CENTATEQ N-300 PRO

The flexible solution for nested-based manufacturing.

CNC processing machines with advanced automation options.







CENTATEQ N-300 PRO – one action in action

Our nesting machines enable optimized cnc-processing and dividing of panels and other plateshaped materials. Various automation level for material handling enable productive and efficient production.

Typical applications for nesting: routing and vertical drilling of panel materials for cabinetry, doors and drawers, closet and storage solutions, furniture, store fixtures, work surfaces, plastics, composites and aerospace.

YOUR SOLUTION

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CENTATEQ N-300 PRO – the compact nesting machine in gantry design

Our nesting machines enable optimized processing of panel materials. Various possibilities for the automation of material handling are available to increase efficiency and throughput. Typical applications for nesting: routing and vertical drilling

of panel materials for cabinetry, doors and drawers, closet and storage solutions, furniture, store fixtures, work surfaces, plastics, composites and aerospace.



- Effective vacuum due to advanced, and automatic **MATRIX Pro Plus technology**
- Clean workpieces due to well-directed dust extraction system from above
- Program-controlled extraction connection
- Closed energy chains to protect cables and hoses
- Easy access to spindle and drilling gear from front of the machine

- High workpiece processing quality due to synchronous drive in combination with high precision linear guides
- Stop System Basic / Extension stop system at the rear
- Additional cleaning aid from bottom
- **Automatic central lubrication**
- Air conditioning for machine control





Easy Entry

- Safety interlocked gantry door
- Easy access to main spindle and drill block

Tool pick-up station

- Allows machine to load its tool changer
- Eliminates operator error



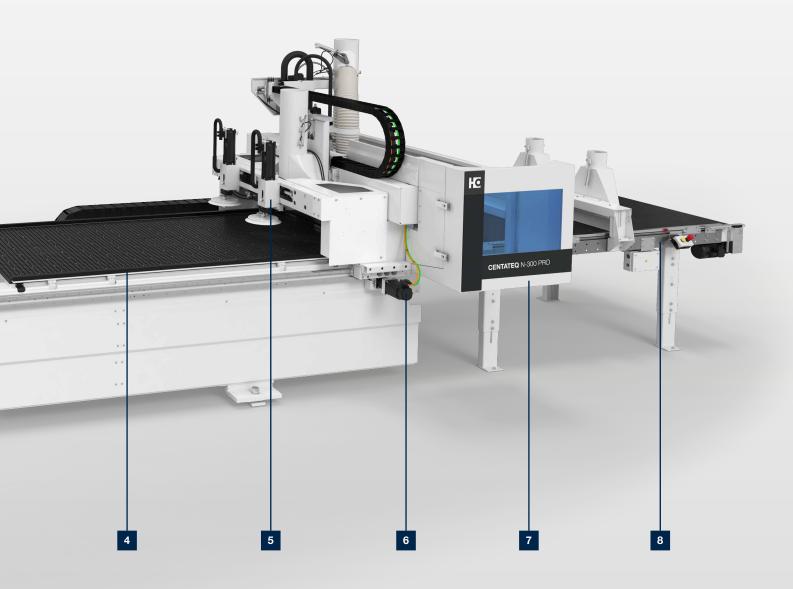
Automatic central lubrication

- Maximum uptime via automatic maintenance
- Decreases manual maintenance requirements



CENTATEQ N-300 PRO – Configuration overview of material handling concepts





- Lifting table for easy infeeding or frequency-controlled roller table
- Automatic Label Printing for precise handling and identification of the workpieces
- 3 Intermediary transfer rollers to prevent scratching during the loading process
- Lowerable fence guide and program-controlled positioning

- The vacuum arm takes over a pre-positioned raw board and aligns this against the end of the table in X-direction
- 6 2 synchronized X-drives guarantee highest processing quality
- Easy entry through hinged machine cover
- Outfeed transport belt

HOMAG Machinery North America

Proudly assembled in Grand Rapids, Michigan, USA





Germany Engineered.
American Value.

Choose your automation level

TYPICAL APPLICATIONS FOR NESTING: routing and vertical drilling of panel materials for cabinetry, doors and drawers, closet and storage solutions, furniture, store fixtures, work surfaces, plastics, composites and aerospace.



