Giben by Anderson Group Europe - HEMA GmbH – Werk Empfingen
Reinhold-Köhler-Str. 18/1-D-72186 Empfingen-✆ +49 7485 9836855 service@Giben.org

Giben Prisma3000 SPT MR YCut GDRT
81208450 year of custruction 2010

Materials

Plate-shaped rectangular materials:	
Particleboard	coated and uncoated
MDF	coated and uncoated

Dimensions min. when fed via integrated lift table	
Length	2400 mm
Width	1200 mm
Strength	10 mm

Dimensions max. when fed via integrated lift table	
Length	4100 mm
Width	2100 mm
Strength	50 mm

Dimensions max. for rotary device MR	
Plate diagonal	4500 mm
Strength	50 mm

All panel materials must be adapt for loading with pushing technology.

The cutting quality to be achieved as well as the saw carriage feed speeds depend on the nature of the material and the properties of the saw blade used.

The material must not have any swollen edges and must not be wavy.

Geschäftsführer: Sandra Brendle
IBAN: DE28642510600013435514
BIC: SOLADES1FDS
Amtsgericht Memmingen
HRB 15839, Sitz: Sontheim
Ust-IdNr.: DE 29 33 07 124

Plant composition

Usable cutting length	4500 mm
Usable lift table width	2200 mm

Saw carriage

Structure Saw carriage	Steel
Saw blade projection	115 mm
gripper opening	117 mm
Power Engine Main Saw	7,5 kW
Diameter main saw blade	430 mm
Power Engine Scoring saw	2.2 kW
Diameter of the scoring saw blade	215 mm
Motorization Feed Saw Carriage	AC Servo Motor
Feed speed saw carriage forward	1-170 m/min
Feed speed saw carriage backward	170 m/min
Electronic adjustment	Yes
Saw carriage feed speed from Control panel adjustable, variable	
Quick clamping system (mechanical)	Standard
Saw blade projection adjustment of the main saw	Automatic
Saw blade projection selectable for baldes diameter 400 mm instead of 430 mm through software selector in	Yes
Scoring saw adjustment from the outside	Manual
Scoring saw switch off through software selector	Yes

Pressure beams

Split pressure beam (Giben patent)	Yes
Protection flaps bar	Yes
Safety blow bar	Yes
Residual cutting device	not required
Recesses in the pressure beam	not required
Front pressure beam lock	Yes

Side aligner

1 roller on the pusher side	Yes
1 roller on the operator side	Yes
Positioning electrical	Automatic
Pre-positioning	About Encoders
Alignment path	70 - 2200 mm

Pusher

Motorization Feed Pusher	AC Servo Motor
Forward feed speed pusher	1-85 m/min
Reduced to CE regulation in accordance with CE regulation	25 m/min
Return speed pusher	85 m/min
Number of roller profiles in the pusher area	10 Piece

grippers (GIBEN patent) Y-CUT

Number of grippers for cutting length 4500 mm	7 pieces
Of which:	
grippers on the pusher	1x2 Piece
Can be positioned in X and Y (double grippers on square fence side)	
Grippers on the pusher	1x2 Piece
Can be positioned in X (double grippers on square fence side)	
movable in axis X to position	1800 mm
Distance between gripper fingers at the bottom	50 mm
Positioning speed gripper in X	18 m/min
Positioning speed gripper in Y	18 m/min
Minimum gripper spacing to each other	50 mm
Positioning grid of the grippers to each other	50 mm
Maximum gripper offset in Y	750 mm
grippers on the pusher, fix	3 Piece
grippers floating	Yes

Semi-automatic turning device MR for head cuts (new version 2010)

Free-rotating pneumatic gripper	1 piece
Pneumatically liftable and lowerable roller drive groups	Yes
Pneumatically liftable and lowerable roller support groups	Yes
Material support in the turning area	Roles
Safety device on 3 air cushion tables	Yes

Loading lift table

Dimensions:	4500 x 2200 mm
Maximum stack height	580 mm
Electromechanical spindles	4 pieces
Loading direction	sidewise
Free-running roller groups	Yes
Driven roller groups	3 pieces

