

CNC Gantry-Processing Centers Vantage 100

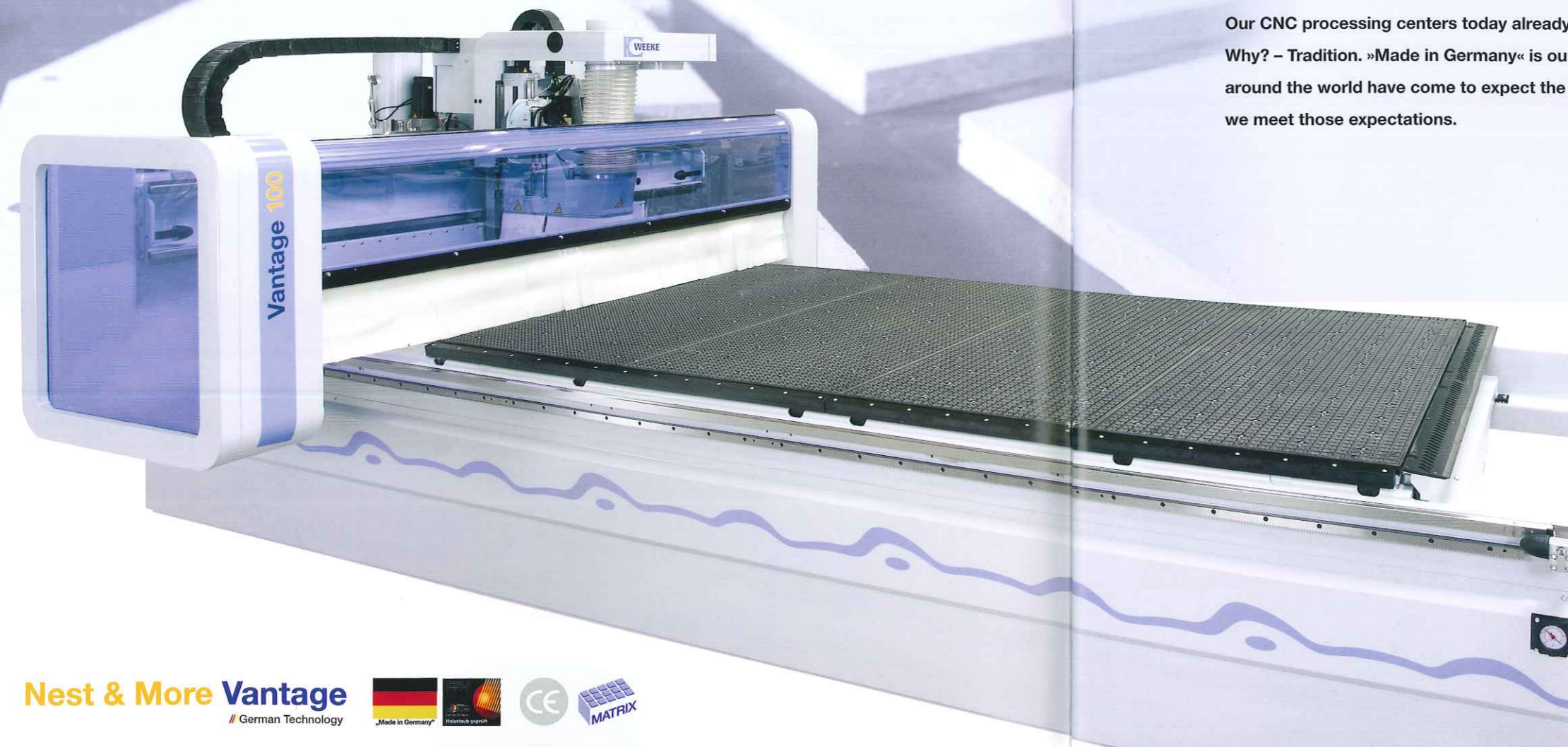
Nesting Solutions



Vantage 100 – The compact nesting machine in gantry design

Our CNC processing centers today already offer technology of the future.

Why? – Tradition. »Made in Germany« is our motivation and our commitment. Customers around the world have come to expect the highest standards from this quality label. And we meet those expectations.



Highlights:

- Gantry style – for highest precision over the total working width
- Sealed »long-life« linear guiding system
- 2 synchronised digital servo-drives in X-direction
- High acceleration
- Vector speed X/Y 96 m/min
- The whole working field is reachable with all processing tools
- Electronic surveillance of all stops
- Efficient use of energy through high vacuum performances and simultaneously minor power consumption
- 12 HP (9 kW) HSK routing spindle (optionally: 16 HP (12 kW))
- Tool changing system (Pick-Up)
- Software bundle for machine and PC (option)

Nest & More Vantage
// German Technology



Configuration

- Standard: 12 HP (9 kW) HSK routing spindle
- Optional: 16 HP (12 kW) HSK routing spindle

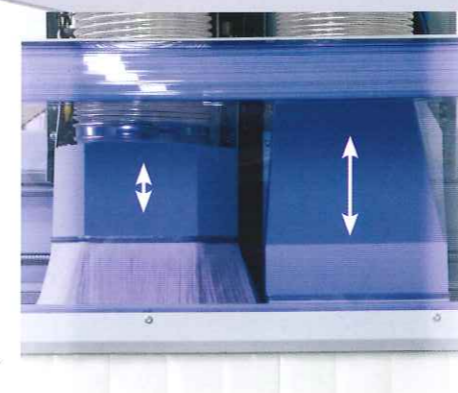
Tool changing system

- Depending on working field in standard:

Vantage 100/480	= 7 places
Vantage 100/510/512	= 8 places
Vantage 100/610/612	= 10 places
Vantage 100/710/714	= 12 places

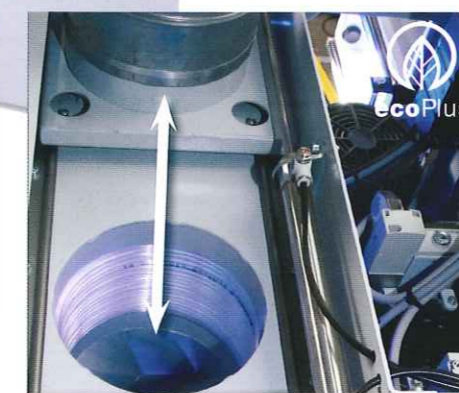
MATRIX table PRO

- High flexibility
- Different vacuum cups available as option



2 CNC-controlled Z-axes in combination with drilling block

- Optimal dust extraction and bigger operative range for processing aggregates
- Weight distribution of the mass (processing units) to the two Z-axes → more stability, higher processing quality



