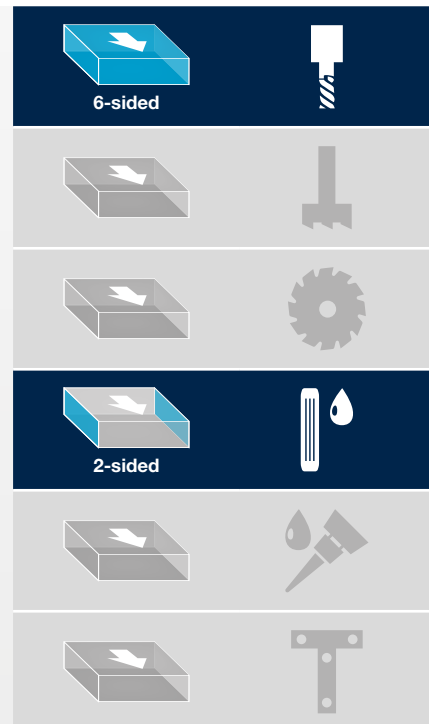
Fence and guide system

- 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

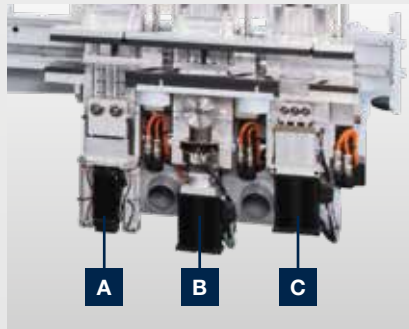
DRILLTEQ H-600 – There's no limit to flexibility

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. The machine is particularly suitable for small series up to batch size 1.



powerTouch2

- Easy operation and programming



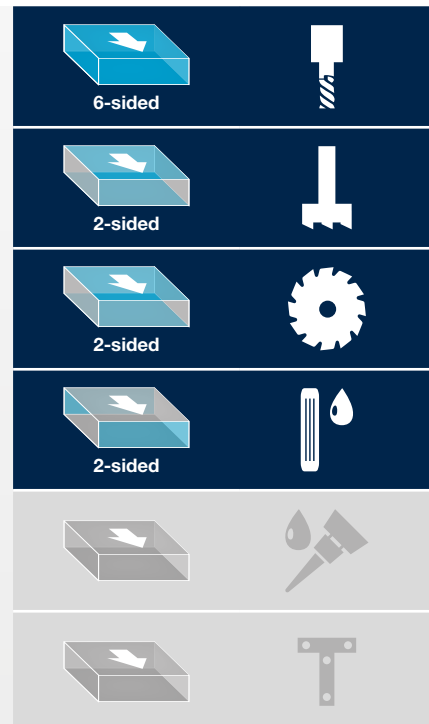
Aggregate for processing of 6th side

- 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



Up to **104** individually selectable drilling spindles

enable **1,700** drillings in less than **3** 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.

The machine is particularly suitable for batch size 1 production.



High-speed drilling gear

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



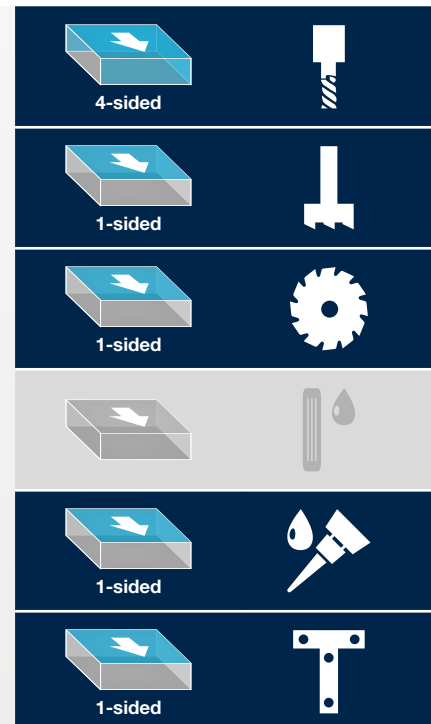
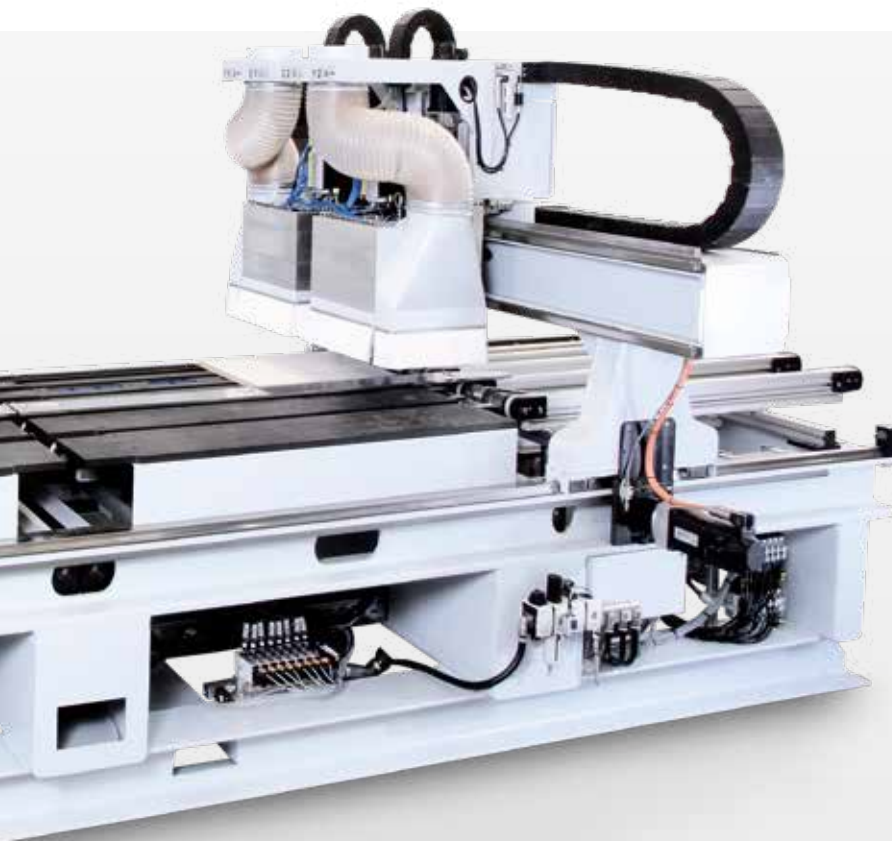
Routing aggregate (left/right hand rotation)

- 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



Up to **4** drilling gears process

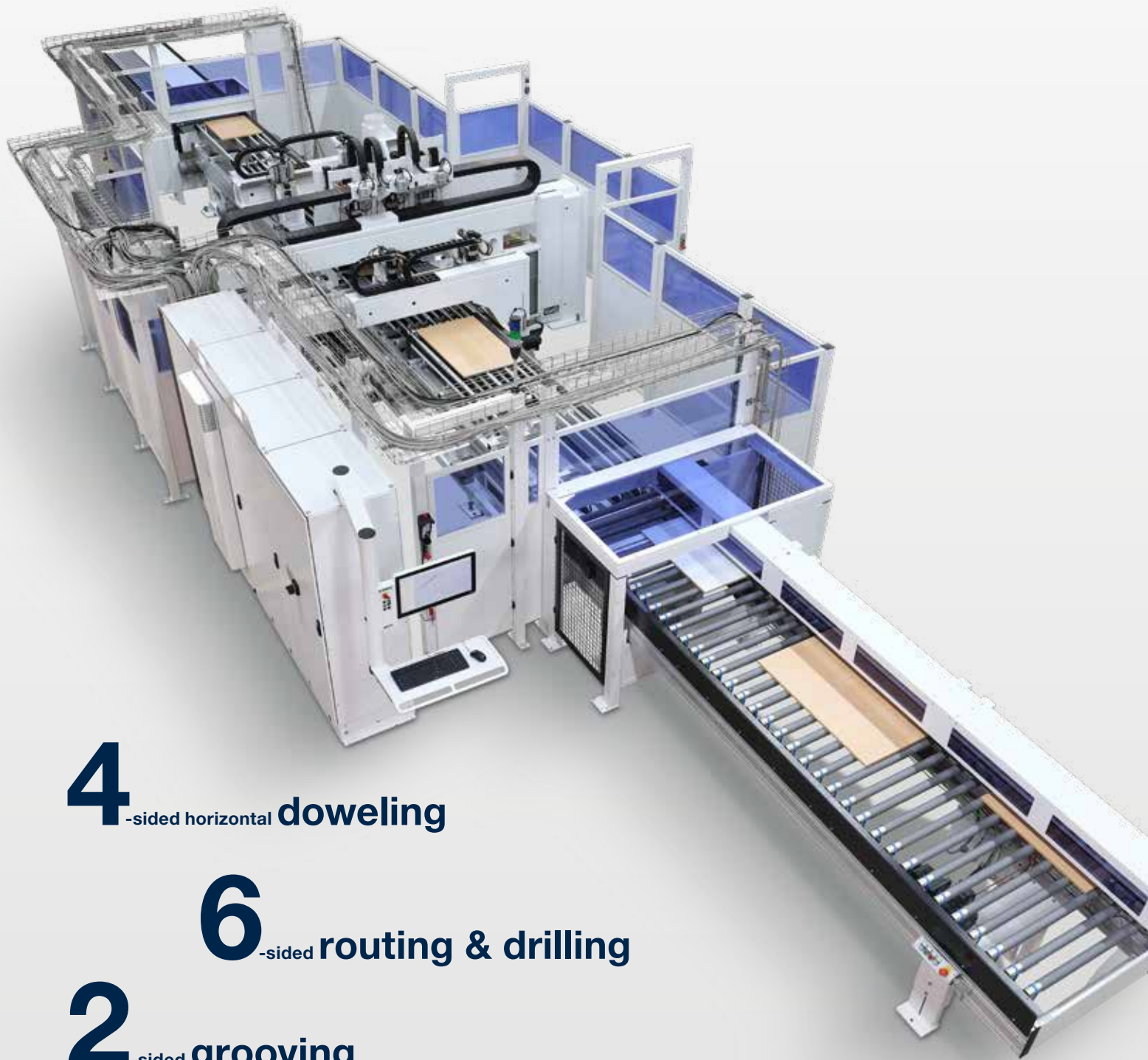
simultaneously **12** or workpieces and

achieve **1,200** 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.



