



— **ProCompositeTech** —



Alu Ranger VGroove

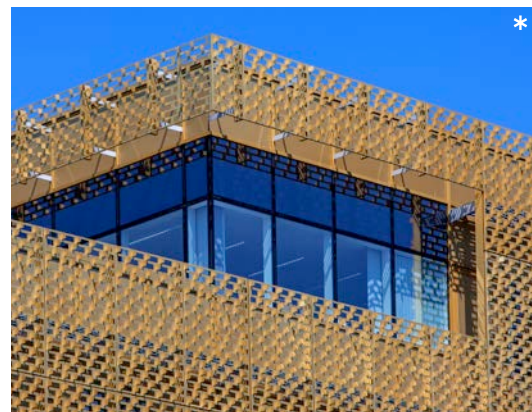
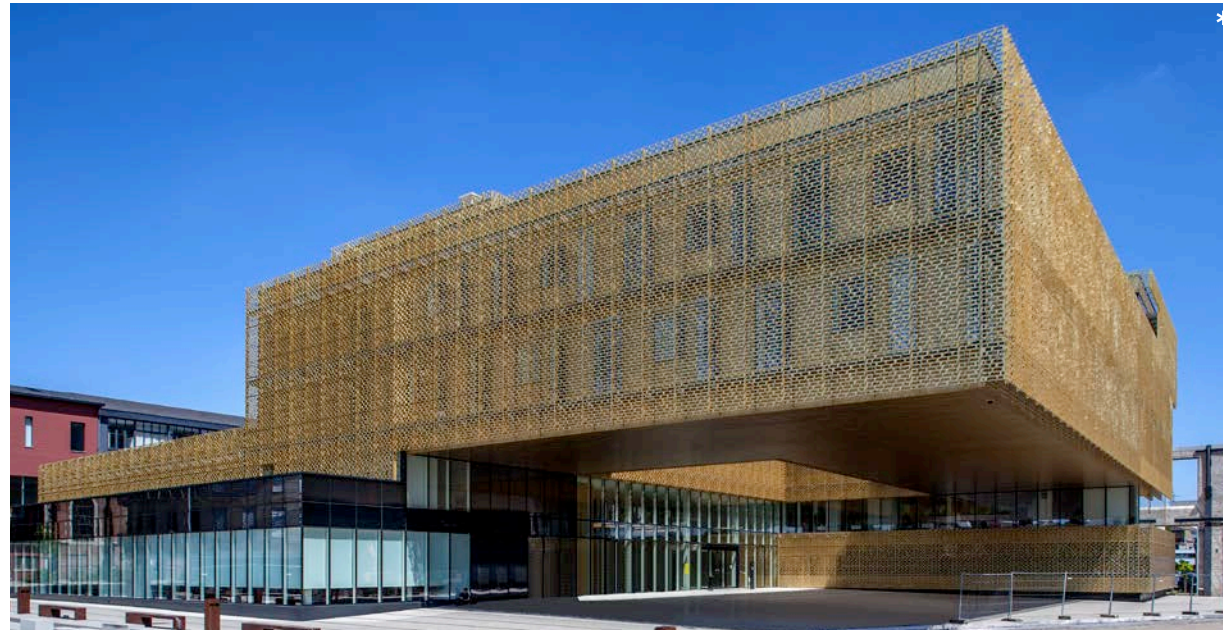
CNC panel router
with vertical table

|4221 |6321 |10121

ACM MINERAL CORE
READY

CNC panel router with **vertical table**
for architectural facades panels processing.

CNC with vertical table: ACM/ACP, ACM Mineral core, panel router with
alu honeycomb core, and corrugated core, Fibrecement, HPL...



TYPES OF PANELS

ACM / ACP PE CORE MINERAL CORE

ALUCOBOND®
LARSON®
ALPOLIC®
ARCONIC®
ALUBOND®
SIBALUX®
VITRABOND®
STACBOND®
MULTIPANEL UK®
.....

ALU HONEYCOMB CORE

ALUCORE®
LARCORE®
PLASCORE®
STARCELL®
CEL COMPONENTS®
HONYLITE®
.....

ALU CORRUGATED CORE

METAWELL®
DOLUFLEX®
.....

FIBERCEMENT

CEMBRIT®
EQUITONE by ETERNIT®
COPANEL®
SWISS PEARL®
.....

HPL

TRESPA®
MAX EXTERIOR®
POLYREY®
RESOPAL®
FUNDERMAX®
.....