Transfer roller conveyor on the right *side* for lateral loading

Dimensions	approx. 1000 x 2200 mm
Free-running roller groups	Yes
Loading direction	sidewise
Maximum stacking height approx.	580 mm

Frontal Alignment

Number of aligners	3 Piece

G-Drive RT electronic control

G-Drive RT electronic control	PC-Embedded
Pattern image display	Yes
Simulation, graphically "real time"	Yes
TFT-LCD color monitor	19"
Microprocessor Pentium 3 (minimum)	1,6 GHz
Main memory capacity (minimum)	512 MB
Hard disk capacity (minimum)	60 GB
USB interfaces	min. 2 pieces
Manual Cuts Function	Yes
Cutting Sequence Function	Yes
Function "Cutting against length stop, absolute"	Yes
"Cuts X/Y" function	Yes
Batch Processing Job by Job (2 Jobs)	Yes
Batch Processing Sequence (Ascending Numbering)	Yes
Plain Text Fault Diagnosis	Yes
Operating System MS Windows XP Prof. SP3	German
Network Card	Yes
Signal exchange for existing vacuum	Yes

Front Air Cushion Tables

Number of air cushion tables	5 Piece
Width of the air cushion tables	510 mm
Length of the air cushion tables	2000 mm
Melamine intermediate pad	Yes
Working height	+/- 950 mm
Air blower for up to 6 air cushion tables	1 Piece
Power air blower	2.2 kW

Square fence

Square fence	left side

Connected loads

Supply voltage	400 V / 50 Hz
Control voltage	24 V
Compressed air requirement at 6 bar	20 - 30 l/min
Suction cups on pressure beam, fixed Ø 115 mm	3 pieces
thereof 1 piece in position for longitudinal cuts at Panel length 2,800 mm	
Suction cup Ø 200 mm fixed to the machine bed, left side going left	1 piece
required air velocity in the centre of the cups	30-35 m/s
Required air volume	see Appendix A

Colour

Fixed machine parts	RAL 7035 (light grey)
Moving machine parts	RAL 5005 (blue)

Safety device

According to CE standard	Yes
Certification Type	B
Protective grille included	Yes

Software logic in GDrive RT to control a vacuum feed. The vacuum feed has been taken out of service and is not included. However, the software logic in the machine control system is still available and usable if desired.

The vacuum feed is integrated into the machine sequence as follows:
The operator can activate the vacuum loading function through software selector. Furthermore, the operator selects removal station 1 or 2. After starting the system, the number of plates per cycle is removed from the selected removal station through the vacuum loader in accordance with the cutting plan specification and fed onto the lift table of the system, always unturned. For this purpose, after the start of the cycle, the lift table is lowered to a loading level approx. 150 mm below the working height of the panel sizing system. The lift table must be empty for this.
The pusher is in the front area of the machine and can continue to work during loading by the vacuum loader. The loading area remains locked against the pusher area during the movements of the pusher to avoid collisions.
After the number of boards per cycle has been loaded onto the machine's lift table, the stack will be loaded with the grippers on the pusher as in a normal lift table loading cycle and the normal cutting cycle begins, also using the MR rotation device.

Appendix A: Calculation of Suction Volume

Calculation of Volume Suction at Air Pressure N

Giben Panel Sizing Machine PRISMA3000 SPT MR Y-Cut	Cup type 1		Cup type 2	
Number of cups	3		1	
Diameter of suction cups mm	115	mm	200	mm
radius of suction cups m	0,0575	m	0,1	m
Surface suction cups m²	0,010381625	m²	0,0314	m²
Required air speed on average m/s	35	m/s	35	m/s
Loss in availability in %	80	%	80	%
Volume m³/h without consideration of loss/cups	**1308,1**	**m³/h**	**3956,4**	**m³/h**
Volume m³/h taking into account loss/cups	**1635,1**	**m³/h**	**4945,5**	**m³/h**
Volume m³/h without consideration of loss/cups type	**3924,3**	**m³/h**	**3956,4**	**m³/h**
Volume m³/h taking into account loss/cups type	**4905,3**	**m³/h**	**4945,5**	**m³/h**

Total volume m³/h without taking into account loss/machine	**7880,7 m³/h**
Total volume m³/h taking into account loss/machine	**9850,8 m³/h**

Giben 812_08_450 Prisma 3000 SPT MR Y1B+V Y-Cut

Achtung: Die Vakuumbeschickung, die man teilweise auf den Bildern sieht, existiert nicht mehr!