4
-sided horizontal **doweling**

6
-sided **routing & drilling**

2
-sided **grooving**



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



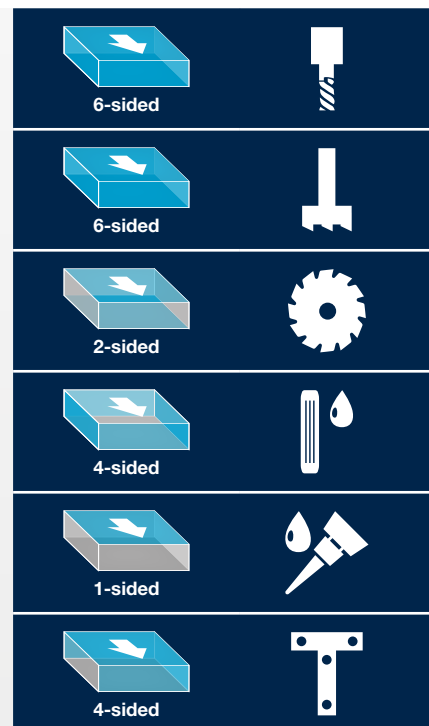
Workpiece handling with clamping system

- 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.

The machine is particularly suitable for batch size 1 production.



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



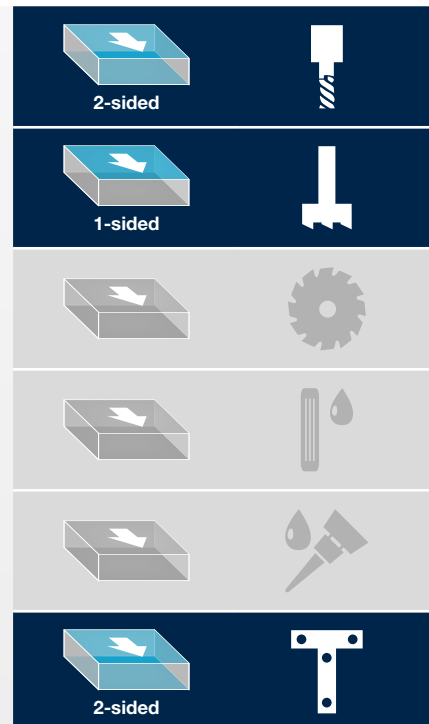
Workpiece handling with clamping system

- 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

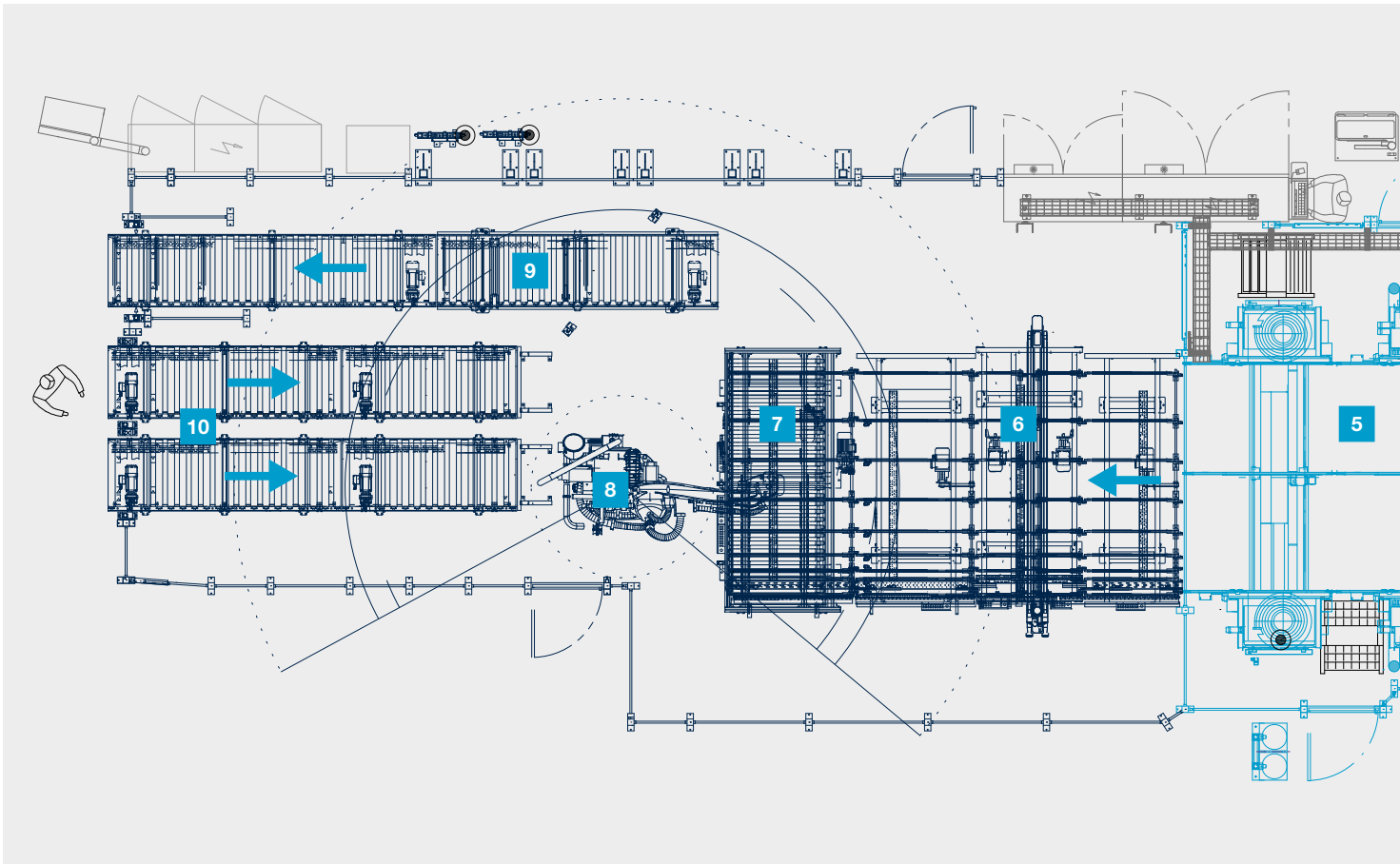
- Complete solution with automated feed from a picking trolley
- Also features an automated trolley change



100% automatic feed of hardware

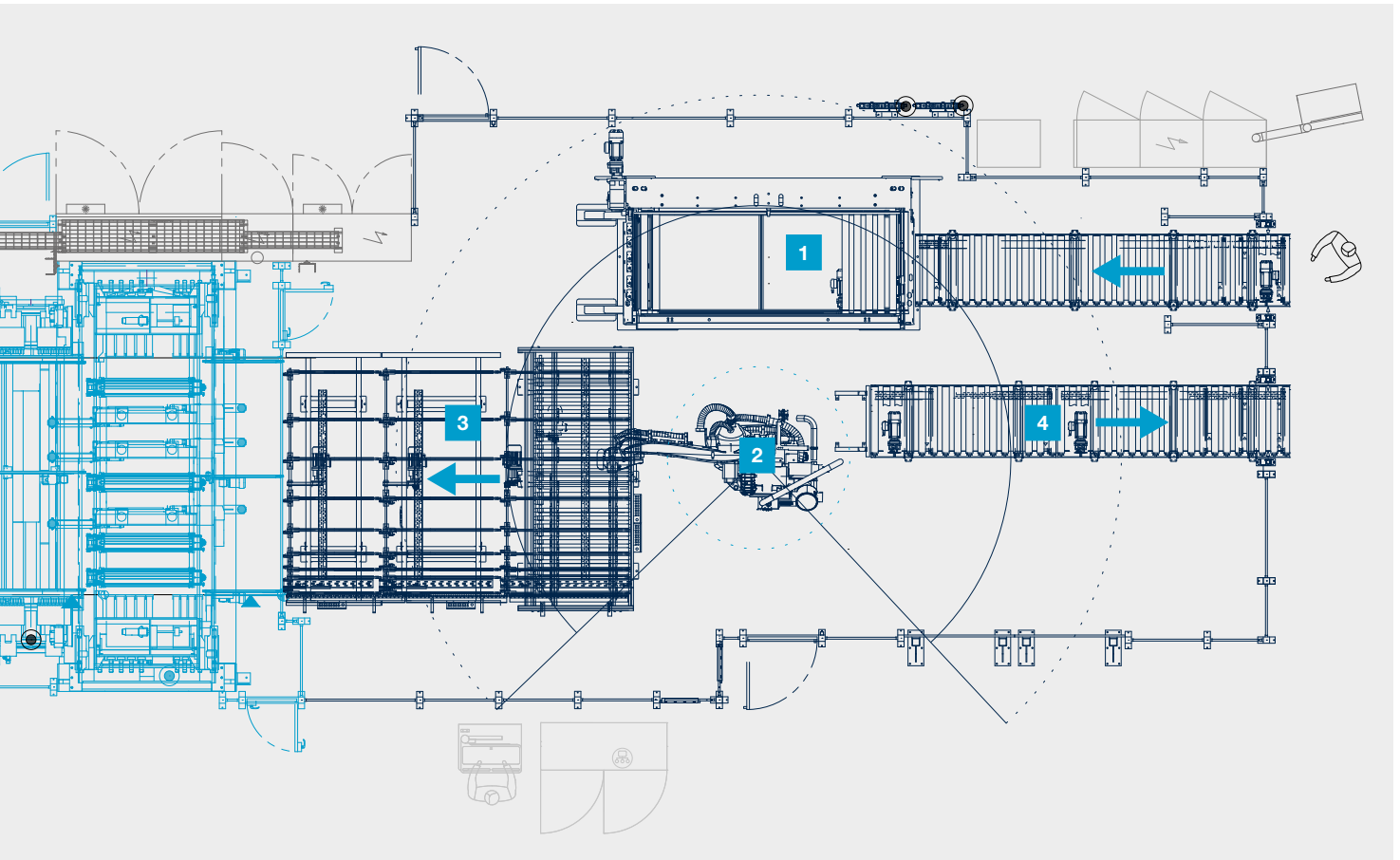
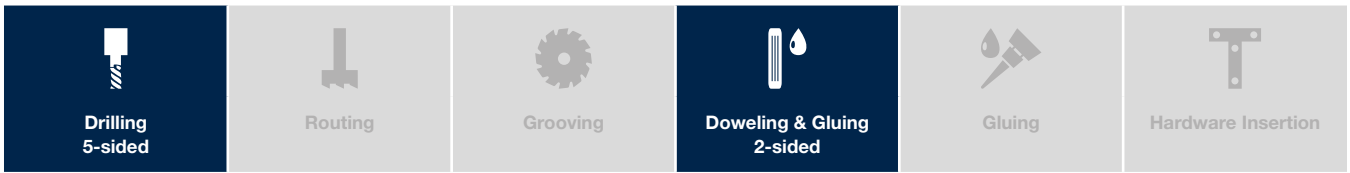
with up to **2-3** parts/minute