I AM ALU RANGER

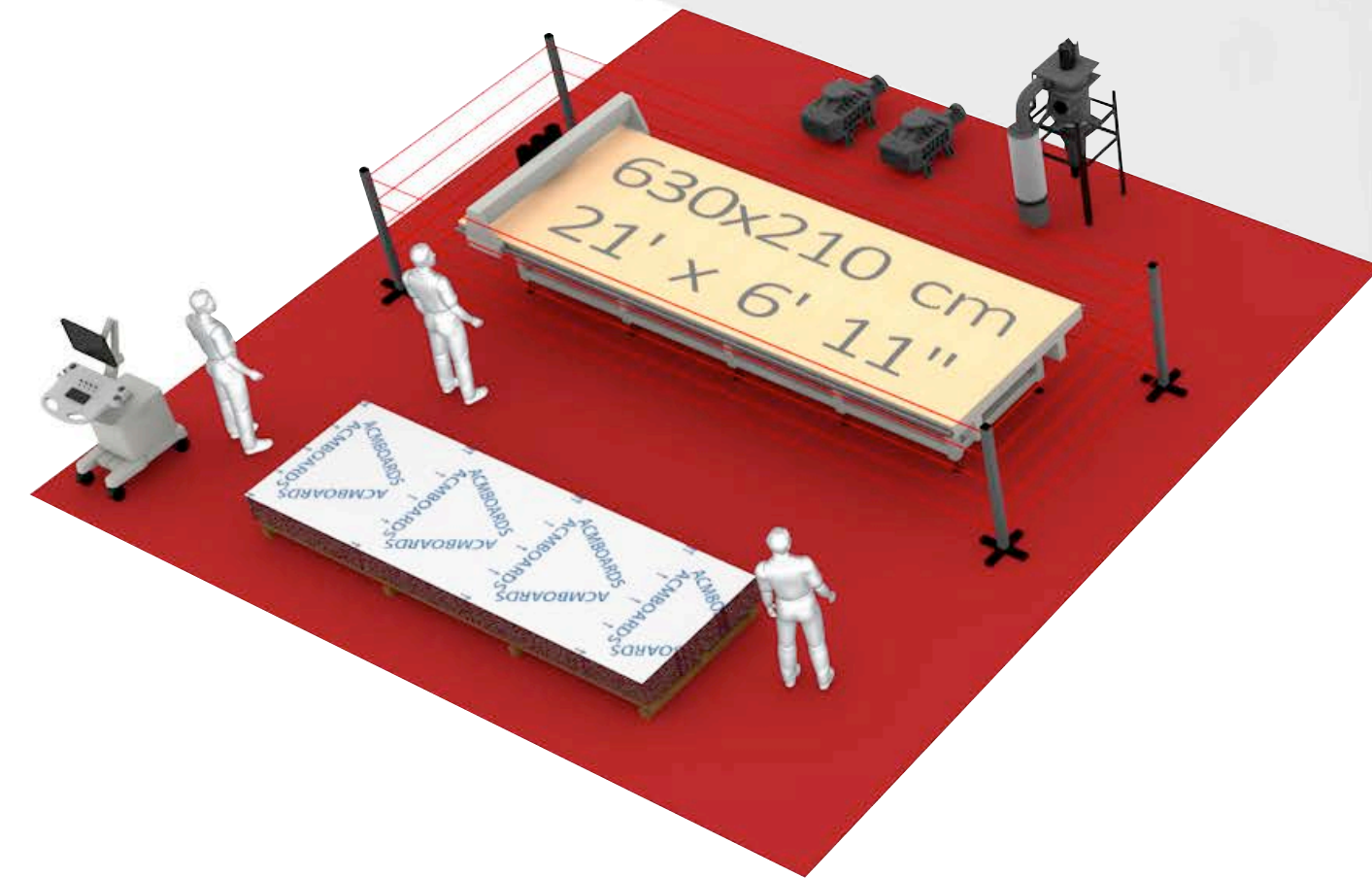
* Ph. Fatih Kucukcolak

less 60%

of space occupied in regards to a horizontal router

- Made for taking up less space
- Ergonomic access to the vertical table
- Higher safety for the operator
- Granted clean table: what is not held falls on the floor

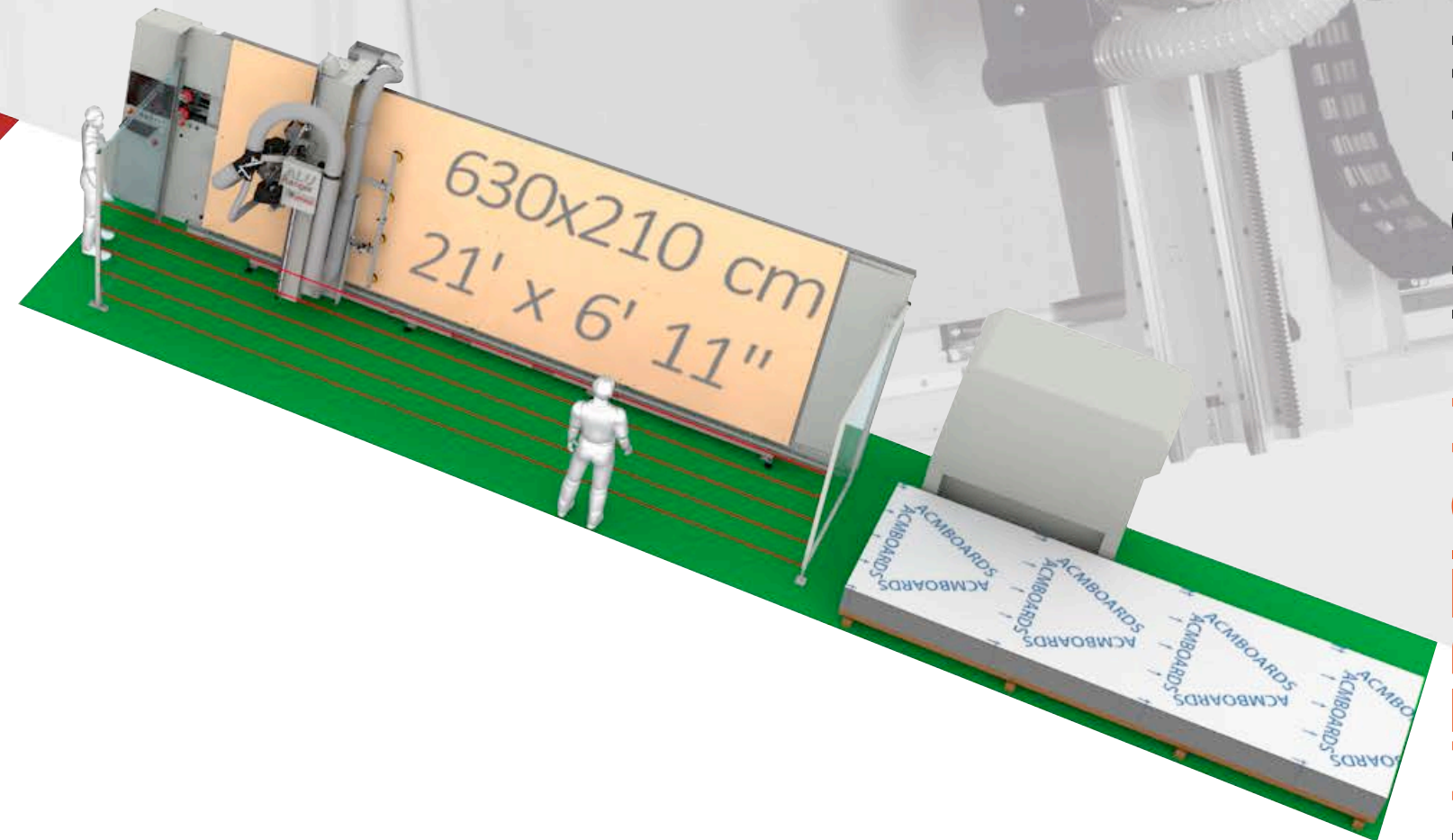
I AM VERTICAL, NO WASTED SPACE



CNC PANEL ROUTER
WITH **HORIZONTAL** TABLE

LAYOUT **121** mq - (1302 sq ft)

