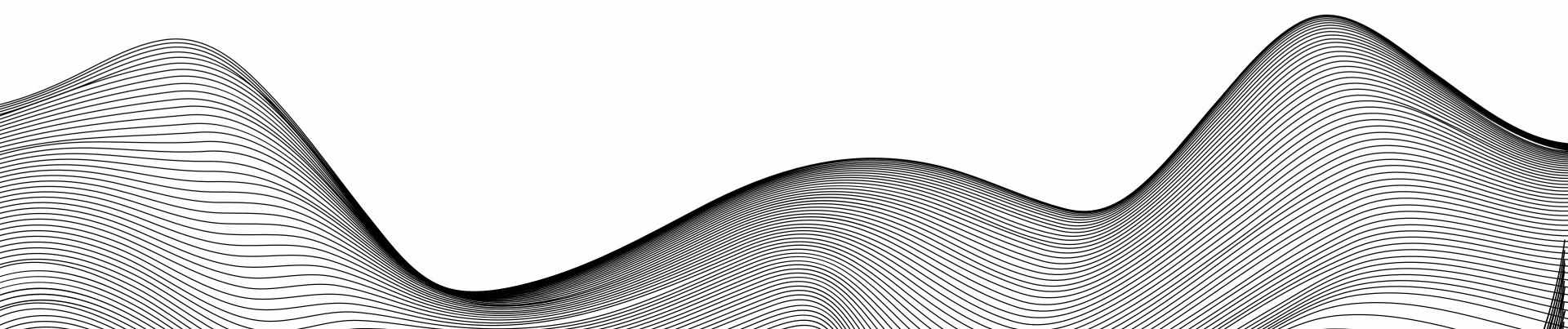




# C O M P L E T E S O L U T I O N SMART FACTORY



- Smart Factory

Dustfree and High-efficiency Nesting Cell

- High-speed Flexible Edgebanding Cell

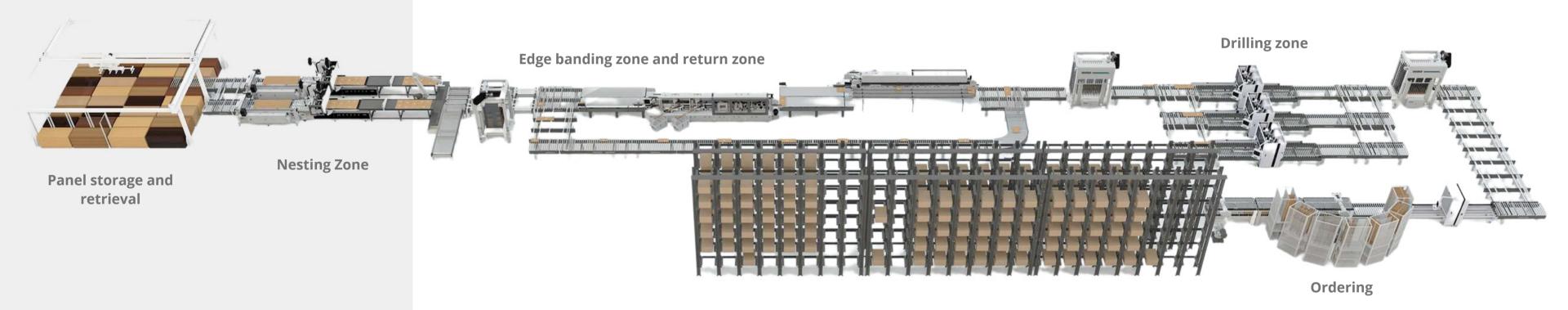
- High-speed Drilling Cell



# Complete solutions for smart factories

TAILOR-MADE PRODUCTION SOLUTIONS

Increase Profitability and Productivity with our complete Service, from project planning to fully automated production lines.