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



PROCESS CONTENTS

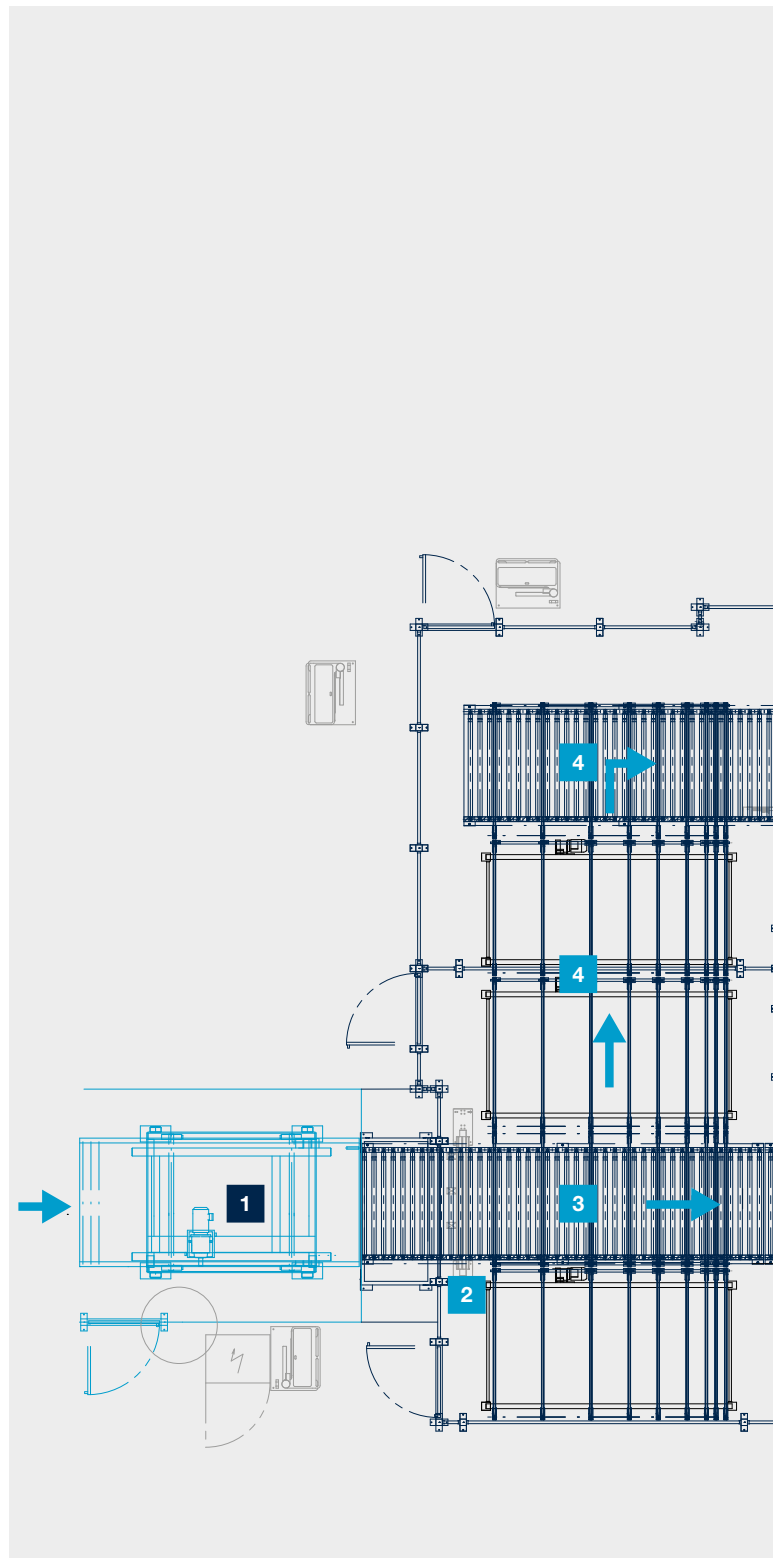
- | | |
|--|--|
| <p>1 Feeding station for the subsequent process</p> <p>2 Feeding by RKR180 robot</p> <p>3 Workpiece separation</p> <p>4 Removal of empty stack supports</p> <p>5 Processing machine DRILLTEQ C-800</p> <ul style="list-style-type: none"> ▪ Vertical drilling from above and below ▪ Horizontal drilling into the three narrow surfaces (X+/X-/Y+) ▪ Gluing/dowel inserting into the two narrow surfaces (X+/X-) | <p>6 Brush cleaning from above and below</p> <p>7 Workpiece collecting</p> <p>8 Stacking by RKR180 robot</p> <p>9 Stacking position for the previous process</p> <p>10 Supply of empty stack supports</p> |
|--|--|