WORKING
TABLE **14** mq - (151 sq ft)



LAYOUT **49** mq - (527 sq ft)

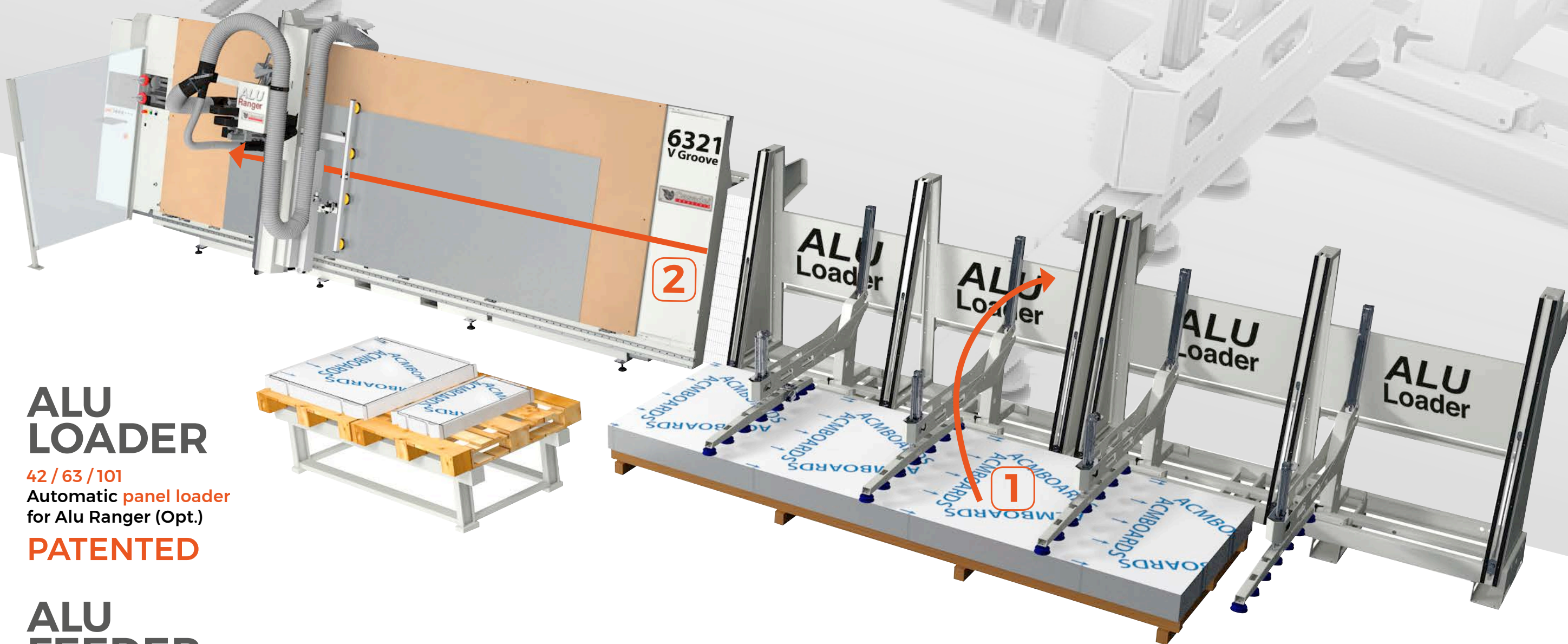
WORKING
TABLE **14** mq - (151 sq ft)

CNC PANEL ROUTER
WITH **VERTICAL** TABLE

**VGroove
6321**

Integrated automation

- Automatic loading and positioning without operators
- More productivity
- Less risk of panels falling
- Best possible access for panel downloading



ALU LOADER

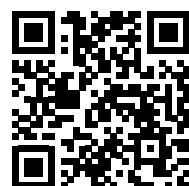
42 / 63 / 101
Automatic panel loader
for Alu Ranger (Opt.)

PATENTED

ALU FEEDER

Automatic panel positioning
system for Alu Ranger (Opt.)

Automatic loading of the panels
with holding arms and suction cups connected
to the vacuum holding system of Alu Ranger