Program-controlled extraction connection

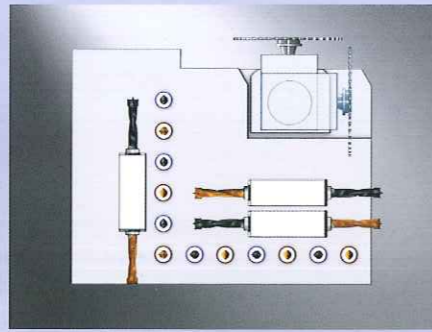
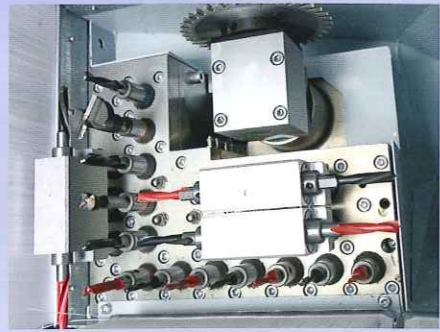
- For an optimum extraction behavior and economic use of extraction energy (ecoPlus)



Synchronous drive

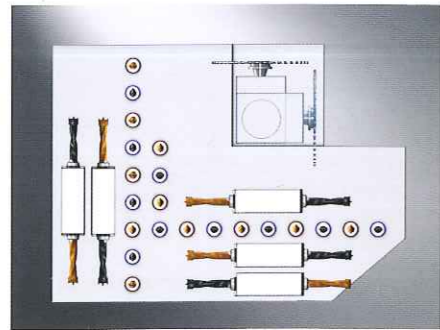
- 2 synchronised digital servo-drives in X-direction guarantee highest processing quality

Options



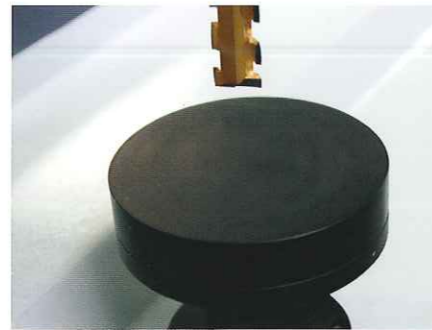
High-Speed 7500 Drilling block | 12 spindles

- 12 vertical drilling spindles
- 4 horizontal drilling spindles in the X direction
- 2 horizontal drilling spindles in the Y direction
- 1 grooving saw Ø 125 mm (0° / 90°)



High-Speed 7500 Drilling block | 21 spindles

- 21 vertical drilling spindles
- 6 horizontal drilling spindles in X
- 4 horizontal drilling spindles in Y
- 1 grooving saw Ø 125 mm (0° / 90°)



Tool length control

- Following the tool change a tool length control is carried out and compared with the integrated tool data file



C-axis

- 0-360° – more flexible processing possibilities
- For the use of aggregates



High-Speed 7500

- Spindles with 1500 - 7500 RPM incl. the patented quick change system



FLEX5

- HIGH PERFORMANCE unit for drilling, sawing and routing
- You save up to 5 individual adapter units



Clamping elements

- Different clamping elements available as option



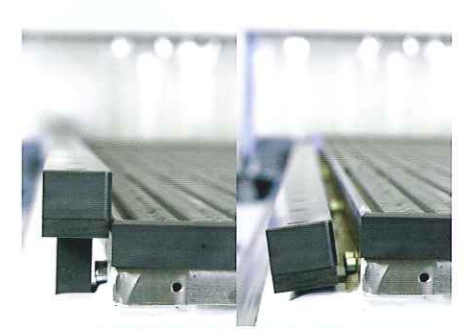
Tool changer

- Tool changing system, fixed behind the machine, 14, 28 or 42 places



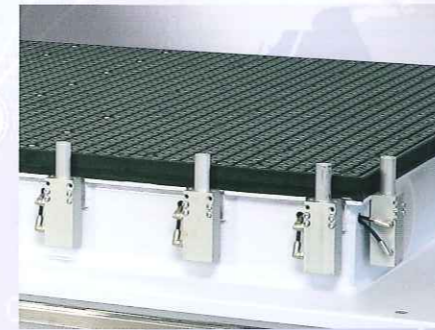
Extendable tool changing system

- Further tool changer places available:
- | | |
|----------------------|------|
| Vantage 100/480: | + 6 |
| Vantage 100/510/512: | + 7 |
| Vantage 100/610/612: | + 9 |
| Vantage 100/710/714: | + 11 |



Lowerable fence guide

- Suitable for safe outfeed of workpieces



Extension stop system

- 4 pneumatically lowerable aluminium stop cylinders (in front right or in front left)



Vacuum lever for raw panel positioning

- For automatic positioning of the raw panels against the fence guide.