Handling solutions for CENTATEQ N-300 PRO

Handling Concept – Outfeed (Basic machine with outfeed belt)



Handling Concept 2 (Automatic load/unload from scissor lift or roller table, outfeed belt)



Handling Concept 3 (Integrated labelling system, automatic load/unload from scissor lift or roller table, outfeed belt)



Integration in HOMAG Automation storage



We have the solution for your nesting requirements!

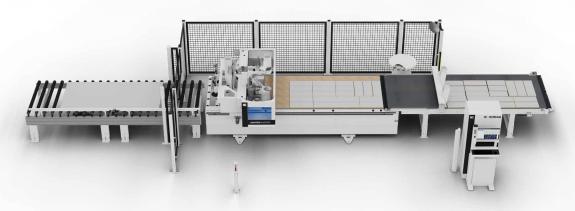
With the HOMAG nesting solutions you are always well-advised. Whether the workpieces should be fed by hand, by roller conveyor, by lifting carriage or by storage – we have the proper concept for your application. With our plug & play features, we enable the successive expansion of the machine from the start.



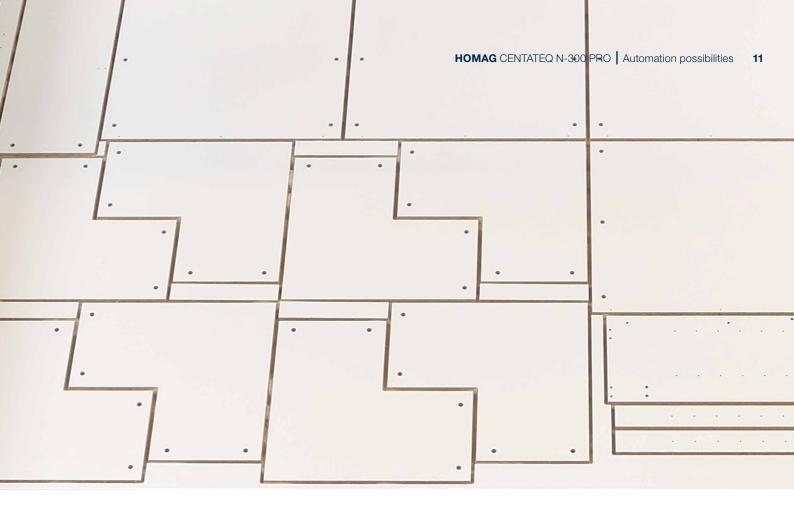
Outfeed Automatic push-off for higher productivity



Concept 2 Panel handling with lifting table

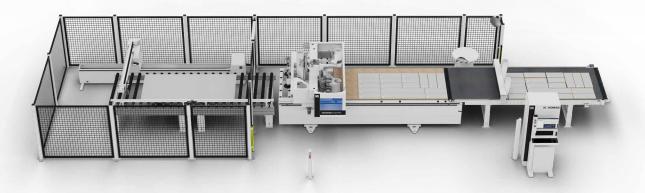


Concept 2R Infeed roller conveyor as interface for preceding automation systems





Concept 3 Panel handling with lifting table



Concept 3R Infeed roller conveyor as interface for preceding automation systems

CENTATEQ N-300 PRO | Everything at a glance...

You have free choice. A package is available for all common requirements. This leaves nothing to be desired.

Handling Concept				Processing level	Tool c	hanger	Drilling gear		Automation level			
						177787			X			
	4 x 8 ft	5 x 10 ft	5 x 12 ft	Pro Performance Package	Linear tool changer with pick-up	Disk type tool changer with pick-up	Vertical V12	Transport belt	Transfer rollers	Lifting table		
Handling Concept Outfeed	•	•		•	-	13	√	✓	-	-		
Handling Concept 1		•		•	-	13	√	√	√	-		
Handling Concept 2	•	•	•	•	-	13	√	✓	√	√		
Handling Concept 2R	•	•		•	-	13	√	√	√	-		
Handling Concept 3	•	•	•	•	-	13	√	√	√	√		
Handling Concept 3R		•		•	-	13	√	√	√	+		