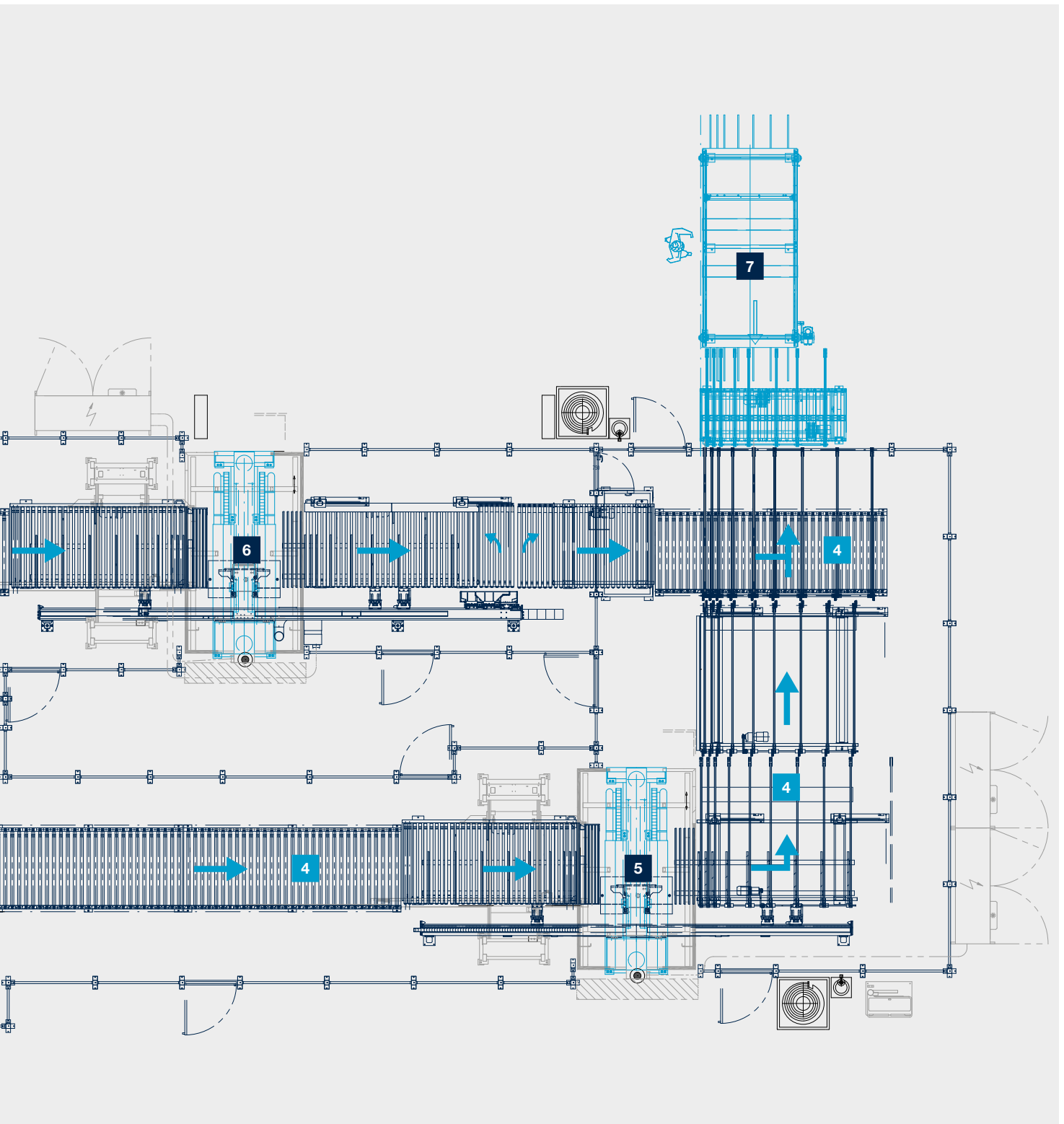


Batch size 1: Universal cabinet processing

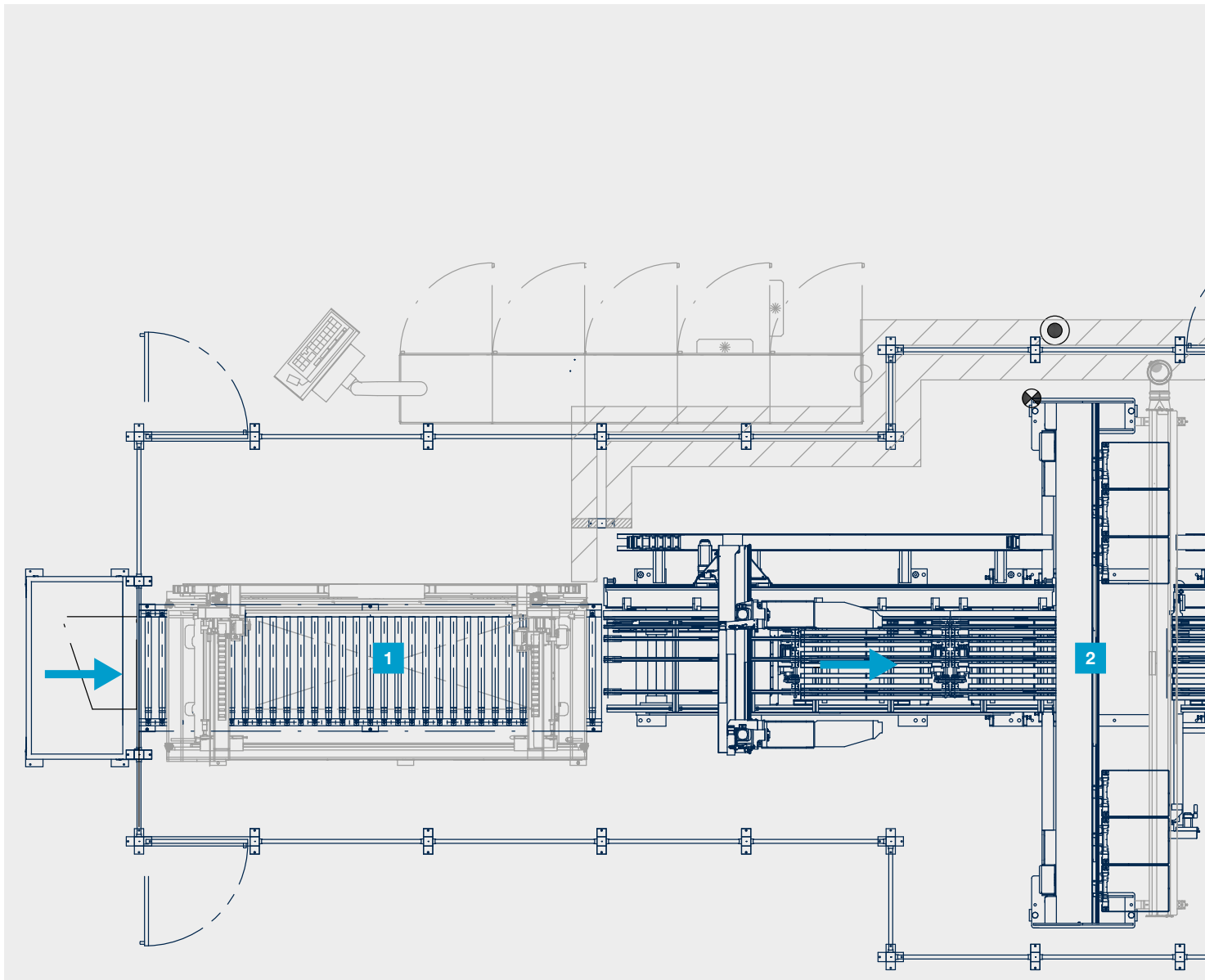
PROCESS CONTENTS

- 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-)
- 7** Workpiece buffer (hedgehog buffer)



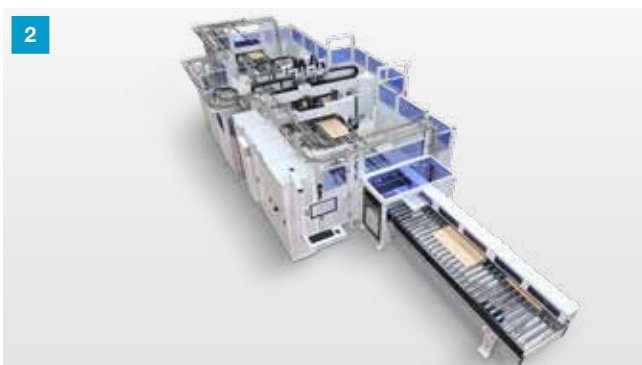
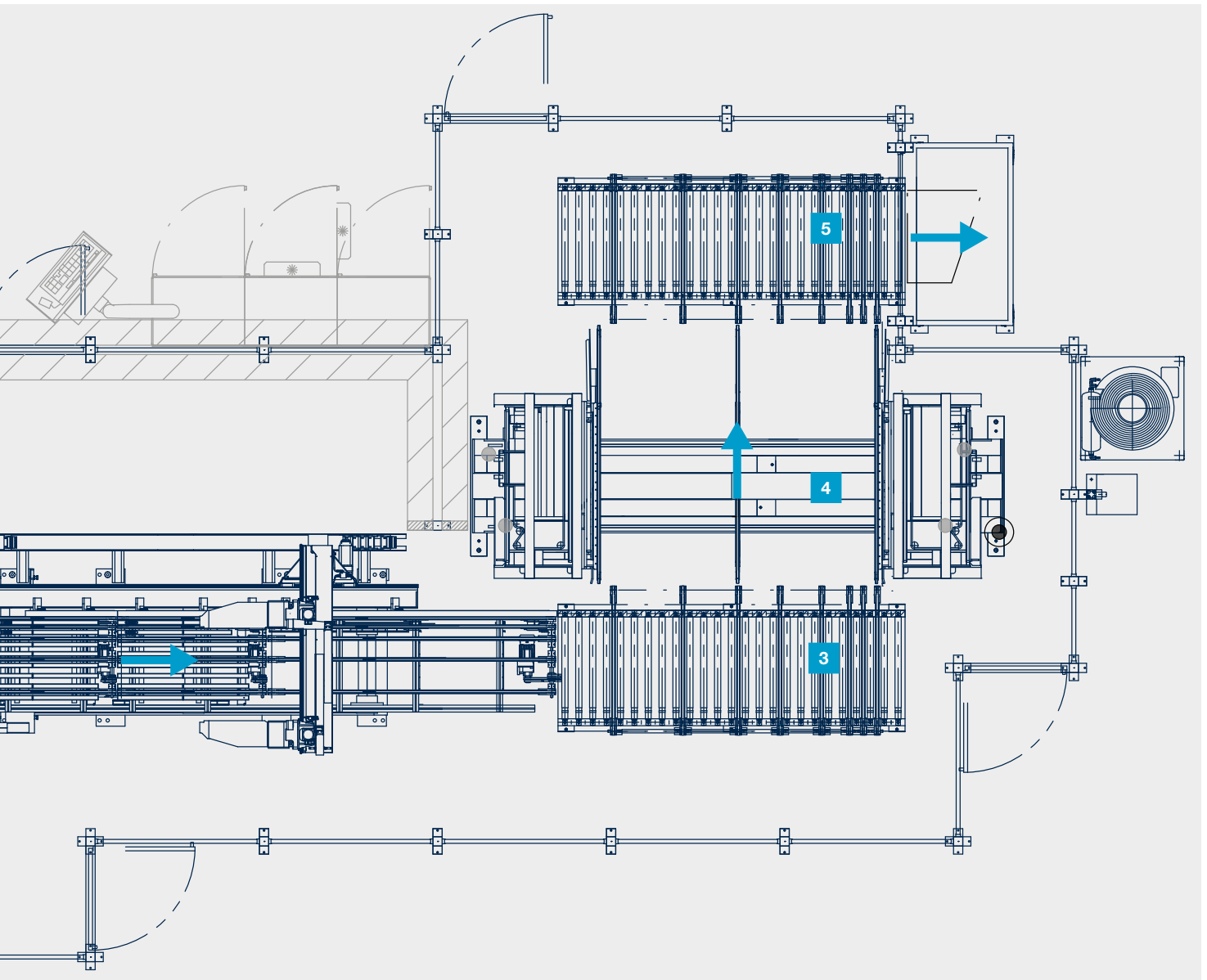