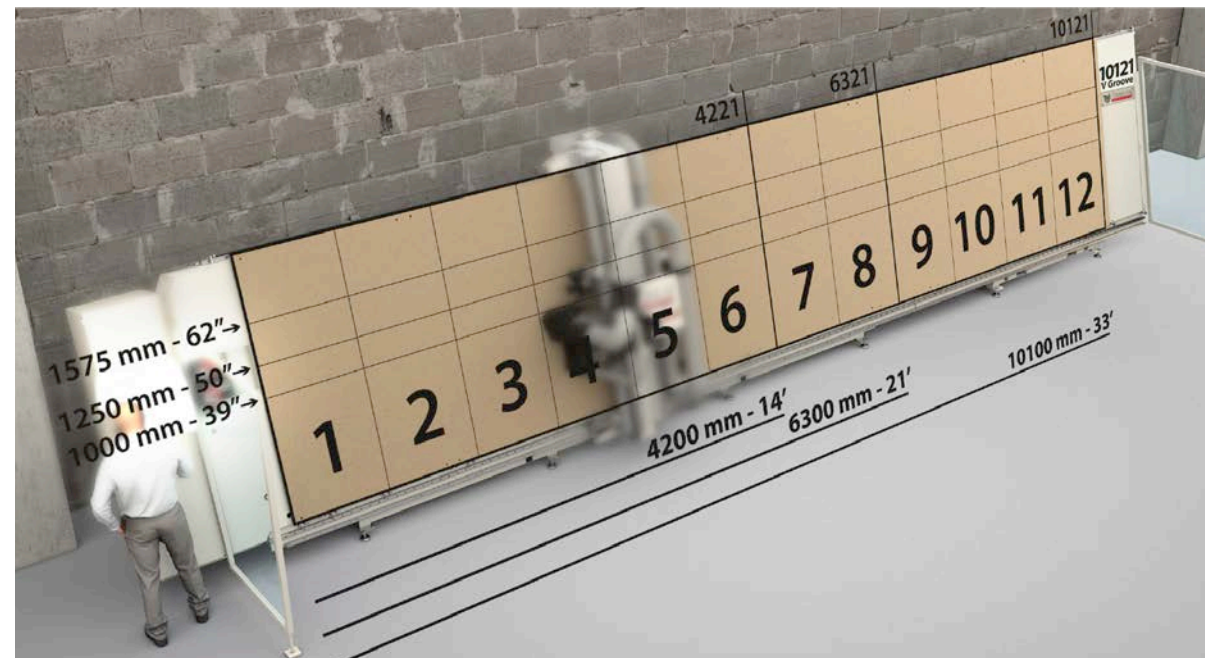


- ① Loading
- ② Positioning

I DO ALL THE LOADING

Panel Vacuum Holding

- Vacuum holding zones made for ACM panels
- Easy release for processed panels (patent pending)
- No risk of panel falling during downloading
- Vacuum pump integrated in the machine frame: less space required, less noise produced



- Vacuum panel holding with MDF sacrificial board.
- Automatic vacuum zone selection by control panel (6, 8, 12 zones).
- Manual vacuum zone selection (24, 32, 48 zones) as per ACM panel height (1.000; 1250; 1.575; 2050 mm - 39"; 50"; 62"; 80").

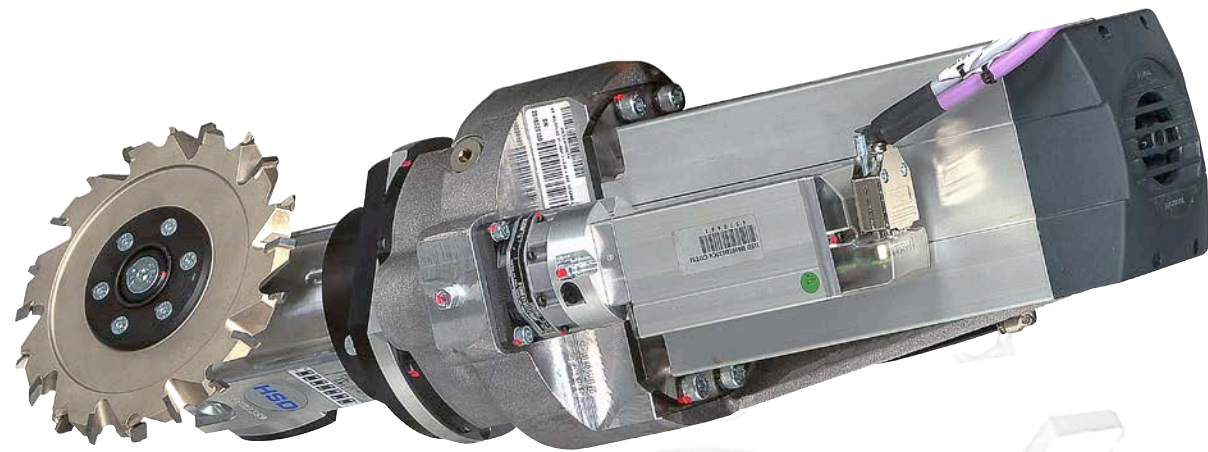


- Dry vacuum pumps (Made in Germany)
- 4221 VGroove 1x250m³/h pump Std
- 6321 VGroove 2x250m³/h pump Std
- 10121 VGroove 4x250m³/h pump Std

I HAVE A STRONG HOLD

The V175 VGroove unit

- Direct power to the tool (no aggregate)
- High speed processing
- Ready to go (no tool change)
- Long lifespan tool
- Dedicated dust collection hood