								Ed	quipme	nt								
Infeed rollter table	Barcode printer	tapio-ready	PowerControl with powerTouch	Synchronous drive	Vacuum arms for positioning	Push-off-device	Dust extraction outfeed from below	Dust extraction outfeed from top	Vaccum system	Vaccum cups	Air cushion function	Air Conditioning	Label printing terminal	Push & pull	Loading of the lifttable from front and rear	Integrated autotransformer	Vertical safety envelope	Tool length conrol
-	-	√	√	✓	-	✓	√	✓	✓	\circ	\circ	✓	0	-	-	✓	✓	√
-	-	√	√	√	√	√	√	√	√	0	0	√	0	√	-	√	√	√
-	-	√	√	√	√	√	√	√	√	\circ	0	√	0	√	0	√	√	√
√	-	√	√	√	√	√	√	√	√	0	0	√	0	√	-	√	√	✓
-	√	√	√	√	√	√	√	√	√	\circ	\circ	√	\circ	√	-	√	√	√
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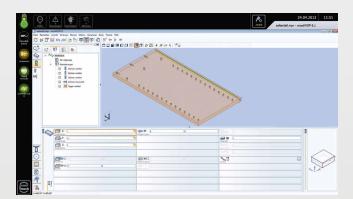
Standard: 🗸

Available:

Option:

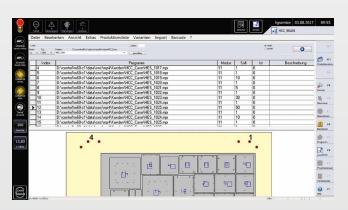
Software | Machine

Our machines are equipped with everything needed for productive use as standard. In addition, a wide range of software modules can be supplemented to create the optimum configuration.



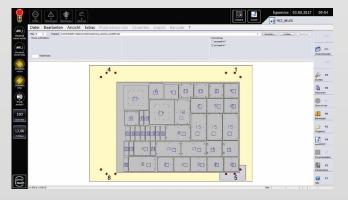
woodWOP

- Modern software based on Windows®
- Import of CAD files in DXF format
- More than 150.000 installations worldwide
- Worldwide largest forum for woodWOP



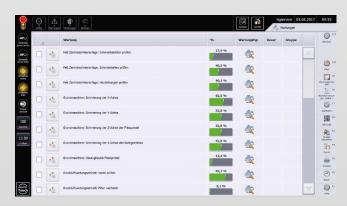
Production list software

For management and creation of product lists for individual manufacturing



мсс

- Simple control of main machine functions through soft keys
- Graphical loading

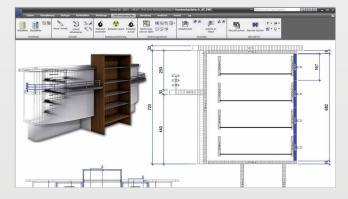


MMR Basic

- Machine Data Recording collecting and evaluating machine states via time meter and event meter
- Display and logging of maintenance measures

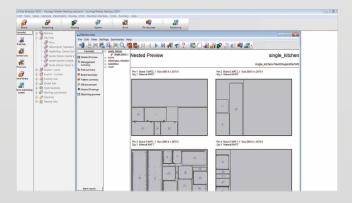
Process optimization

CUT RITE, THE OPTIMIZATION SOFTWARE OF HOMAG, is used for cutting boards on sawing machines as well as nesting machines. The modular structure of the software allows users already controlling their sawing machine via Cut Rite to integrate the nesting module without problems. Plus, customer processes can be made even more efficient by HOMAG iX and residual parts management.



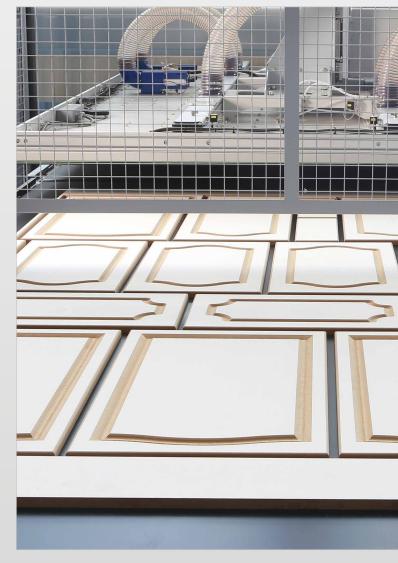
HOMAG iX

- Parametric design in 3D
- Seamless data flow in operation
- Bill of materials, cutting to size and cost estimation
- CNC data for HOMAG Group machines
- Barcode generation
- Photorealism for sales negotiations



Optimization software: woodWOP Nesing Plugin and intelliDivide Nesting

- Optimization and generation of cutting plans for rectangular and free-formed workpieces (woodNest Basic: manually | Cut Rite: automatically)
- Functions with Cut Rite:
 - Import of parts lists, e.g. from Excel, or direct import of woodWOP programs
- Additional milling strategies "bars", "common line" and
- Includes material management, parts sorting by material type, and label printing in the office
- Manual editing of cutting plans





Our Mission, Your Performance.