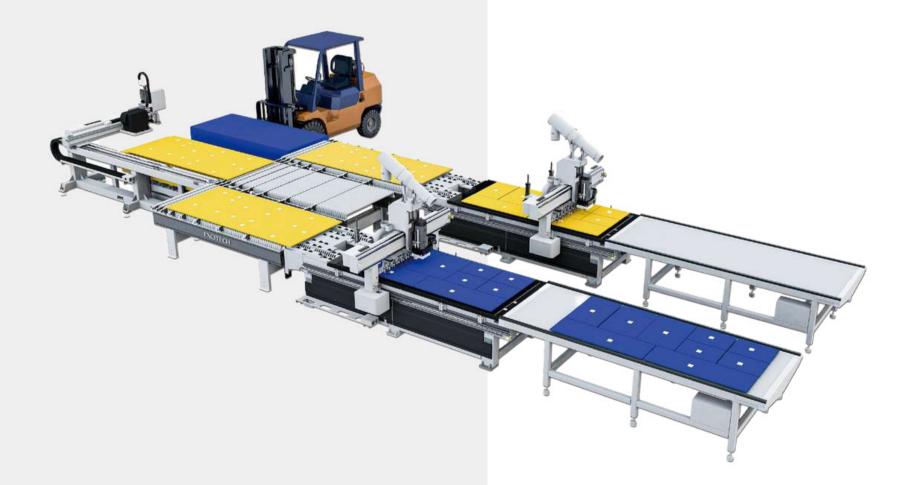
Dustfree and High-efficiency Nesting Cell



## Nesting Cell WK/ WK-G / W4 Optional

Nesting Cell - One label machine & two Nesting machines

Output Footprint Operator
2800-3800 pcs / 8 hours 16.5x6m 1



## Nesting Cel WK/ WK-G / W4 Optional

Nesting Cell (Robot Stacking) - One label machine & two Nesting machines

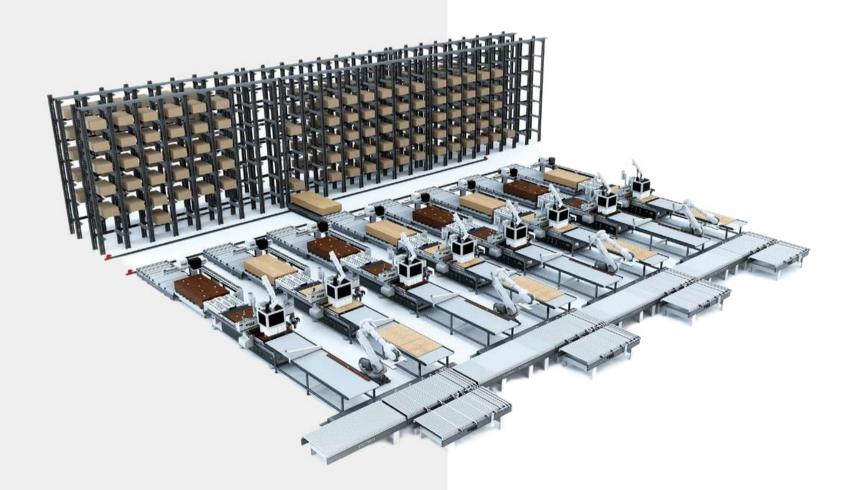
<b>Output</b> 2800-3800 pcs / 8 hours	<b>Footprint</b> 20.6x6m	Operator 1	
Order-based	For batch size 1 and s	eries production	
Reduce error	Eliminates human errors, reduces panel damaç		
Enhance Efficiency	ncy Greatly enhances efficiency		
Reduced labor cost	Require less operator	rs than manual processing	





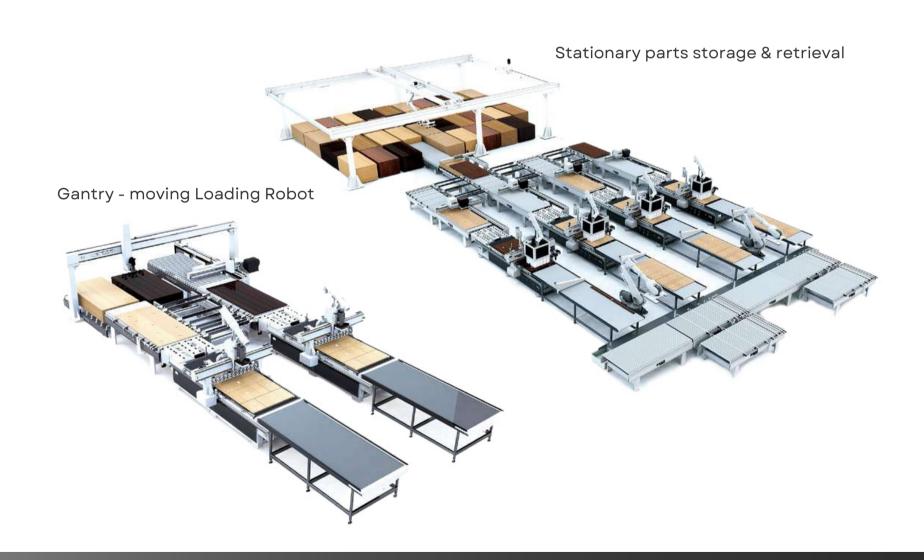
## Nesting Cell RGV/AGV + Vertical Storage

Batch size 1 nesting with series conditions. Unstaffed panel supply system



## Nesting Cell Panel supply by Gantry - Moving Robot

Solutions for order-based production: great flexibility and automated sequences for production with a wide range of colors, materials, sizes, etc.