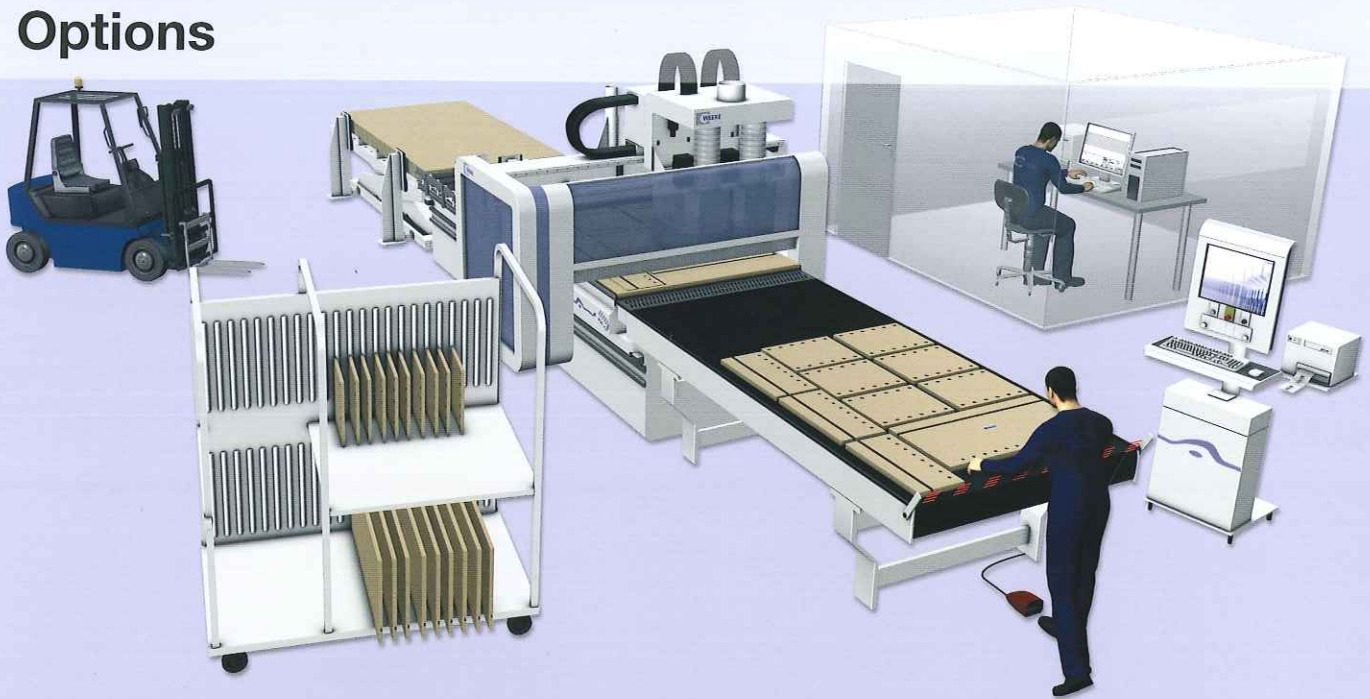


Push-Off device for workpieces

- The Nest is pushed out
- Cleaning cycle possible
- Option: Push-off device with controlled Z axis

Would you like something extra? Our options provide all opportunities for a perfect adjustment of your nesting machine to your requirements.

Options



Example of a nesting cell Concept 2



Barcode connection

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

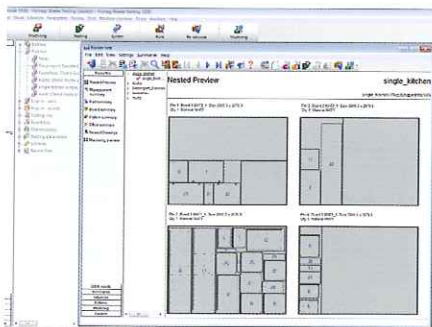


Central vacuum system

- Up to 3 vacuum pumps can be centralised collectively



Tool box »STARTER KIT«



Cut Rite Nesting

- Profi Nesting Software



Cut Rite Nesting Terminal

- Incl. Profi Nesting software, terminal, label printer and PC screen



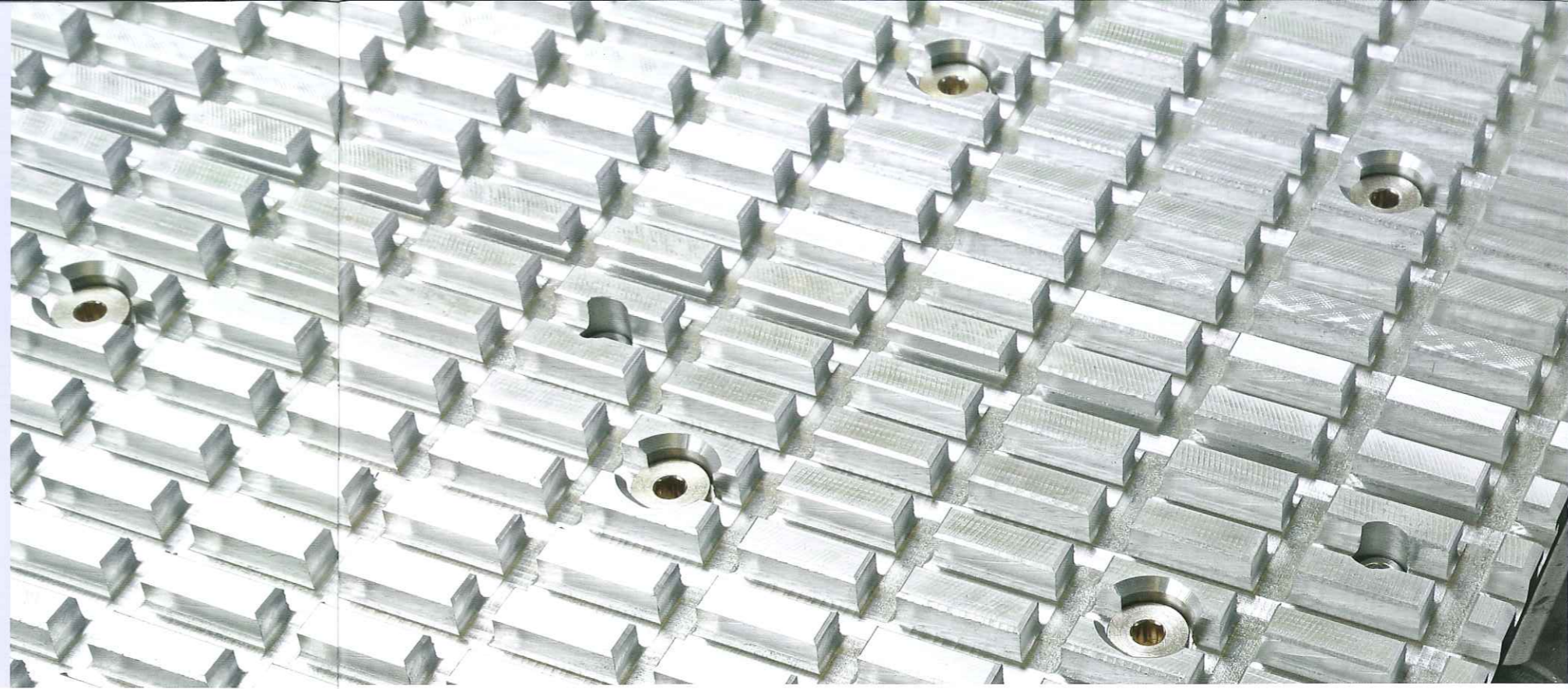
Air-conditioning

- Air-conditioned switch cabinet

Vantage 100 with aluminium grid table

The optional aluminium grid table allows the positive locking of clamping elements and thus reliable fixture of the workpieces even under exposure to high hogging forces. By means of the table design, the vacuum transmission optimizes the distribution of the vacuum, reduces leaks and transmission losses and supersedes extensive installations.