Batch size 1: High-performance cabinet production

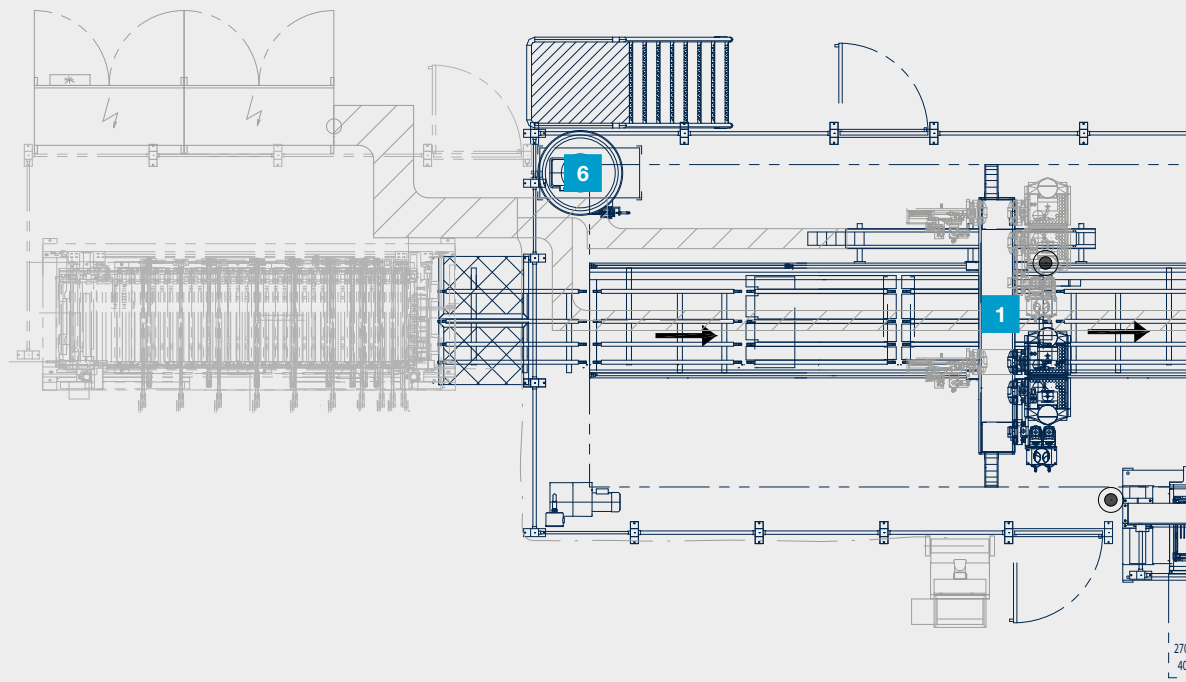


PROCESS CONTENTS

- | | |
|---|---|
| <p>1 Workpiece measurement</p> <p>2 Processing machine DRILLTEQ L-500</p> <ul style="list-style-type: none"> ▪ 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-) | <p>3 Angular transfer</p> <p>4 Processing machine DRILLTEQ C-300</p> <ul style="list-style-type: none"> ▪ Horizontal drilling into three narrow surfaces (X+/X-) ▪ Gluing/dowel inserting into two narrow surfaces (X+/X-) <p>5 Angular transfer</p> |
|---|---|

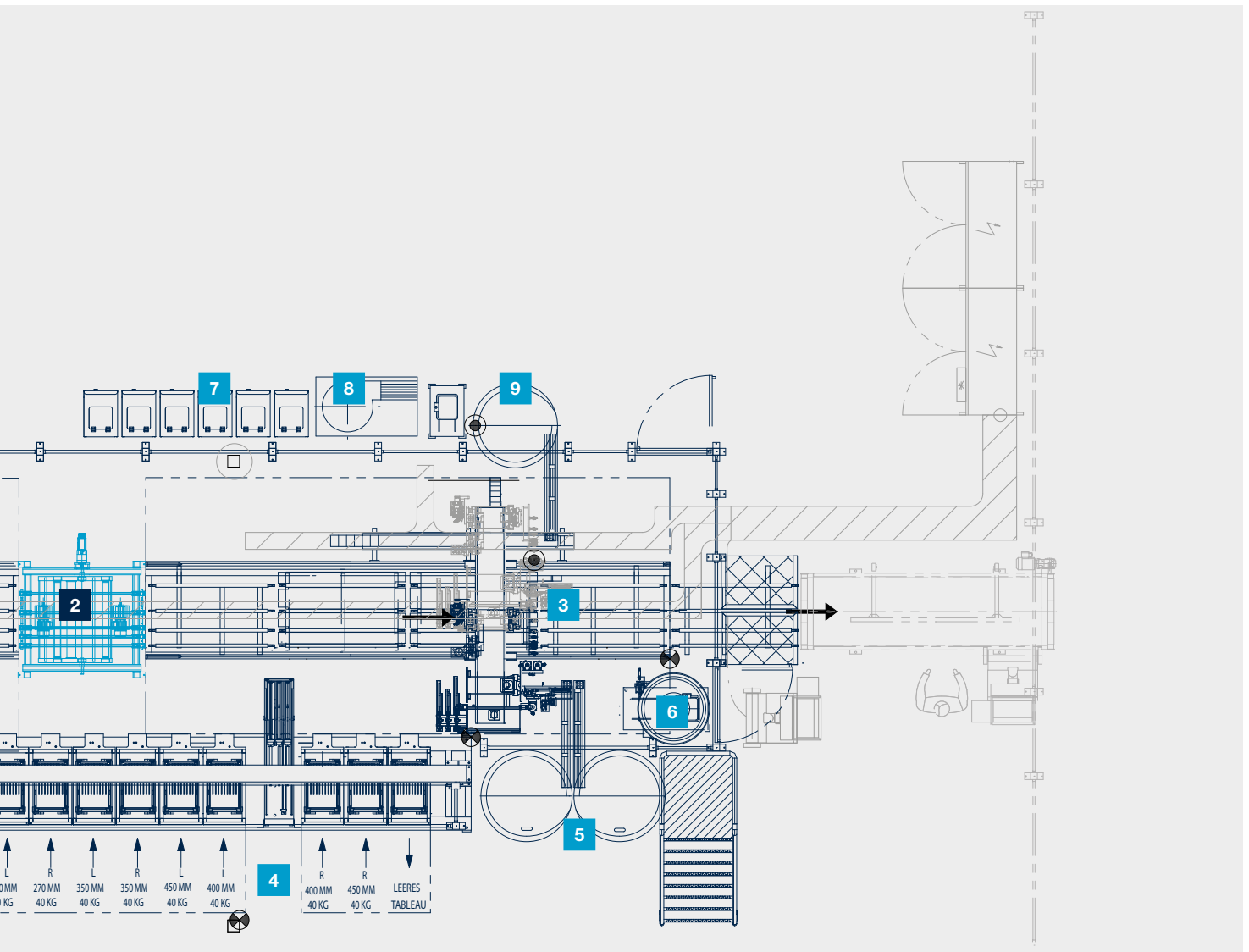


Batch size 1: Complete side processing (including hardware inserting)



PROCESS CONTENTS

- | | |
|--|--|
| <p>1 Processing machine DRILLTEQ L-200</p> <ul style="list-style-type: none"> ▪ 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 | <p>3 Processing machine DRILLTEQ L-200</p> <ul style="list-style-type: none"> ▪ 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 |
| <p>2 Turning station</p> | <p>4 Magazine for drawer slides</p> |



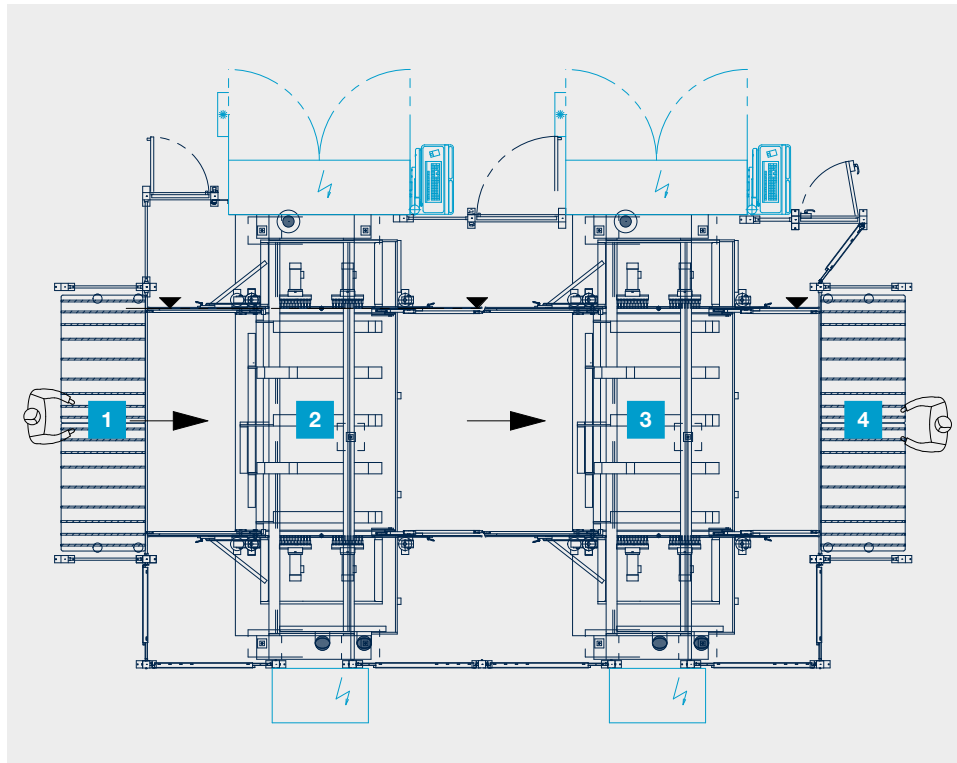
- 5** Vibration conveyor for top cabinet hangers
- 6** Vibration conveyor for mounting plates
- 7** Vibration conveyor for EURO screws
- 8** Vibration conveyor for glue beads
- 9** Vibration conveyor for rear wall brackets