## **Dust-free Tecnologies**

Up to 98% of dust extration effect, ideal for all commonly used materials such as MDF board, chipboard and plywood board.

173

To create a better, dust free and healthier working environment for your production space, we have made **173** upgrades to the machines.

Improved air duct design allows unobstructed air flow.

Sistema inteligente

Intelligent control of air duct on/off and air flow direction.

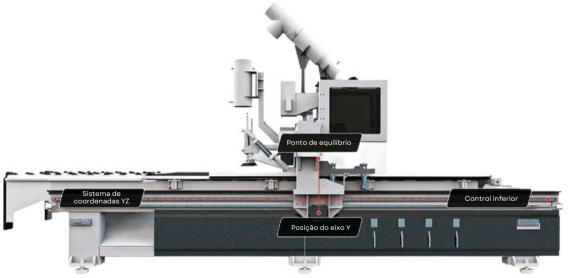
22

Truly dust free even cutting at 22m/min.
Visibly dust free effect.

Heavy duty & welded unibody Gantry and frame.

High precision transmission system

High stability electrical system



## Dynamic balance

Velocidade de processamento de m/min para manter o padrão de alta precisão



Armazenamento de alta resistência



Alta resistência e precisão completa



Aço estrutural de liga engrenagem 100% de alta resistência e dureza.

#### Sistema de execução

O núcleo de equipamento, as funções e o processo são perfeitamente apresentados, garantindo um processamento de alta qualidade.

#### Sistemas estruturais

Design dinâmico otimizado da máquina inteira, amortecimento de choques e redução do intervalo de serviço comum para alcançar a estabilidade do processamento.

#### Sistemas de transmissão

A saída de potência crescente, transmissão estável, limite de fadiga alta e alta resistência ao impacto.



# Heavy-duty Nesting W4

### Heavy-duty Nesting with Dustfree Processing

With option to upgrade to new labeling device	3.8 secs per label
With option to upgrade to rotate labeling device	Automatically adjustes position to stick label on narrows parts
Uninterrupted work cycle	Automatic pre-labeling, infeeding, nesting, outfeending in one cycle to enhance productivity

### Patented dust-free nesting technologies



# High speeed machine WK-G Series

### High speed nesting machine

Auto tool charger	High-power spindle to process different materials
Carousel tool magazine	16 servo tool changers optional
Application	Cabinet, flat door, molded door, etc.





# Linear tool changer

WK-C Series

## Dust nesting machine with Linear tool changer

Auto tool charger	High-power spindle to process different materials
Linear tool magazine	Linear tool magazine travels with the bridge, tool changing is faster and easier
Application	Cabinet, flat door, molded door, etc.