I KEEP CLEAN

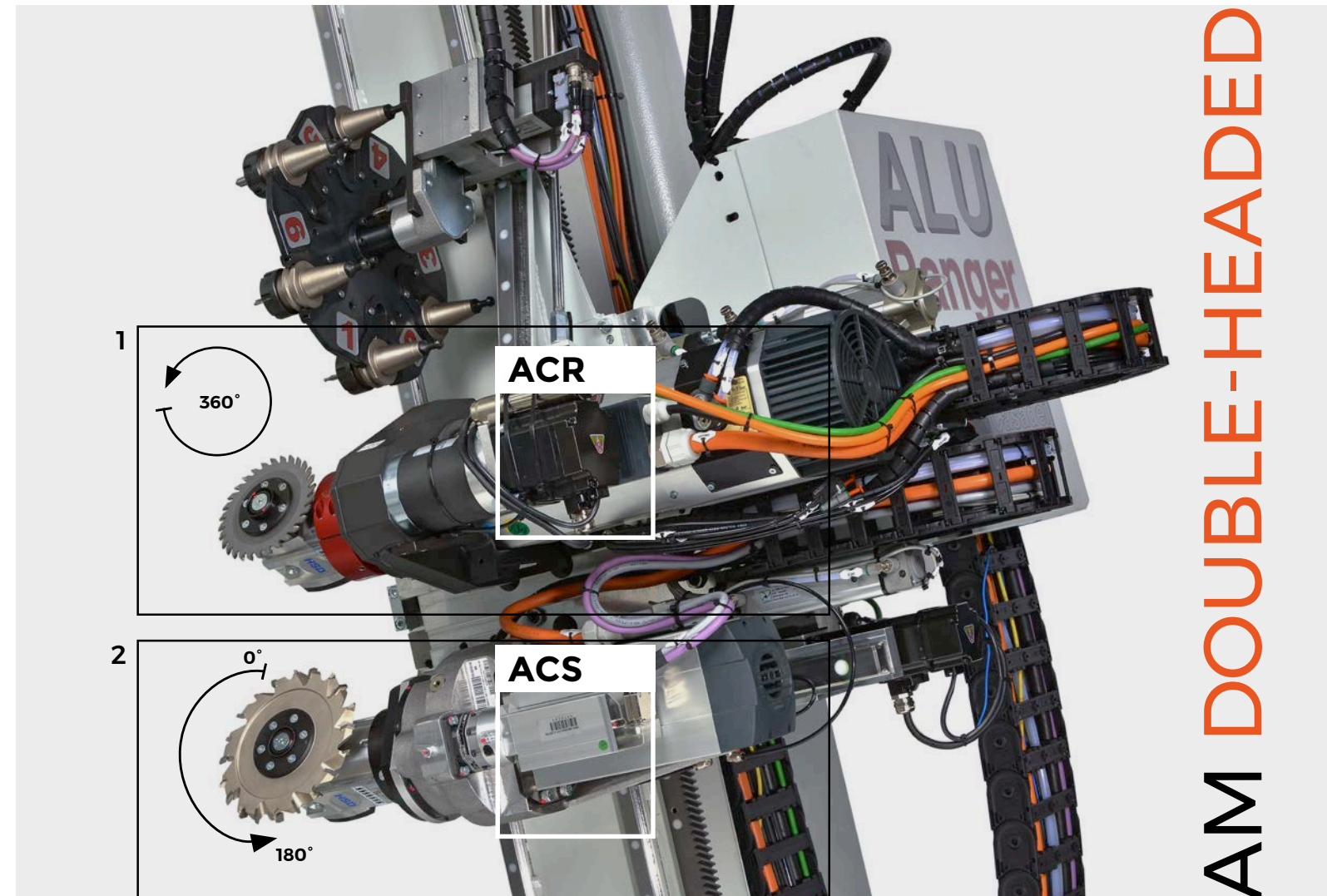
V-Grooving on ACM

HPL cut

Fibercement cut



No risk of dust breathing!



I AM DOUBLE-HEADED

R75A - TC6L

ELECTROSPINDLE FOR FLUTE TOOLS AND BLADE AGGREGATES

- High-efficiency electrospindle
 - High-resistance ceramic bearings
 - Power 7.5 kW - up to 24000 RPM - Electroventilated
 - Rotary tool changer (flute tools) 6 positions ISO 30 Cones - Collet ER32
 - Integrated dust collection hood

ACR OPTIONAL

- Fourth positioning Axis 0-360° to cut in any direction

V175 VGROOVE UNIT

INDEPENDENT AND SEPARATED ANGULAR ELECTROSPINDLE FOR GROOVING / CUTTING AT HIGH SPEED

- Power 5 kW - up to 8000 RPM
 - Carbide Vgrooving cutterhead ø175mm (Std)
 - Pneumatic rotation (0° or 90°) (Std)
 - Integrated dust collection hood
 - Sizing cuts on HPL with ø 250 mm - 10" saw blade

ACS OPTIONAL

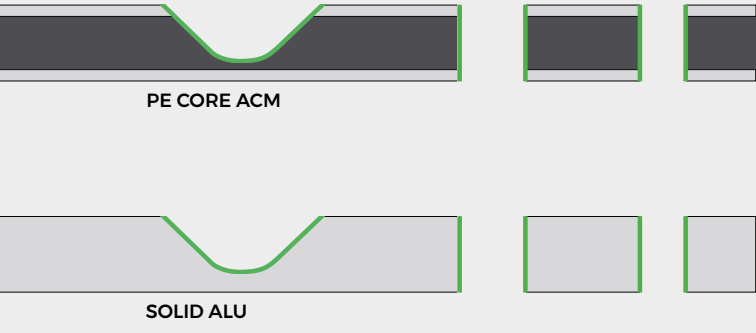
- Fourth positioning Axis from 0 to 180° for Vgrooving disc or sawblade

MATERIAL

VGroove with Rotary cutterhead

Flute tool route

Sawblade cut

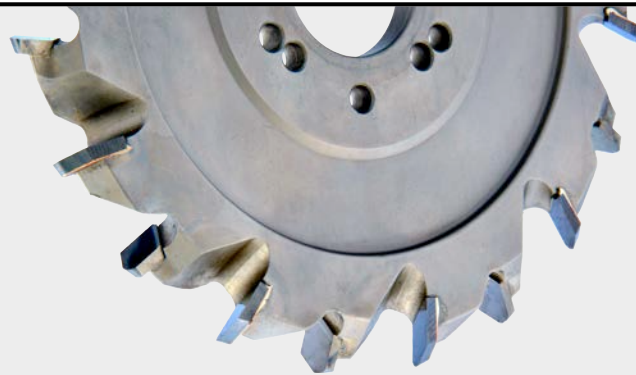


VGroove

FLUTE TOOL

CIRCULAR SAWBLADE

CUTTERHEAD



VGROOVE _ Ø 175 mm Z 10+10 WIDIA (std)
 processing speed: up to **50 mt/1'** (PE CORE)
 processing speed: up to **10 mt/1'** (Solid Alu)



Ø 4 mm WIDIA
 processing speed: up to **12 mt/1'** (core in PE)
 processing speed: up to **4 mt/1'** (Solid Alu)

Ø 6 mm WIDIA

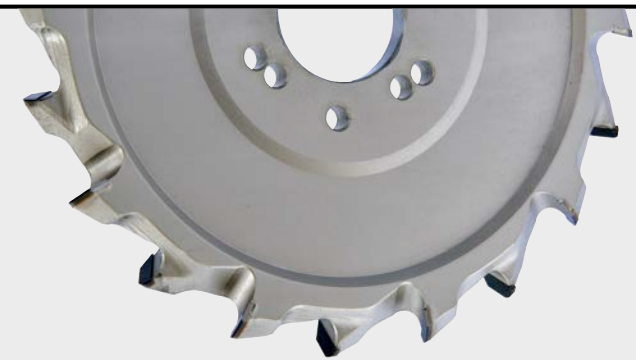
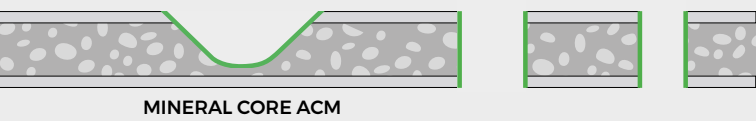
Ø 10 mm VGROOVE WIDIA