Concepts for series production

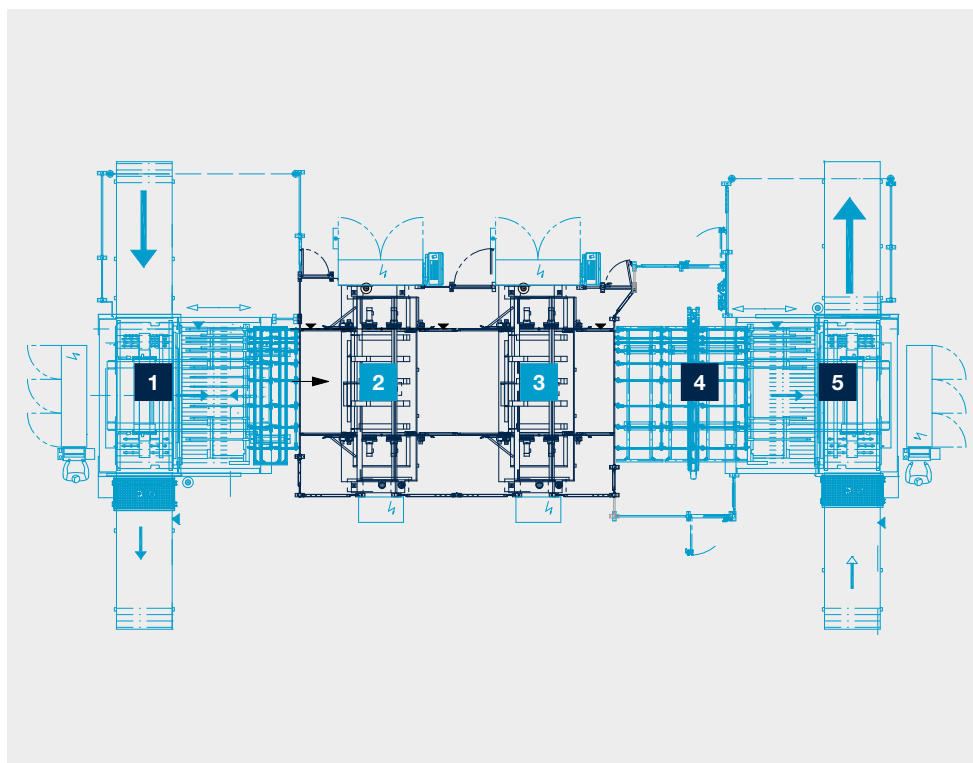
PROCESS CONTENTS

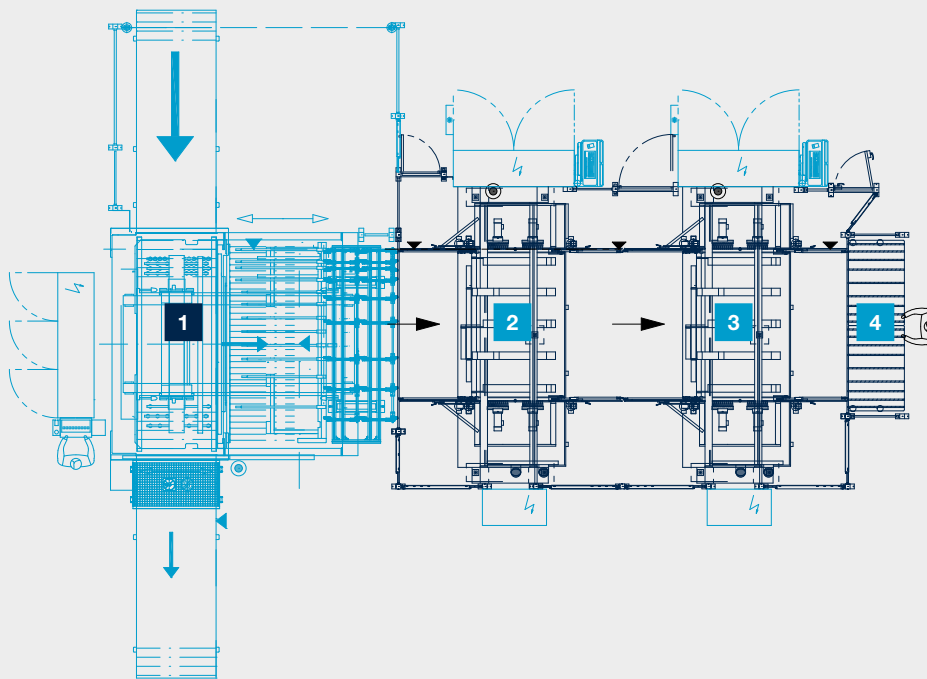
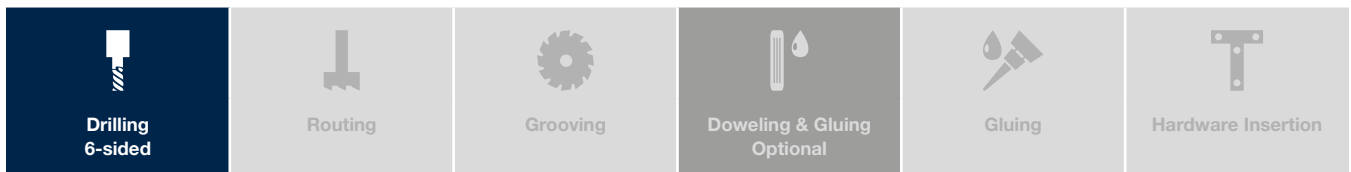
- 1 Manual workpiece feeding
- 2 Processing machine
DRILLTEQ C-500
 - Vertical drilling from above and below
 - Horizontal drilling into four narrow surfaces (X+/X-/Y+/Y-)
- 3 Processing machine
DRILLTEQ C-500
 - Vertical drilling from above and below
 - Horizontal drilling into four narrow surfaces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



PROCESS CONTENTS

- 1 FEEDTEQ C-500 Feeding
- 2 Processing machine
DRILLTEQ C-500
 - Vertical drilling from above and below
 - Horizontal drilling into four narrow surfaces (X+/X-/Y+/Y-)
- 3 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





PROCESS CONTENTS

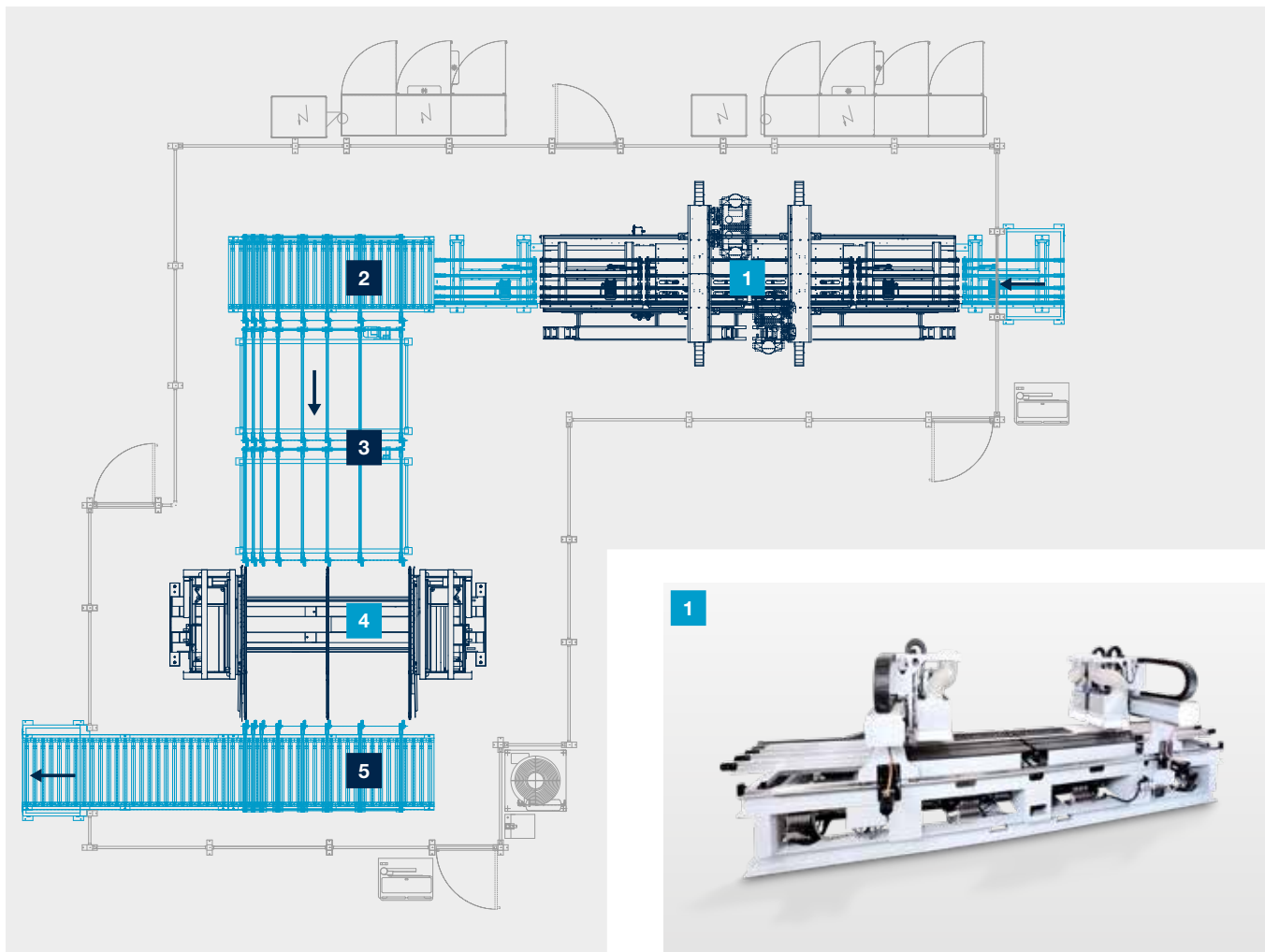
- 1 FEEDTEQ C-500 Feeding**
- 2 Processing machine DRILLTEQ C-500**
 - Vertical drilling from above and below
 - Horizontal drilling into four narrow surfaces (X+/X-/Y+/Y-)
- 3 Processing machine DRILLTEQ C-500**
 - Vertical drilling from above and below
 - Horizontal drilling into four narrow surfaces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