Series	Traveling Size	Working size	Dimension	Net.W	Travelling	Working	Loading and unloading	Spindle	Tool	Table	Power	Dust Extration
331133	1147511119 5125	77311111g 0120	Biiiidiidiidii	eight	speed	speed	speed	Info.	Magazine	Structure		Info.
W4 Ser	ies Heavy-duty	nesting mach	ine with Pre-	-Labelin	g							
1224	2500x1260x200mm	2440x1220x50mm	10500x3200mm	3700kg								
1230	3140x1260x200mm	3050x1220x50mm	12600x3200mm	5500kg						201111		
1530	3140x1600x200mm	3074x1550x50mm	11200x3500mm	6500kg	00.4	00.05	20-25m/min 15m/min	15m/min 9kW 24000r/min	Carousel 8	Vacuum Table	30kW	+0004
1537	3700x1600x200mm	3685×1550×50mm	14400x3500mm	6800kg	80m/min	20-25m/min						Φ200*1 Φ150*1
2128	2900x2160x200mm	2850x2130x50mm	11700x4100mm	6000kg							1979	
2138	3860x2170x200mm	3800x2130x50mm	14000x4100mm	7100kg							35kW	
WK-G	Series standard	nesting mach	ine with Pre	-Labelin	g		J			1	//	
1228	2900x1260x300mm	2850x1220x50mm	12450x2700mm	4500kg	100m/min	18-23m/min	15m/min	9kW 18000r/min	Carousel 8	Vacuum Table	30kW	Ф200*1 Ф150*1
WK-C	Series Linear to	ol-changing ne	esting machi	ine (Pre-	-Labeling)							
1228	2900x1260x300mm	2850x1220x50mm	12000x2700mm	4000kg	80m/min	15-20m/min	15m/min	9kW 18000r/min	Linear 12	Vacuum Table	27kW	Ф200*1 Ф150*1
WK-C	Series Linear to	ol-changing ne	esting machi	ine (Aut	o Loading and	d Unloading	)					
1228	2900x1260x300mm	2850x1220x50mm	10000x2700mm	3000kg	80m/min	15-20m/min	15m/min	9kW 18000r/min	Linear 12	Vacuum Table	25kW	Ф200*1 Ф150*1
WK-C	Series Linear to	ol-changing ne	esting machi	ine								
1224	2500x1260x300mm	2440x1220x50mm	3600x2300mm	1300kg								
1228	2900x1260x300mm	2850x1220x50mm	4200x2300mm	1800kg		15–20m/min N/A	10/50	N/A 9kW 18000r/min		Vacuum Table	22kW	
1530	3140x1600x300mm	3100x1560x50mm	4500x2750mm	2100kg	80m/min		N/A					Ф200*1
2128	2900x2160x300mm	2850x2130x50mm	4200x3250mm	2300kg						27kW		

For specific machine configurations, please refer to your technical agreement



# **Edgebanding cell**

Four Edgebanders cell-high speed, batch size 1 edge processing (>50mm)

Output	Footprint	Operator
4500-6500 pcs / 8 hours	36x12.5m	2

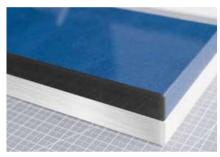
Intelligent and extensible	Flexible change-over of different edges
Partner Patent	Automatic production of small parts >50-250mm in with
Automatic production	Multi shift production
Reduced labor cost	Require less operators than manual processing



## Fast and flexible

High speed infeed, stable changeover

Changeover between glue tanks, different edges, corner round types and buffing unit. Batch size 1 solution without compromising output.



#### 1.4 Million

Stable performance even with 1.4 million times of changeover every year



Minimized gap between workpiece





High-speed Flexible Edgebanding Cell



## **Edgebanding cell**

Four Edgebanders cell-for Narrow components processing (>50mm)

**Output** 3500-4000 pcs / 8 hours

**Footprint** 27.5x12.5m

Operator



High quality solution to overcome the biggest challenges in automation





We supply integrated solutions including softwares

Produce with intelligence Interactive and intuitive operation

Cell control and machine monitoring (display of production data, machine occupation, erros message, troubleshooting, etc, and solutions)

Batch size 1 and order-oriented (automatic component identification via barcode)

Tailored to fit your solution



# Edgebanding cell

Four Edgebanders cell-for interlinked Edgebanders (for components > 250mm)

**Output** 4500-6500 pcs / 8 hours

Footprint 38x12.5m

Operator

# Edgebanding cell

Two single-sided Edgebanders in a cell

Output 3000 pcs / 8 hours **Footprint** 43x7.5m

Operator







# Longer service life, greater ROI

# Independently developed units

Design

Structurally strengthened frame guarantes stability over long service life

Procedures

The unibody welded frame is annealed, heat-treated and machined

Stability

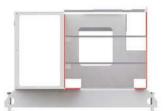
Aero-aluminum and god quality steel -only the best raw materials for the best performance

Accuracy

CNC machined frame

Control

Upgraded encoder control of snipping and corner round unit increases work efficiency and effect.











Servo corner trimming



Servo edge feeding



Dust free Pre-milling











High speed flexible edge processing technology with laser unit | Special designed end cutting unit

#### Retangular spot system



Adopting semiconductor fiber coupled output laser, the laser is focused to the adhesive layer of the edge banding through the rectangular spot system, beautiful and seamless, bid farewell to the glue line

#### Rectangular spot system



Uniform heating, no scanning blind area

#### Top glue station (Quick-melt) + laser



Convenient and flexible to connect with EVA or PUR glue station



## **High-speed Edgebanding**



#### WF683GI

Double top glue pots + Quick melt | Corner rounding with 4 motors | High speed V-belt top presure sliding chain