Attention: the vacuum loader on the pictures do not exists any more!

Abbildung 1- 81208450_201008_01

Abbildung 2 - 81208450_201008_02

Abbildung 3 - 81208450_201008_03

Der hammerschlaggrüne Verschiebewagen auf diesem und den folgenden Bildern gehört nicht zum Lieferumfang der Maschine!

The hammer blow green transfer shuttle in this and the following pictures is not included in the scope of delivery of the machine!

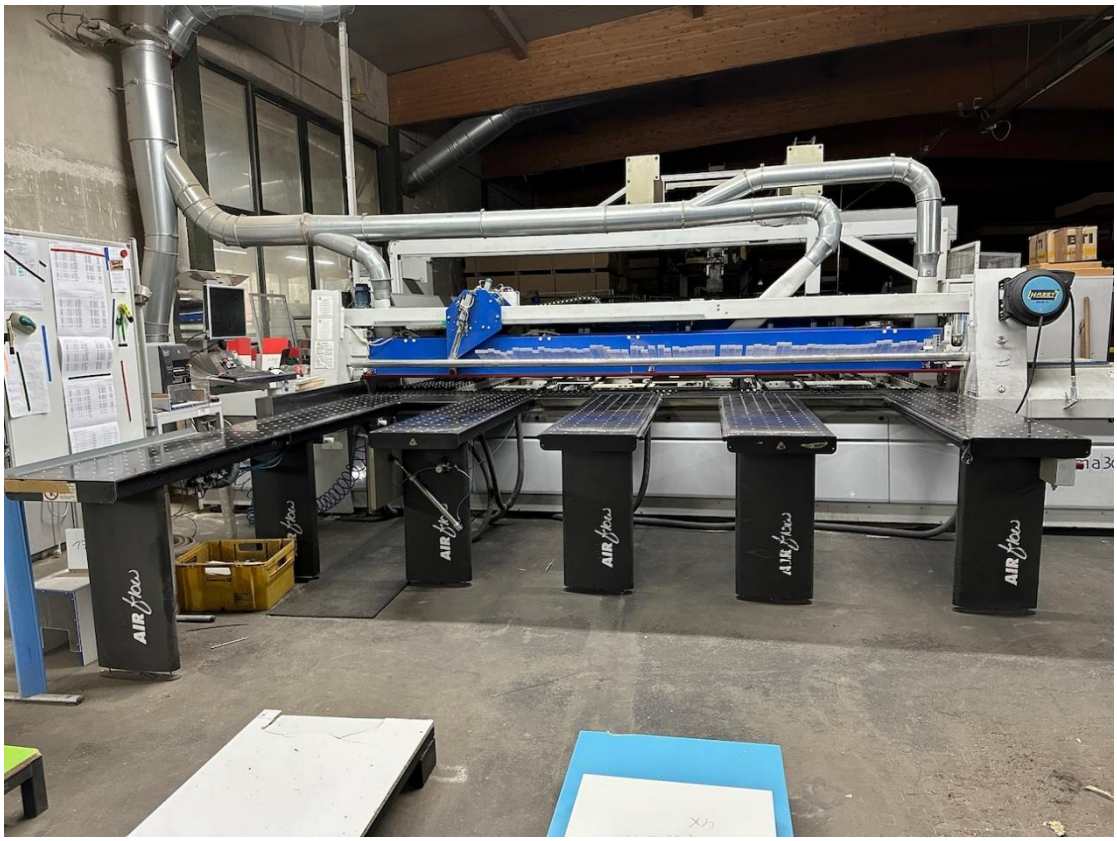

Abbildung 4 - 81208450_202404_01

Abbildung 5 - 81208450_202404_02