The grid table is also suitable for aggregates due to different clamping elements with variable mounting heights.



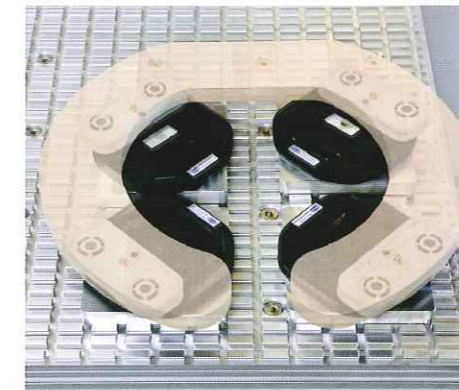
Your benefits at a glance:

- Optimizes the distribution of the vacuum by the fine grid of the table
- Free definable vacuum surfaces reduce leaks and transmission losses
- Different clamping elements with variable mounting heights for more flexibility
- Reliable part fixture even under exposure to high hogging forces
- Also suitable for the use of aggregates
- Processing of wood-based composite materials provided, e.g. acryl glass



Processing example

- The possibilities to fix the workpiece on the narrow table grid provide a lot of flexibility for the applications



Processing example

- Due to rotatable vacuum cups even special shapes of the workpieces are possible without any problems



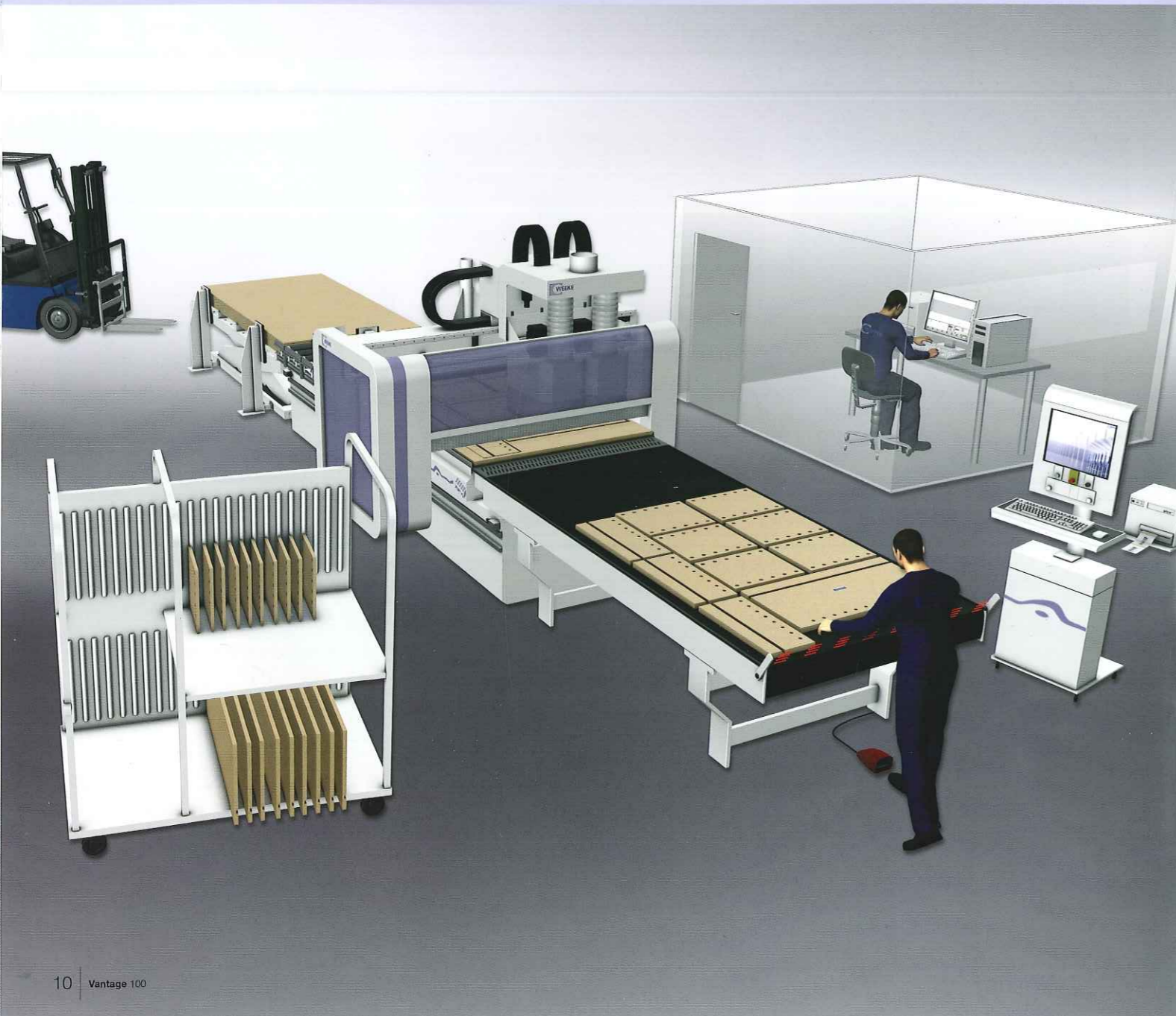
Clamping elements

- With diverse types of vacuum blocks it is also possible to carry out simple and quick horizontal processing on grid tables

Nesting Solutions

Nesting – the method with four-fold “focus”...

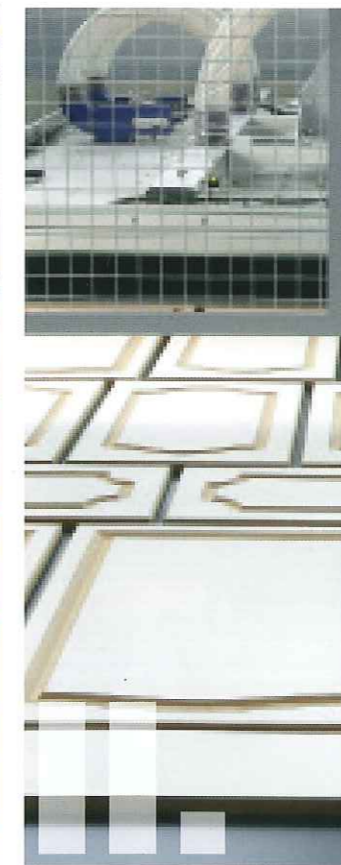
We divide the typical nesting areas into four areas. The carcass production, the dividing and refining of furniture fronts, the processing of frame furniture as well as the very interesting possibilities for “advanced materials”, such as processing block elements, plexiglass, aluminium or alucobond.