## Top glue pot with Quick



#### Opcional

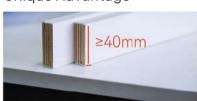
Double top glue pots + Quick Melt

#### Opcional



## **Edgebanding for both doors & carcasses**

#### Unique Advantage







WF583GI

Top glue pot with Quick Melt + Bottom glue pot Corner

Spray separate agent Pre Heating 1 Pre pre Heating 1 Pre pot 1 Pre pot 1 Pre pot 1 Pre pot 1 Pressing pot 1 Pressing 2 Pressing 3 Pr



### WF581GI

Top glue pot with Quick Melt + Bottom glue pot Pre Mil

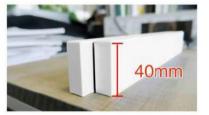
Spray separate agent Pre Milling Pre Heating 1 Pre Milling Pressing Pressin

## Narrow Parts Edgebanding technologies

### WF583 Series

WF583GIMW WF583GIW WF583GW WF583W WF582W









Small part infeed rollers

Small part infeed pusher







Designed to process long, narrow (>30mm) parts

## **Options**



Pur adhesive melting unit available for water-proof and zero joint requirements



Easy to clean PUR glue reservoir is optional



2/4/6/12 slot servo tape magazines available for upgrade. Smoth guidance, servo driven, the edge infeed is both precise and swift



Automatic glue refill device available



Edgebander with return converyors, greatly helps reducing down time while improving productivity



Top, bottom and side grooving available

								, , , , , , , , , , , , , , , , , , , ,														
Series	Dimension	Power	Net. Weight	Working Speed	Panel Thickness	Panel Length	Panel Width	Edge Thickness	Edge Width	Dust Extration Info.												
Edge Baı	nder for Intellige	ent proce	essing																			
783GC	11400x1900x950mm	38kW	4800kg	20-26m/min	9-60mm	250	250mm 100mm			Ф100*7												
781GC	9600x1900x950mm	37kW	4200kg	20-20m/min	9-80mm	Zoumm		0.4-3mm	13-65mm	Ф100*5												
583GIW	8230x1600x900mm	25kW	3000kg				≥50mm			Ф100*7												
581GIW	6390x1600x900mm	17kW	2350kg	18-24m/min	9-60mm	≥250mm	≥50mm	0.4-3mm	13-65mm	Ф100*5												
581GIW30	6390x1600x900mm	17kW	2350kg	1	9021 (883 (800 STA))	X-77-0-74300000-1	> 30mm			Ф100*6												
Laser Ed	gebanding tech	nology																				
687P-Laser	10530x1800x970mm 835x610x249mm	27kW	3850kg	20-26m/min	9-60mm	> 150mm > 250mm	> 80mm > 100mm	0.4-3mm	13-65mm	Ф100*8												
WF6 Seri	es high speed E	dge Band	der																			
683GIIM	10330x1800x970mm	29kW	3900kg							Φ100*9												
683GIM	10330x1800x970mm	28kW	3850kg		9-60mm	9-60mm	9-60mm	9-60mm	9-60mm	9-60mm	9-60mm	9-60mm							Φ100*9			
683GM	10330x1800x970mm	27kW	3800kg	20-26m/min									≥150mm /	≥80mm	0.4-3mm	13-65mm	Ф100*9					
683GII	9620x1800x980mm	29kW	3750kg	20-2011/11/11										,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, , ,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	37.0011111	≥250mm	≥60mm	0.4-5000	13-0311111	Ф100*8
683GI	9830x1800x970mm	28kW	3750kg																			
681GII	8180x1800x970mm	28kW	3350kg							Ф100*6												
583GIM	8700x1600x900mm	25kW	3300kg		1 1	1		1 1		Φ100*6												
583GI	8410x1600x900mm	25kW	3150kg							Ф100*6												
583GK	8410x1600x900mm	25.5kW	3150kg							Ф100*5												
583G	8410x1600x900mm	25kW	3150kg			≥120mm	≥60mm			Ф100*5												
581GI	6390x1800x980mm	17kW	2350kg	18-24m/min	9-60mm	1	/	0.4-3mm	13-65mm	Ф100*5												
583	6600x1600x900mm	16kW	2500kg			≥250mm	≥40mm			Ф100*5												
582	5960x1600x900mm	12kW	2250kg							Ф100*3												
581	5390x1600x900mm	16kW	2000kg								Ф100*4											
580	4460x1600x900mm	11kW	1500kg						Ф100*2													