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

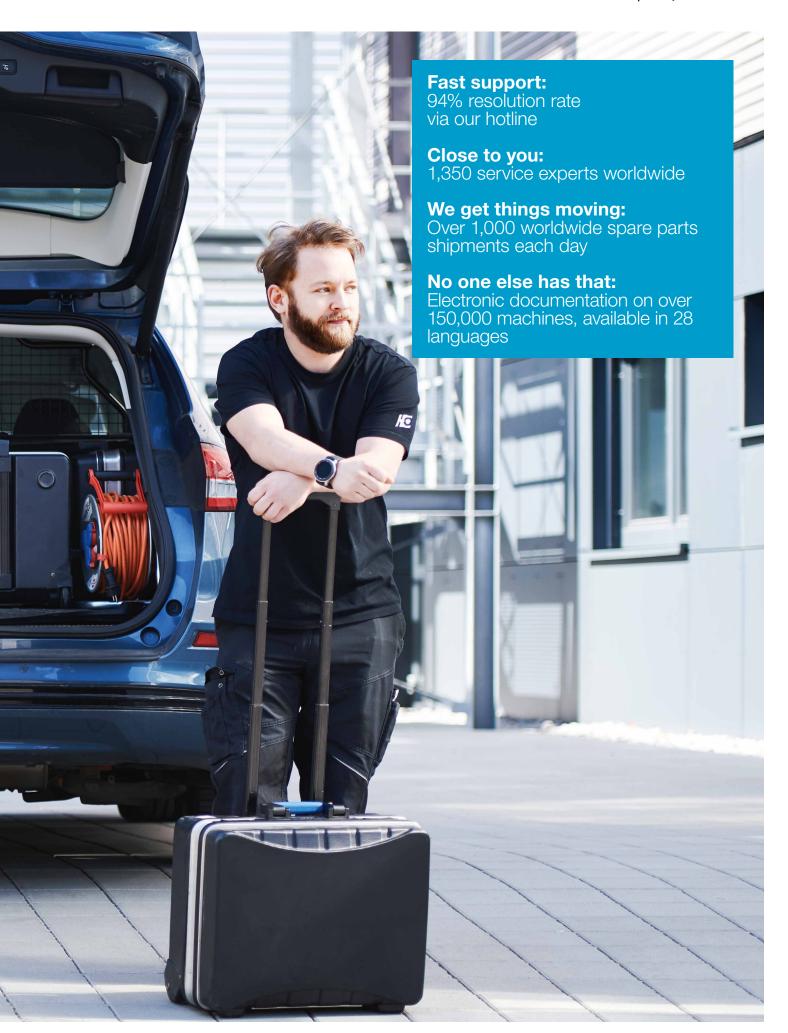
Our modernization program is tailored to your machines and processes. We can evaluate your data and situation and advise you on the next step.

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.

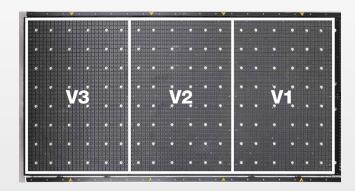
FINANCING & CONSULTING

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.



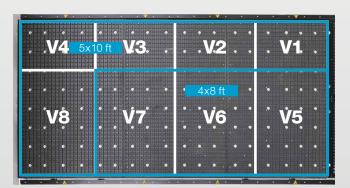
CENTATEQ N-300 PRO – Efficient table field occupation by MATRIX Pro Plus

By selecting and deselecting the table field occupation, the vacuum is activated in the required area and is effective where it is needed. The areas are optimally matched to the established range of boards.