AGGREGATE WITH WIDIA CIRCULAR SAWBLADE _ Ø 125 mm
 processing speed: up to **50 mt/1'** (core in PE)
 processing speed: up to **10 mt/1'** (Solid Alu)



DIAMOND



VGROOVE _ Ø 175 mm Z 10+10 DIAMOND (opt)
 processing speed: up to **15 mt/1'**



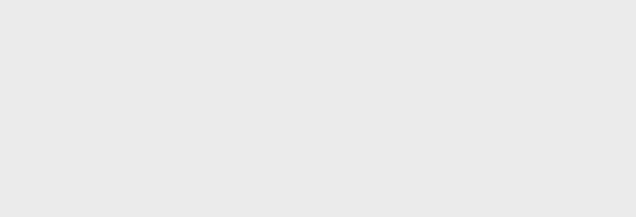
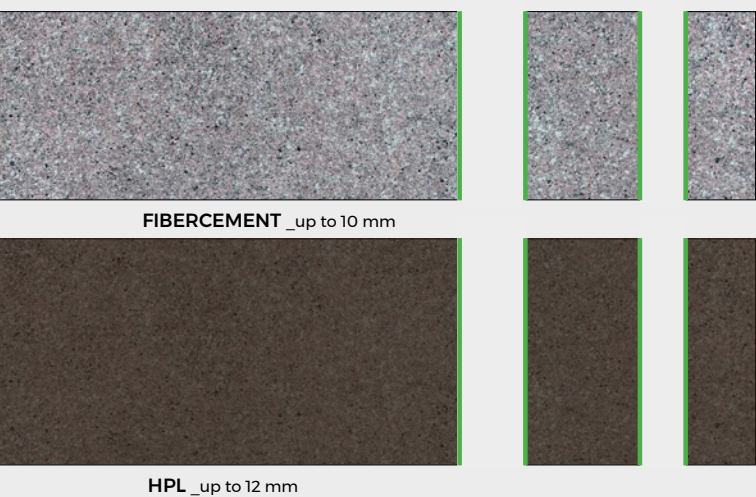
Ø 4 mm DIAMOND
 processing speed: up to **5 mt/1'**

Ø 6 mm DIAMOND

Ø 10 mm VGROOVE DIAMOND

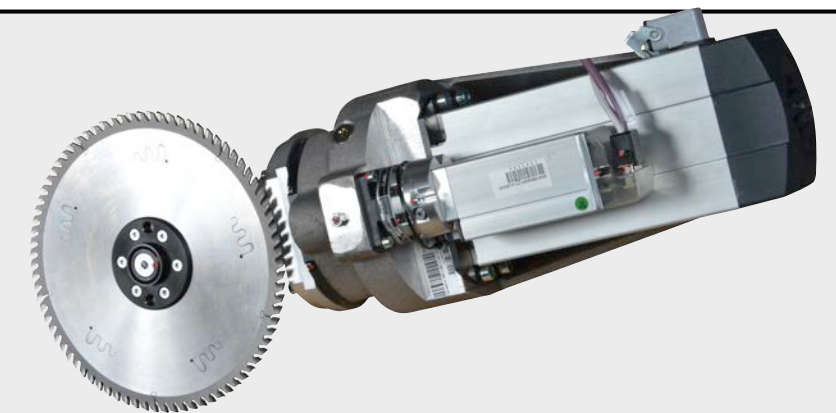


AGGREGATE WITH WIDIA CIRCULAR SAWBLADE _ Ø 125 mm
 processing speed: up to **10 mt/1'**



Ø 4 mm DIAMOND
 processing speed: up to **6 mt/1'**

Ø 6 mm DIAMOND



"VGROOVE" UNIT WITH WIDIA CIRCULAR SAWBLADE _ Ø 250 mm
 processing speed: up to **15 mt/1'**



I AM VERSATILE AND FAST

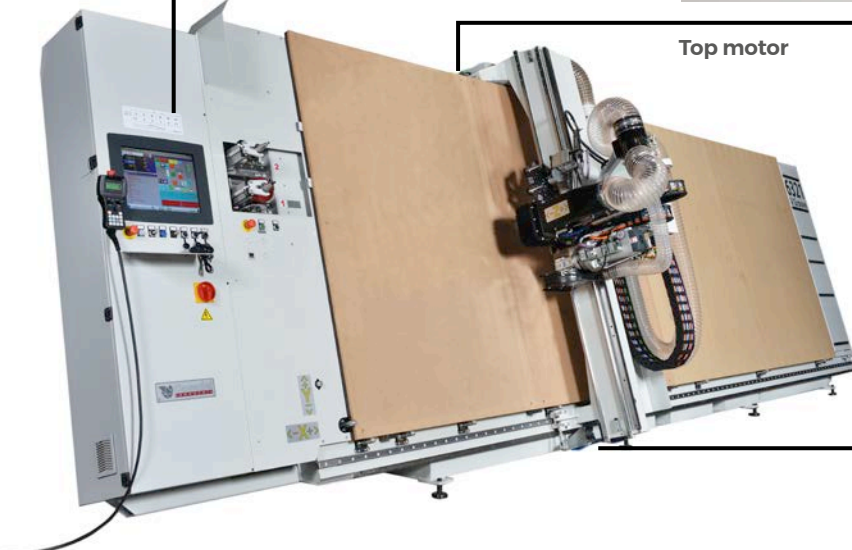


The Vertical way

- Table flatness granted by vertically machined frame
- The vertical sturdy structure increases the vibration absorption, shows less chattermarks during processing and gives a longer tool lasting
- Operator's safety is increased by side protections and light barrier



Electrical box and control panel integrated into machine frame



Top motor



Lower motor

I WAS MADE THIS WAY...