Carcass furniture

Advantages by nesting:

- Routing of all components required for a carcass
- Drilling, grooving in just one cycle
- Clamping elements also provide horizontal drilling



Processing of furniture fronts

Advantages by nesting:

- Fast dividing and refining of furniture fronts from one workpiece - everything in one cycle!
- The application of aggregates provides high flexibility for the further processing



Frame furniture

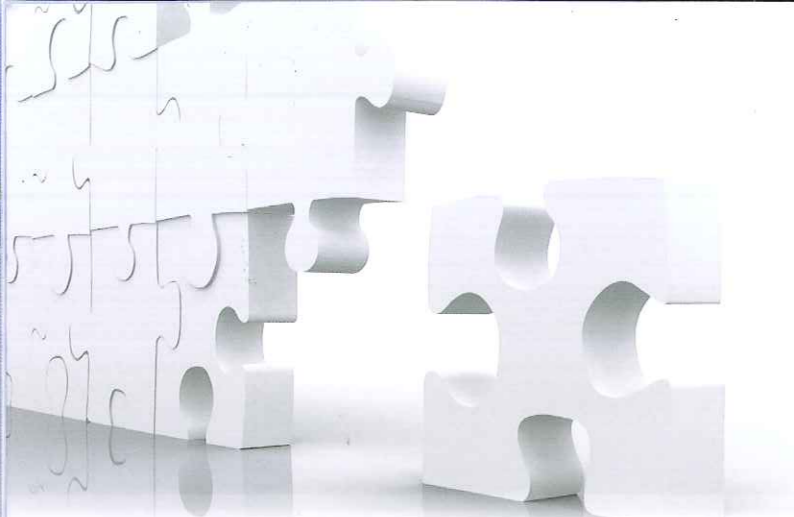
Advantages by nesting:

- High degree of utilization due to easy handling of “free” formed parts



Advanced Materials

- High flexibility of processing possibilities of e.g. block elements, plexiglass or acrylic glass
- Proper cutting of e.g. foam material, carpets or veneer
- High gloss polishing routing

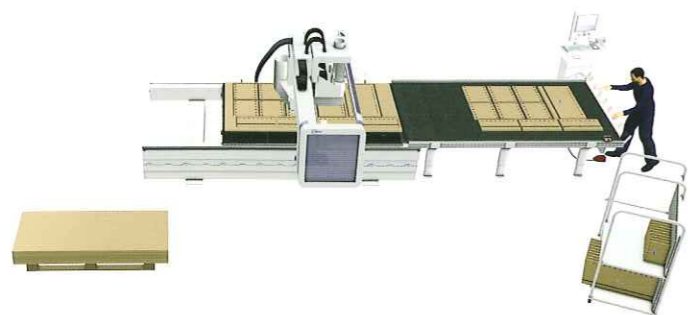


Discover the possibilities...

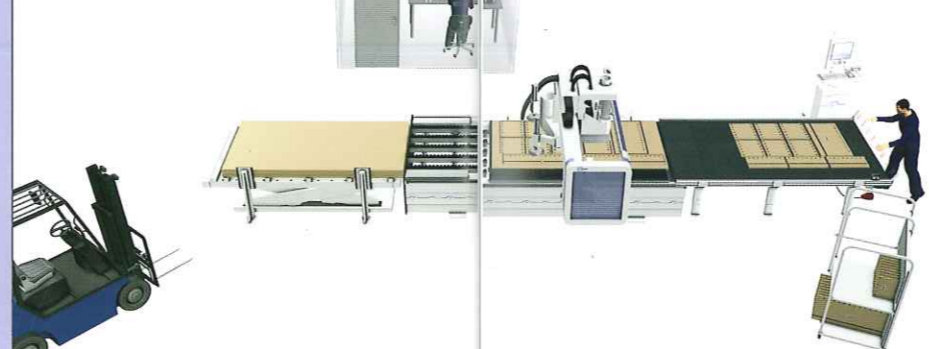
With the WEEKE nesting solutions you are always well-advised. Whether manual feeding of workpieces, by lifting carriage or by storage - we have always the proper concept for your application. You wish to identify, for example, the workpiece flow exactly by barcode? No problem!