For specific machine configurations, please refer to your technical agreement





High-speed Drilling Cell

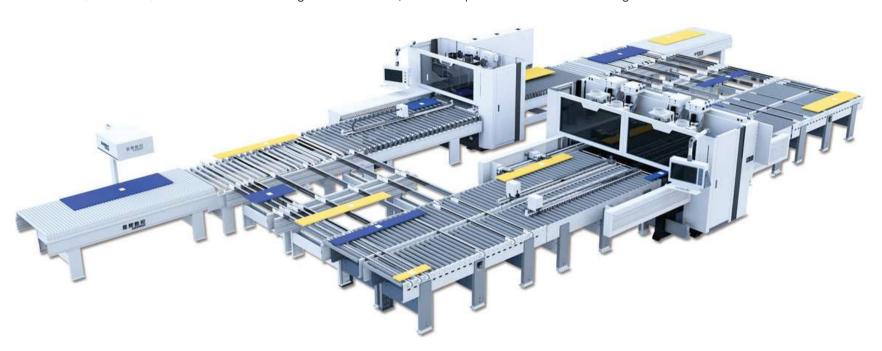
# **Drilling Cell**

## Different application scenarios

## Tailored to suit your needs

Output	Footprint	Operator
3400-3800 pcs / 8 hours	20x7.5m	2

Automatic Production	Multi shift production
Reduced Labor Cost	Require less operators than manual processing
Eliminates Errors	Reduce procesing error and panel damage
Informatization	Integrated solutions, real-time production data record



# **Drilling Cell**

Different application scenarios

Tailored to suit your needs

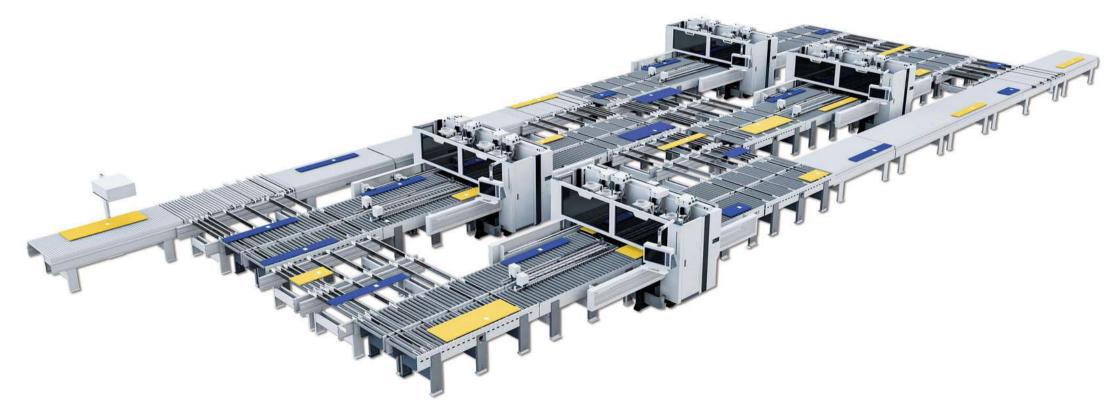
Output	<b>Footprint</b>	Operator
3000-4000 pcs / 8 hours	20x10m	1

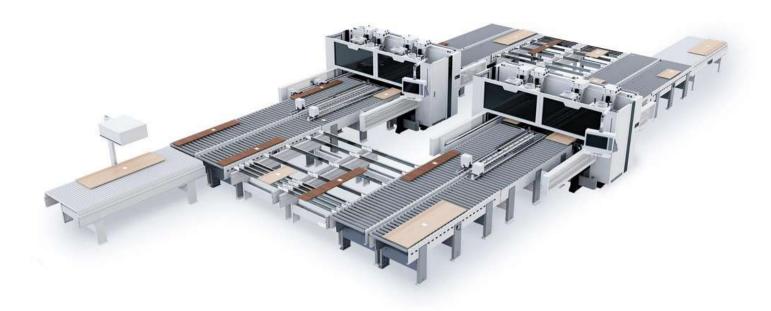


# **Drilling Cell**

For double work zone drilling machines in a cell

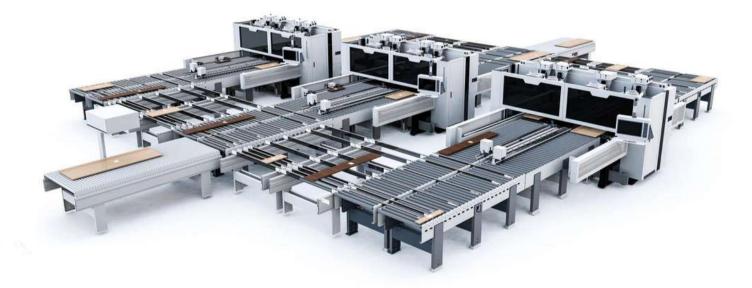
OutputFootprintOperator9600-11000 pcs / 8 hours34x12m2