Hand-held remote control (Opt)

- 4 lines and 16 characters
- Axis manual control "JOG"
- Speed control "Override"



Automatic presetter for tool length

- Fully automatic
- Measurement tolerance $\pm 0.02 \text{ mm} \pm 0.0007 \text{ In}$



Industrial numerical control

- Up to 7 axis controlled (X,Y,Z interpolating)
- 17" LCD colour monitor
- Ethernet connection, USB, mouse



Origin pop-up stops

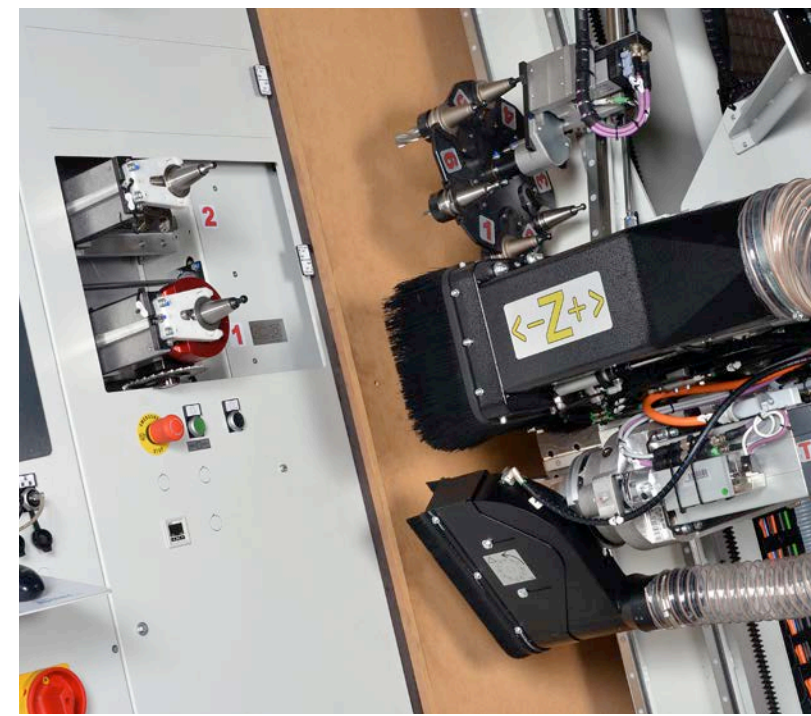
- Bearing for easy panel sliding
- Pneumatic control with safety sensor connected to PLC



Automatic lubrication for linear guides



Automatic lubrication for tools (Opt.)