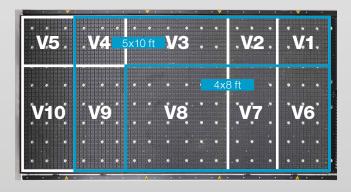
Segmentation of vacuum zones on the example of table size $1250 \times 2520 \text{ mm} \mid 4 \times 8 \text{ ft}$

- Segmentation in 3 fields
- 2,6 x 4 ft 5,2 x 4 ft 8,4 x 4 ft



Segmentation of vacuum zones on the example of table size $1550 \times 3100 \text{ mm} \mid 5 \times 10 \text{ ft}$

- Segmentation in 8 fields
- 4 x 8 ft, 4 x 10 ft5 x 8 ft, 5 x 10 ft



Segmentation of vacuum zones on the example of table size $1550 \times 3700 \ mm \mid 5 \times 12 \ ft$

- Segmentation in 10 fields
- 4 x 8 ft, 4 x 10 ft, 4 x 12 ft
 5 x 8 ft, 5 x 10 ft, 5 x 12 ft

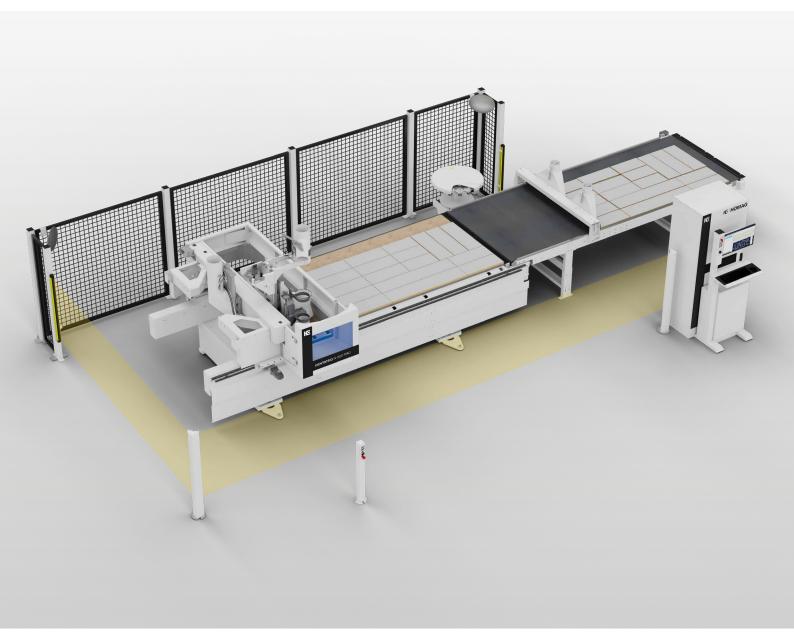
Different sizes for different applications: it's your choice

Nesting machines are utilized across a wide variety of market segments. We see nested based manufacturing strategies employed in the production of cabinetry, doors and drawers, closets and storage, furniture, store fixtures, work surfaces, plastics and composites, non-ferrous metals, as well as aerospace.

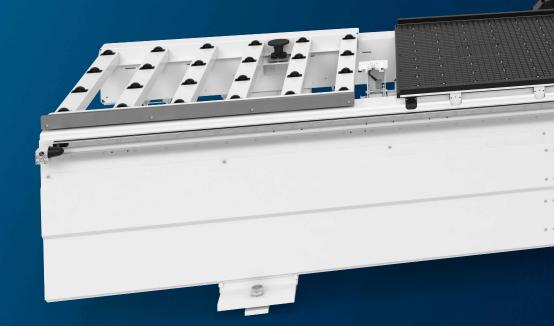
The CENTATEQ MATRIX Pro Plus table system is perfectly suited to handle the raw material variance noted by some of today's multi-faceted manufacturers. The solution reads the raw board size of the incoming program and automatically concentrates vacuum pressure to the correct area of the machine, limiting machine setup time. Vacuum zones can also be manually selected at the machine control.

Technical Data

Our machines are equipped with everything needed for safe and effective operation.



		Χ	Υ	Z
Working field	Table 4 × 8 ft	2520 / 99.2	1250 / 49.2	100 / 3.9
	Table 5 × 10 ft	3100 / 122.0	1550 / 61.0	100 / 3.9
	Table 5 × 12 ft	3700 / 145.7	1550 / 61.0	100 / 3.9
Travel range	Table 4 × 8 ft	3710 / 146.1	1660 / 65.4	245 / 9.6
	Table 5 × 10 ft	4300 / 169.3	1965 / 77.4	245 / 9.6
	Table 5 × 12 ft	4900 / 193.0	1965 / 77.4	245 / 9.6
				mm / inch





HOMAG Group AG

info@homag.com www.homag.com

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