For double work zone drilling machines in a cell

OutputFootprintOperator4800-5500 pcs / 8 hours20x8.5m2



For double work zone drilling machines in a cell

Output	<b>Footprint</b>	Operator
7200-8300 pcs / 8 hours	20x13m	2



## **Cam Software**

One-stop software integrated solutions

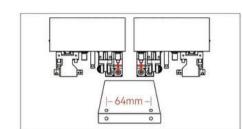
35%

35% Efficiency bonus compared to peer machines

92%+

#### Double drill banks utilization 92%

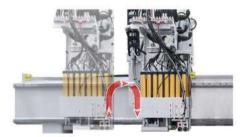
Holes with a spacing of 64mm (both vertical and horizontal directions) are processed with one stroke, featuring high utilization rate of 92% of both drill banks.



## **CAM**

#### **Independently Developed CAM Software**

Independently Developed CAM Software Exclusive



New algorithms enable drill banks and clamps to move in a "frog leap" fashion

## Robust Frame



Unique advantage of Wotso - offcuts clamped and trasnported to waste bin without the risks of hitting the bottom drill bank and human intervention.

- Supports major design softwares and machines found on market
- Optimized algorithms and dodging movements
- Job editing on site is made possible
- Integratable with various MES/ERP systems

## Double Work Zone WHA-2T

#### Double work zone throughfeed 6 sided drilling machine

Double work zone	Processing without interruputing the work cycle, greatly enhances efficiency					
Six Drilling Banks (Optional)	Six drilling banks, greater efficiency					
Smaller footprint	Same output delivered, only half of the space					
Auto tool changer optional	Versatile for all kinds of bespoke applications that n involve different connectors Lamello and more	nay				

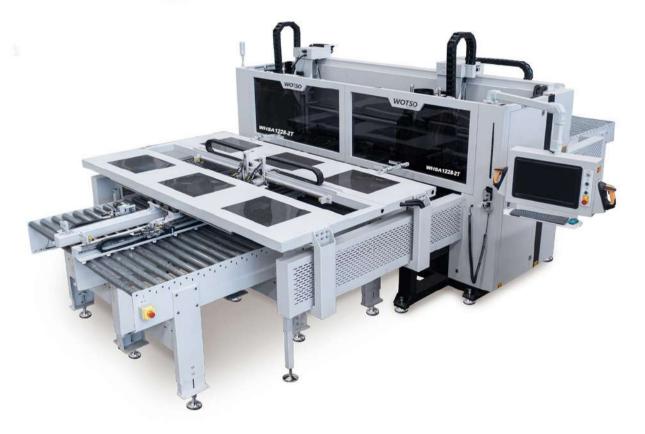
#### **Unique Advantage**



Parts under 650mm can be processed on two tables simultaneously



Parts above 650mm can be processed with both drill banks on one table



Throughfeed WHS - Single drill bank WHSW - Double drill bank

#### Double drill bank throughfeed 6-sided drilling machine

Infeed in 1 sec

Synchronous strokes of the two drill banks

**Highlights** - Holes with a spacing of 64mm (both vertical ans horizontal directions) are proceedssed with one stroke, featuring high utilization rate of 92%



Throughfeed Automatic infeed without manual intervention

> Feeding time is reduced to just 1 second, Pre-loading and positioning to eliminate standstill time





#### Auto toll-changer 6-sided drilling machine

**Auto tool changer** 

Versatile for all kinds of beskope applications that may involve different connectores, Lamelo and more.