2 3



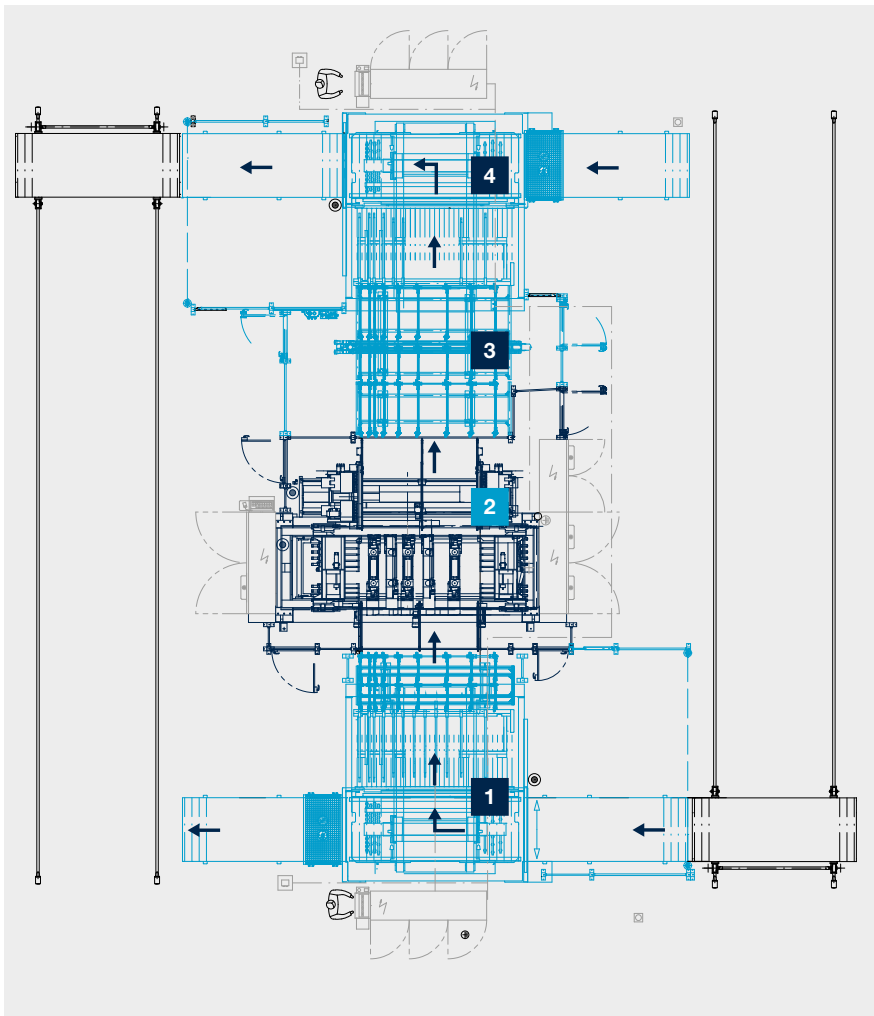
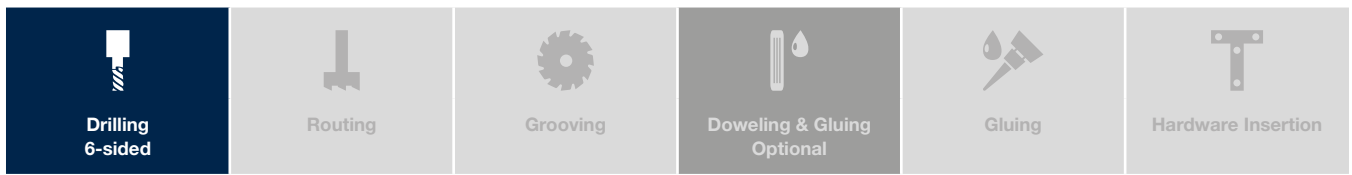


Concepts for small series production



PROCESS CONTENTS

- | | |
|---|---|
| <p>1 Processing machine DRILLTEQ L-200</p> <ul style="list-style-type: none"> ▪ Vertical drilling from above ▪ Horizontal drilling into three narrow surfaces (X+/X-/Y+) ▪ Grooving (0°/180°) from above ▪ Optional routing from above | <p>3 Optional buffer section</p> |
| <p>2 Angular transfer</p> | <p>4 Processing machine DRILLTEQ C-300</p> <ul style="list-style-type: none"> ▪ Horizontal drilling into two narrow surfaces (X+/X-) ▪ Gluing/dowel inserting into two narrow surfaces (X+/X-) |
| | <p>5 Angular transfer</p> |



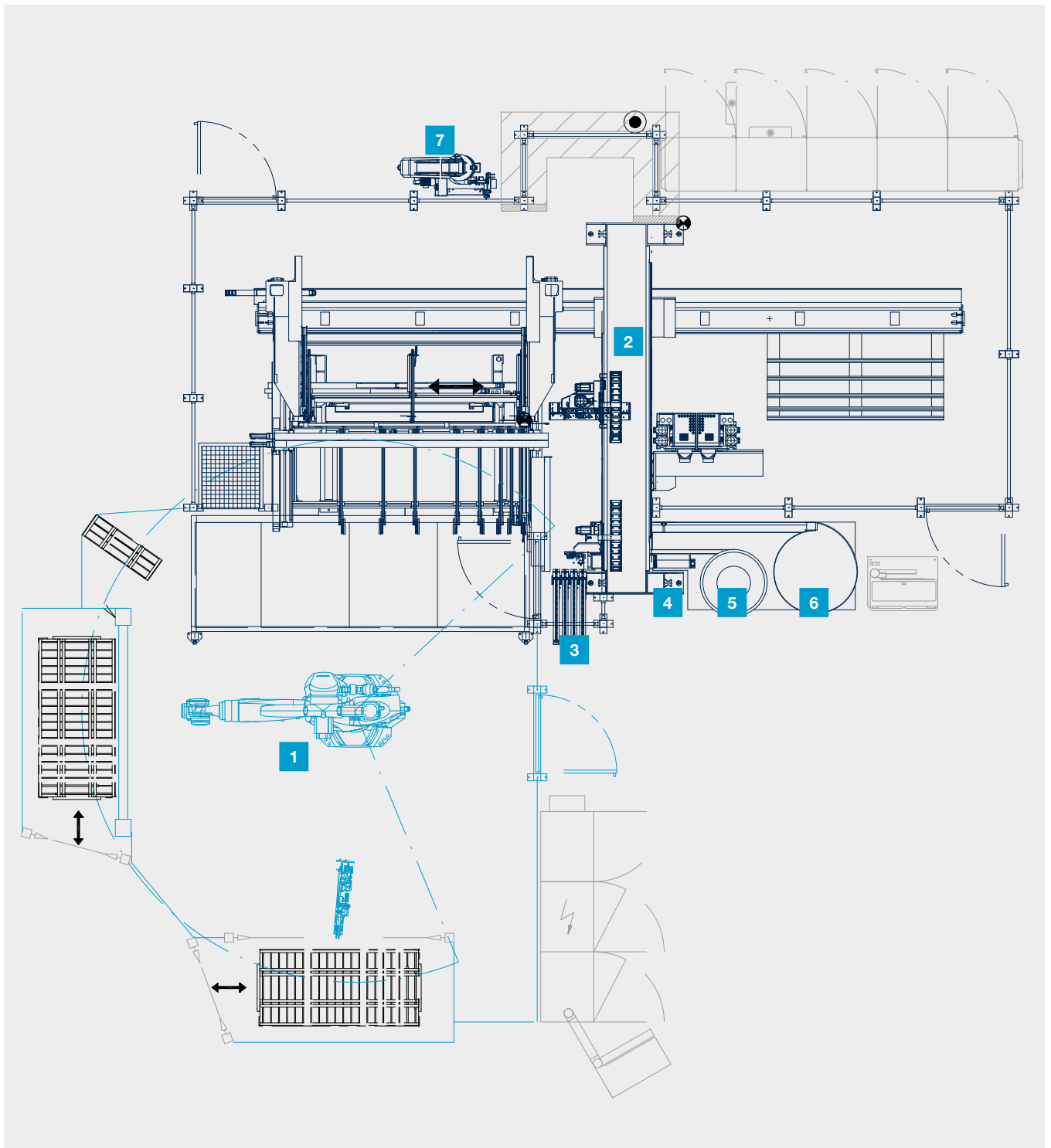
PROCESS CONTENTS

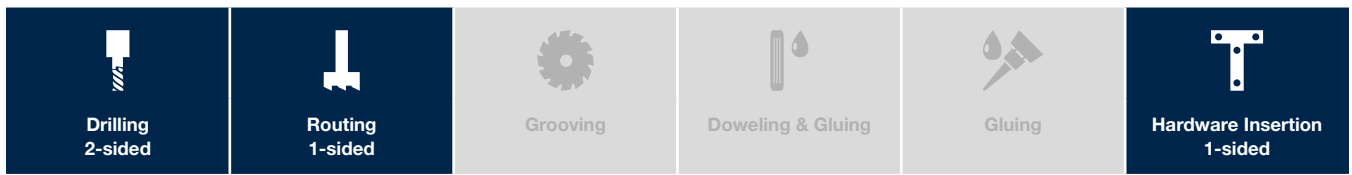
- 1 FEEDTEQ C-500 Feeding**
- 2 Processing machine DRILLTEQ C-800**
 - Vertical drilling from above and below
 - Horizontal drilling into four narrow surfaces (X+/X-/Y+/Y-)
 - Optional dowel inserting
- 3 Brush cleaning from above and below**
- 4 STACKTEQ C-500 Stacking**