Nesting Solutions

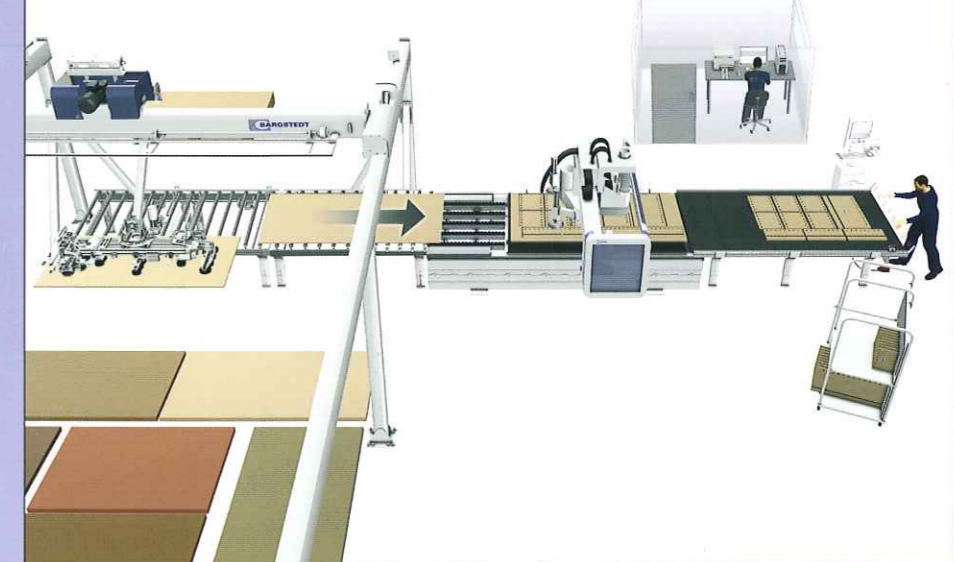
Nesting „start-up“



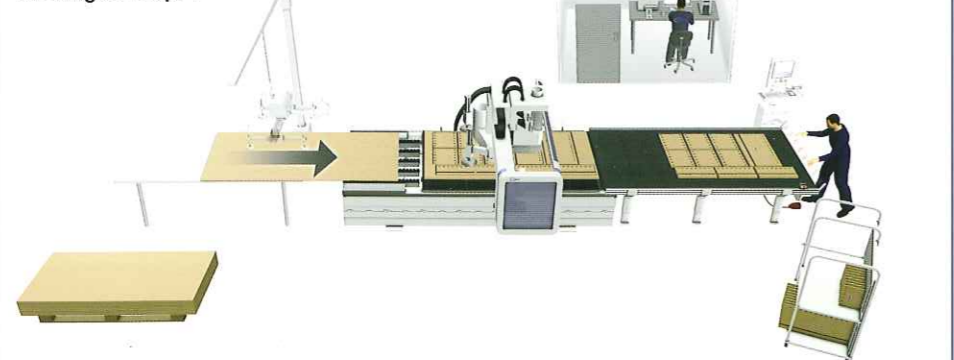
Nesting concept 2



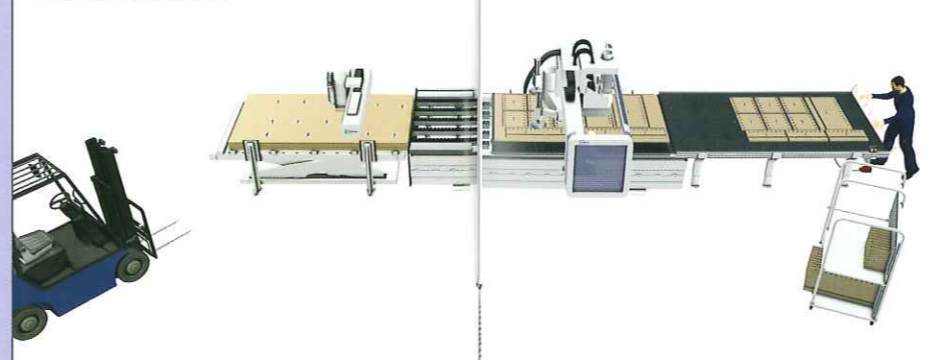
Nesting concept 1R with storage



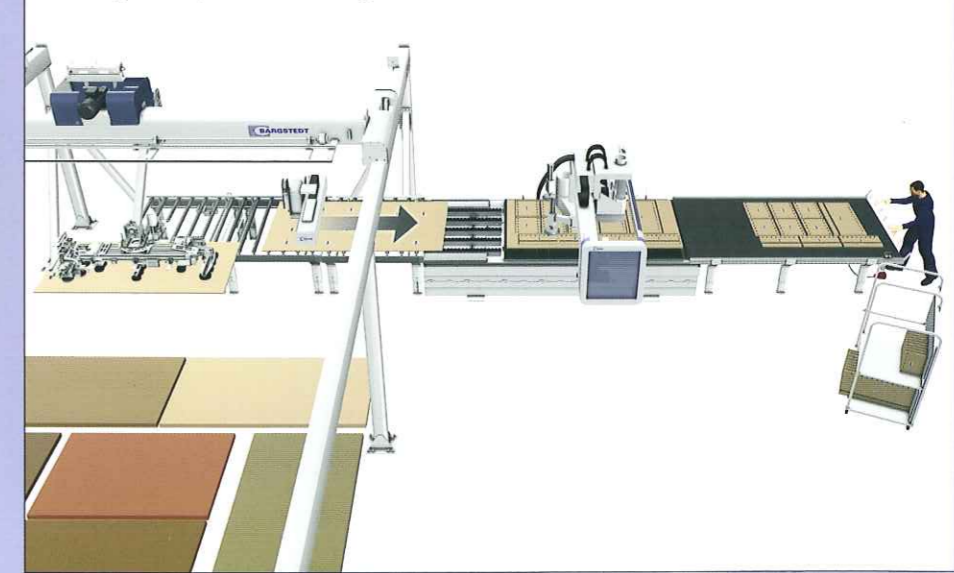
Nesting concept 1



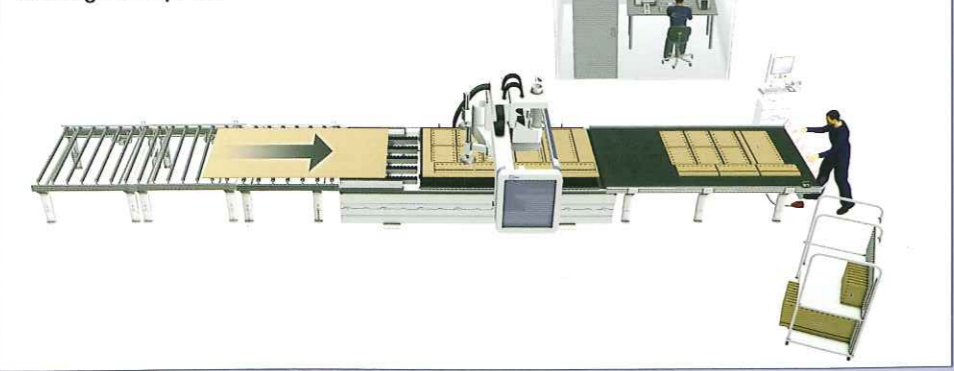
Nesting concept 3



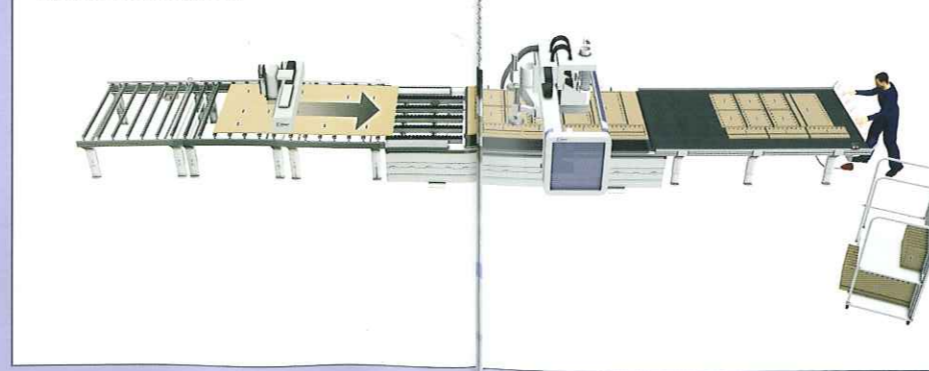
Nesting concept 3R with storage



Nesting concept 1R



Nesting concept 3R



Hardware | Software

With this software package you are »Ready to Race«. You will receive one of the most established CNC-programming systems, the woodWOP software, which has proven itself by more than 30.000 installations worldwide.