All-purpose

6 toll changers with all-purpose aggregate or rotation axis opcional





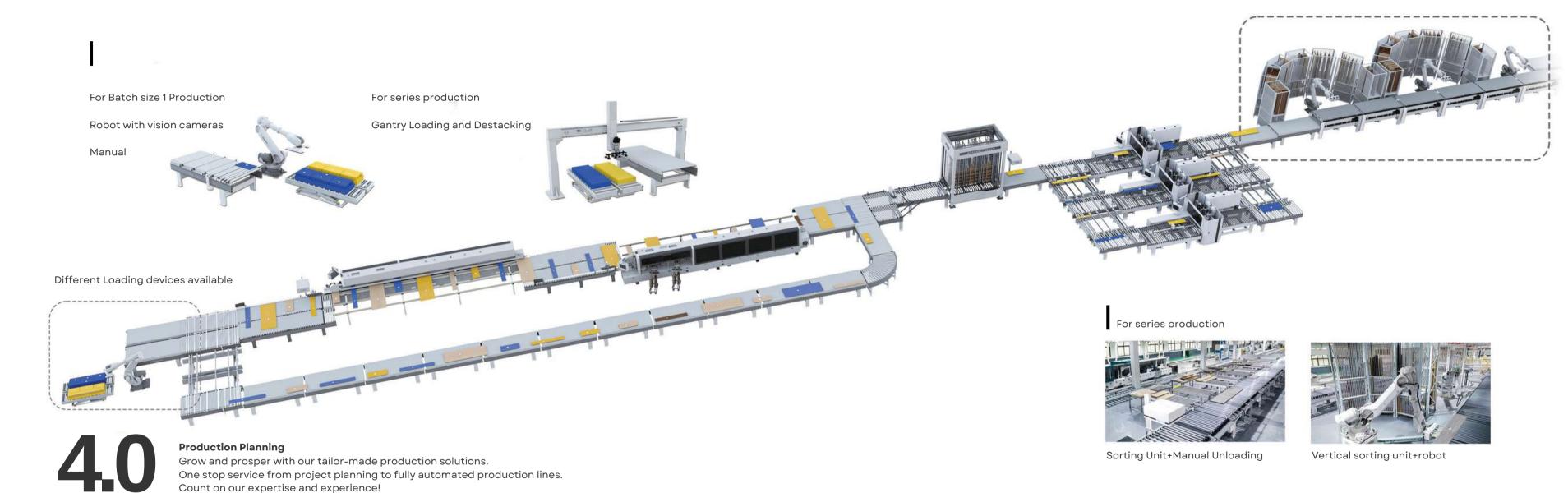


## **Technical Data**

Series	Traveling size	Max. Working size	Min. Working size	Dimension	Net. Weight	Traveling Speed	Drill bank info.	Spindle info.	Power	Dust Extration Info.
1228	5300x2630x150mm	2800x1200x50mm	200x50x15mm	7300x3700mm	8000kg	130/80/30m/min	Vertical 66+Horizontal 32	3.5kW*4	34kW	Ф200*4 Ф150*2
1228	5300x1750x150mm	2800x1200x50mm	200x50x16mm	7300x2800mm	4500kg	130/80/30m/min	Vertical 33+Horizontal 16	3.5kW*2	22kW	Ф200*2 Ф150*1
1228	5300x1750x150mm	2800x1200x50mm	200x50x16mm	7300x2600mm	4200kg	130/80/30m/min	Vertical 21+Horizontal 8	3.5kW*2	16kW	Ф200*1 Ф150*1
1228	5300x2630x150mm	2800x1200x50mm	70x30x15mm	5900x3700mm	5000kg	130/80/30m/min	Vertical 42+Horizontal 16	3.5kW*4	26kW	Ф200*2 Ф150*2
1228	5300x1750x150mm	2800x1200x50mm	70x30x10mm	5900x3300mm	3300kg	130/80/30m/min	Vertical 21+Horizontal 8	6 kW*2 2.2kW*2	26kW	Ф200*2 Ф150*1
1228	5300x1750x150mm	2800x1200x50mm	70x30x10mm	5900x2800mm	3100kg	130/80/30m/min	Vertical 33+Horizontal 16	6 kW*1 3.5kW*1	26kW	Ф200*2 Ф150*1
1228	5300x1750x150mm	2800x1200x50mm	70x30x15mm	5900x2800mm	3100kg	130/80/30m/min	Vertical 33+Horizontal 16	3.5kW*2	18kW	Ф200*2 Ф150*1
1228	5300x1750x150mm	2800x1200x50mm	70x30x15mm	5900x2600mm	3000kg	130/80/30m/min	Vertical 21+Horizontal 8	3.5kW*2	14kW	Ф200*1 Ф150*1

For Specific machine configurations, please refer to your technical agreement

# Interlinked Edgebanding-Drilling line



# WOTSO

**Wood tech Solutions** 

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