2



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

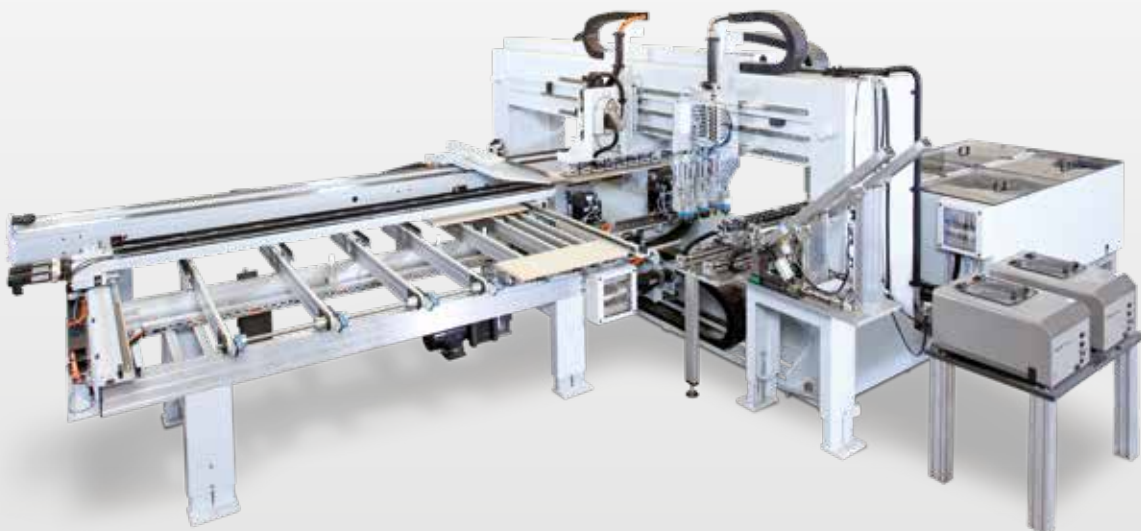




PROCESS CONTENTS

- | | |
|---|--|
| <p>1 Robot RKR 180</p> <p>2 Processing machine DRILLTEQ L-800</p> <ul style="list-style-type: none"> ▪ 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 <p>3 Bar magazine for hinges</p> | <p>4 Linear conveyor for drawer adapters</p> <p>5 Vibration conveyor for drawer adapters</p> <p>6 Vibration conveyor for hinges</p> <p>7 Vibration conveyor for stop buffers</p> |
|---|--|

2



Apps and digital assistants.

Quick and easy support in your machine environment.

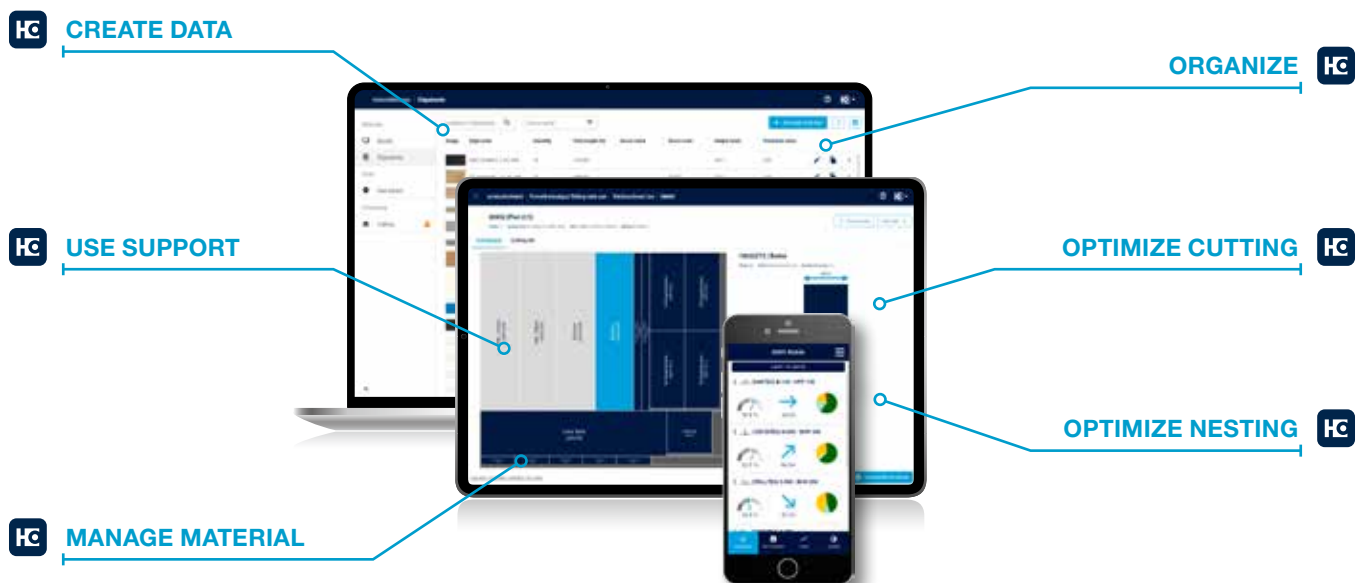
Some people still use pen and paper to create their cutting patterns. But they look at their smartphone if they want to know what the weather is like – instead of looking out of the window. We asked ourselves: why not combine the best of both? Our apps and digital solutions make your everyday work easier: 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

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:

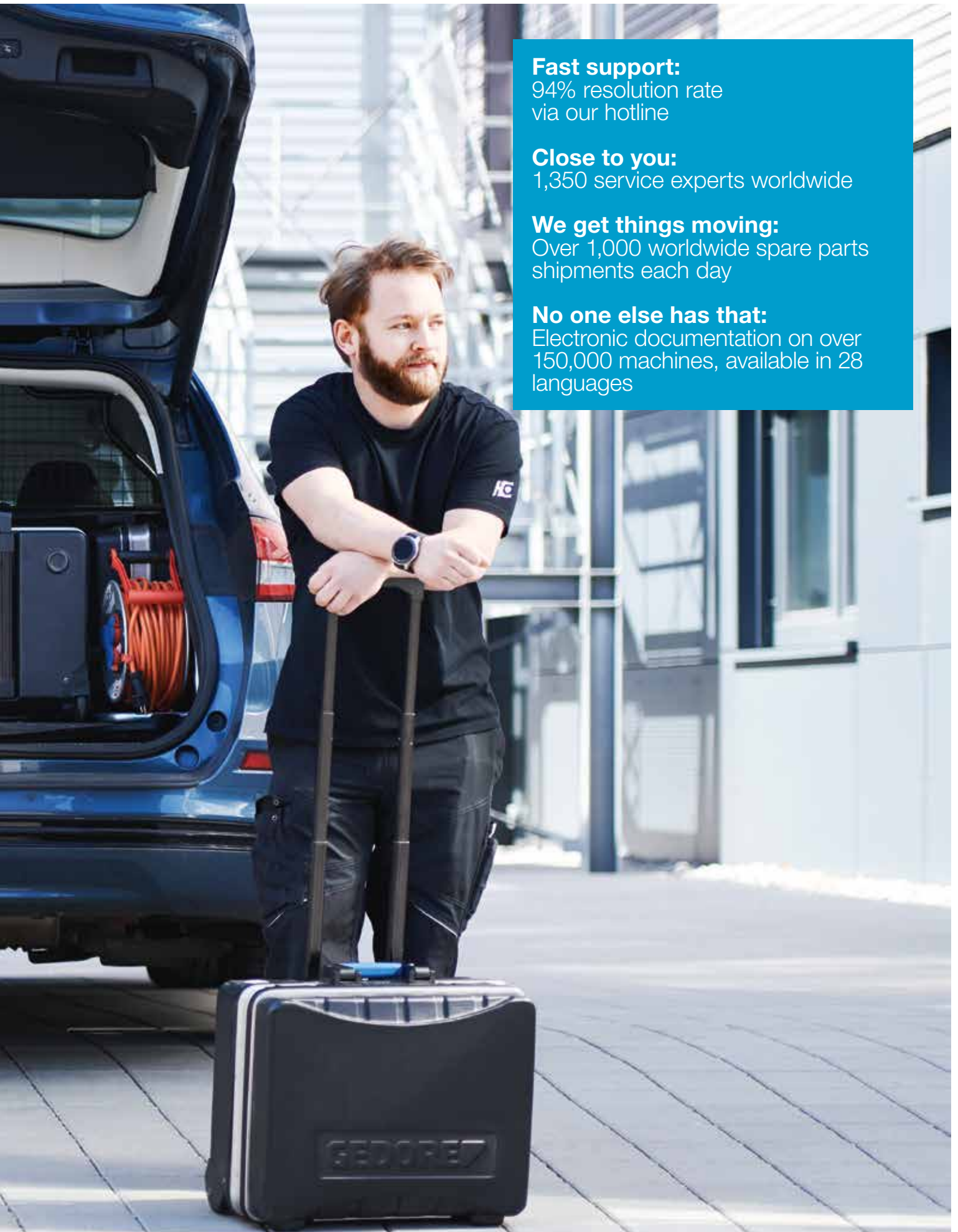
1,350 service experts worldwide

We get things moving:

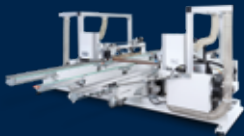
Over 1,000 worldwide spare parts
shipments each day

No one else has that:

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



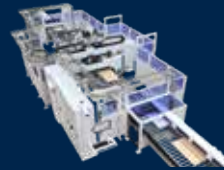
DRILLTEQ | Technical Data

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

* 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.



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