Please use our website:

Worldwide largest forum for woodWOP:

www.woodWOP-Forum.de

Free Download of woodWOP-components:

www.weeke.com → Products → Software

Standard | Software Machine

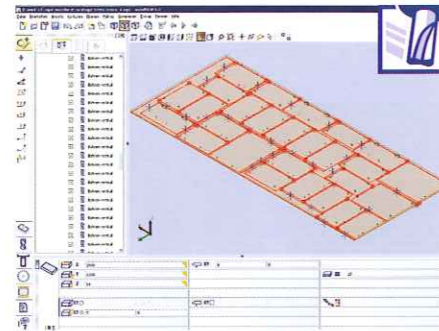
powerControl

- 17" TFT monitor
- Provision teleservice capability
- USB frontside bus
- Ethernet connection 10/100 Mbit
- Ergonomic hand terminal
- Position of the switch cabinet »freely selectable« (left/right)



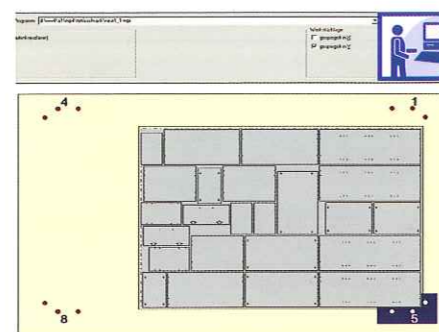
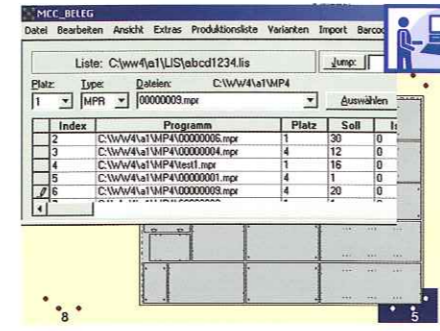
woodWOP

- Modern software based on Windows®
- More than 30,000 installations worldwide



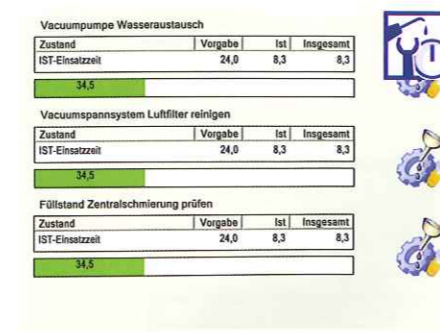
Production list software

- For management and creation of product lists for individual manufacturing.



MCC

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



Machine data recording Basic

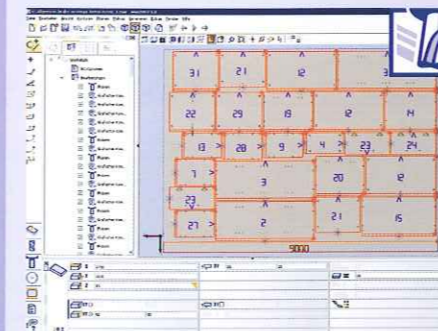
- Machine Data Recording – collecting and evaluating machine states via time meter and event meter



Options | Office Package „Premium“

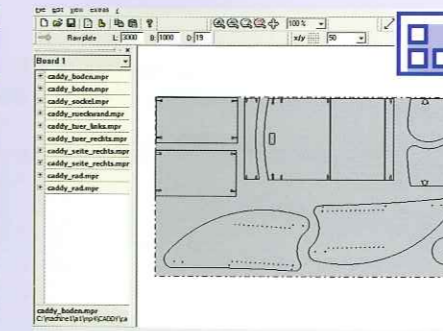
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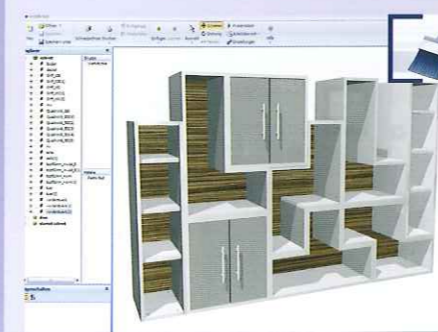
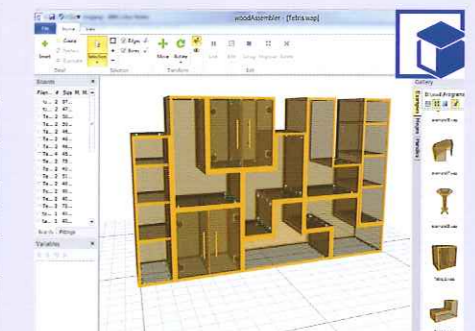
woodNest Basic

- Software for manual Nesting of shaped parts



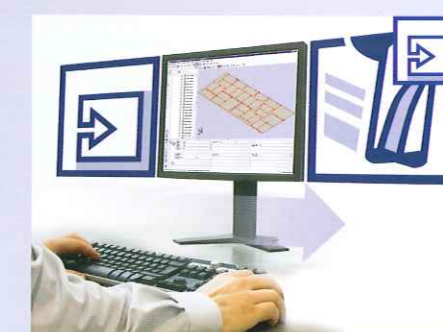
woodAssembler

- To visualize woodWOP-programs (MPR) in 3D
- Enables the construction of individual workpieces to finished objects



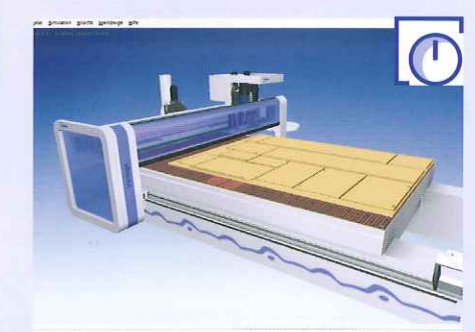
woodVisio

- Objects generated in woodAssembler or Blum Dynalog can be provided with surface materials
- The objects are displayed in a free-standing position



woodWOP DXF Basic

- Interface for CAD-Data Import
- Basis to generate woodWOP programs



3D CNC-Simulator

- Simulates the processing in the order it is stored in the NC-program
- Allows time calculation
- Collision check of the vacuum cups

Aggregates

HIGH PERFORMANCE



High Performance

Sawing,
Ø 220 mm



High Performance

Drilling/Sawing/
Routing,
2 spindles,
Ø 220 mm



High Performance

Cam box router,
2 spindles,
Ø 16/20 mm



High Performance

Drilling/Sawing,
swivelling
(0° - 90°),
Ø 180 mm



High Performance

Planing Aggregate

FLEX5



Drilling/Sawing/ Routing



Drilling/Routing/ Sawing

2 spindles



Drilling/Routing

4 spindles,
50 mm



Cam box router

2 spindles,
Ø 16/20 mm



Drilling/Sawing, swivelling

(0° - 90°),
Ø 180 mm



Drilling/Routing, swivelling cranked

(0° - 90°)



Tracing routing unit with tracing ring

Ø 70 mm |
Ø 130 mm



Drilling, 7 spindles

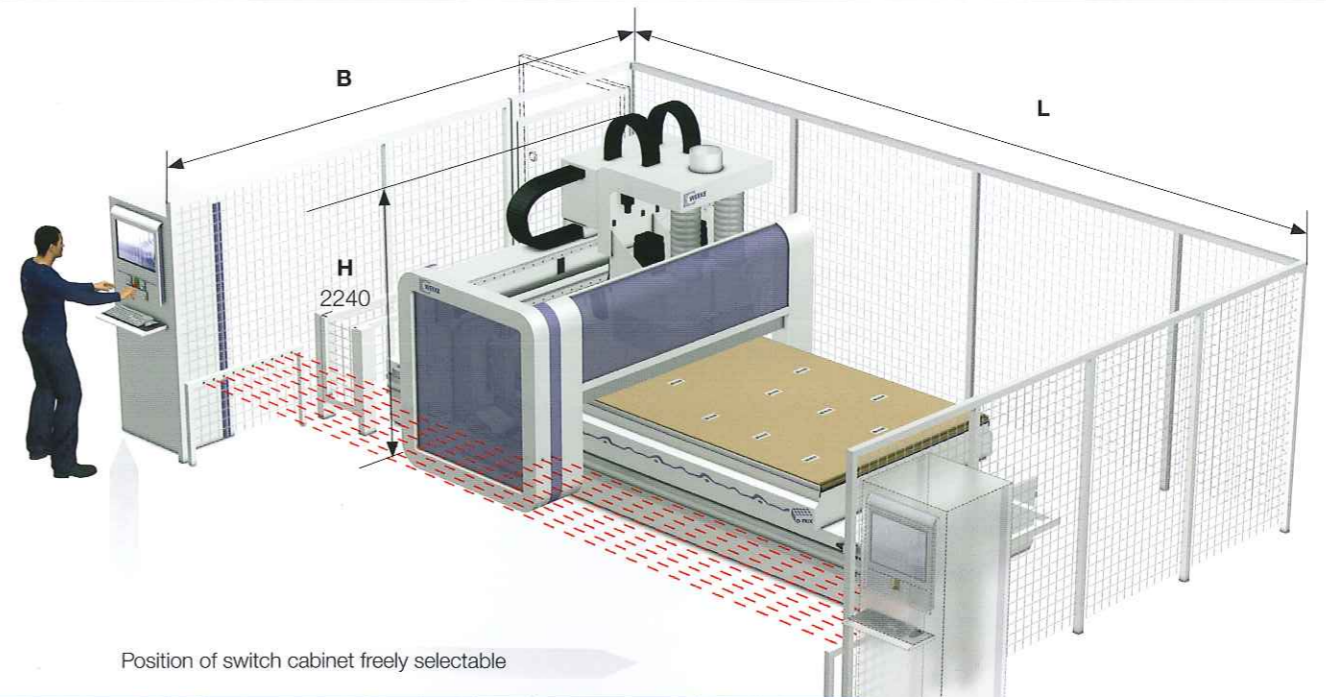
25 mm pitch



Fitting drilling head, 3 spindles

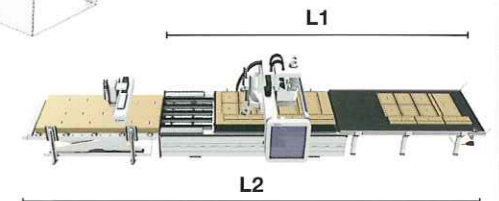


Technical data



Position of switch cabinet freely selectable

	L	B	L1 (with transport belt)	L2 (Concept 3 with lifting table and belt)
Vantage 100/ 480	6480	5120	7860	11215
510	7030	5420	9415	13470
512	7630	5420	10015	14570
610	7030	5740	9410	13470
612	7630	5740	10020	14570
710	7030	6150	9450	13470
714	8230	6150	11620	16270



Vantage 100 Series - working fields

	Width (mm)	Length (mm)	Thickness (mm)	Width (ft)	Length (ft)	Thickness (inch)	Vacuum capacity
Vantage 100/ 480	1250	2500	100	4	8	3,94	300/360 m³/h 50/60 Hz
510	1550	3100	100	5	10	3,94	600/720 m³/h 50/60 Hz
512	1550	3700	100	5	12	3,94	600/720 m³/h 50/60 Hz
610	1850	3100	100	6	10	3,94	600/720 m³/h 50/60 Hz
612	1850	3700	100	6	12	3,94	600/720 m³/h 50/60 Hz
710	2250	3100	100	7	10	3,94	900/1080 m³/h 50/60 Hz
714	2250	4300	100	7	14	3,94	900/1080 m³/h 50/60 Hz

Vector speed	m/min (X - Y) 96 - (Z) 20
Compressed air connection	inch R ½
Compressed air required	bar 7
Dust extraction port	mm Ø 200
Dust extraction volume	m³/h min. 3170
Total machine weight 480 - 714	kg appr. 2800 - 5200
Electrical power - total connection load	kW 19,5 - 32,5
Switch cabinet	mm 1000/800 x 800 x 1970