Tool changer

- 9+1 available tools with automatic change
- Cone presence sensor



... AND I DO NOT MISS ANYTHING

PROGRAMMING WITH CAD/CAM SOFTWARE

DXF DRAWINGS

Possibility of creating, modifying and implementing

IMPORT OF DXF FILES

from Autocad® or other CAD programs

EXPORT OF CAM FILES

to Vertical Machining Centre

AUTOMATIC TOOL ASSIGNMENT

from DXF layer import

INTEGRATED MANAGEMENT

of tools available

NESTING OPTION

for optimizing processing operations

ADVANCED NESTING OPTION

for maximum reduction waste

MODULE

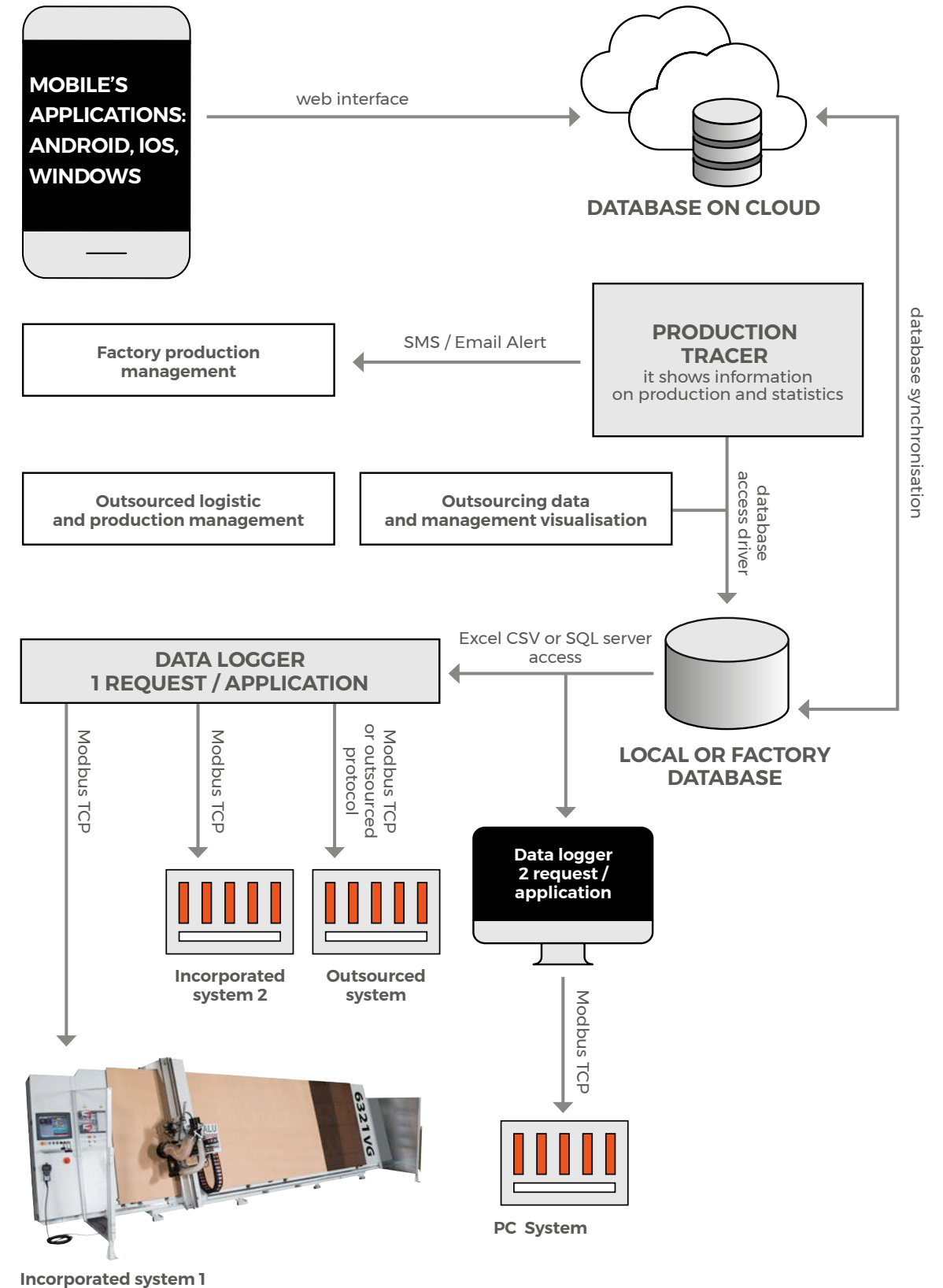
to calculate project costs

- cost of panels used for the façade
- cost for processing time
- operator's cost for cassette folding time
- cost of rivet and operator's cost for riveting
- assignment of any other cost regarding panel processing
- forecast for necessary panels for the job and for the processing time



I EXECUTE

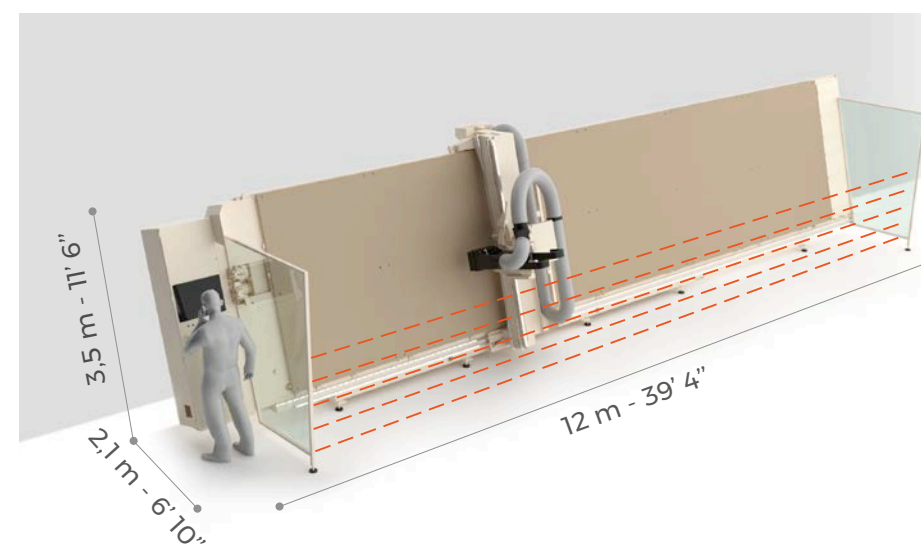
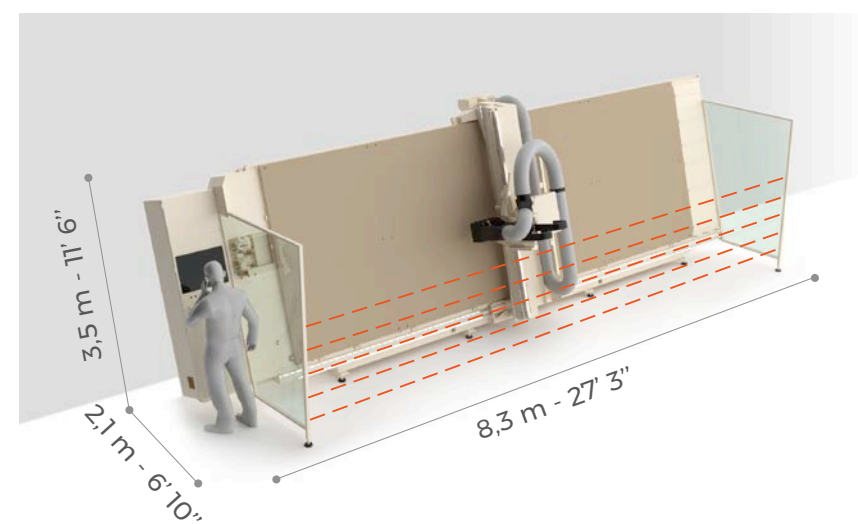
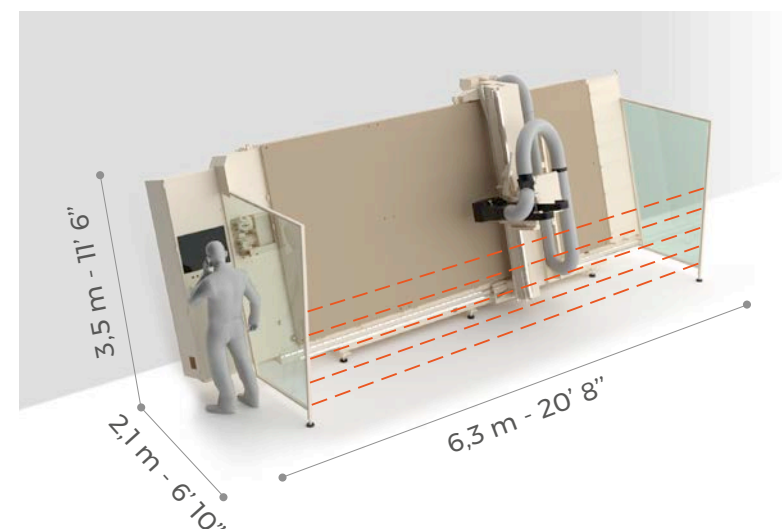
- Collaboration between operator, machine and devices
- System's integration



I AM SMART FACTORY_4.0

TECHNICAL CHARACTERISTICS

	ALU RANGER VGroove 4221	ALU RANGER VGroove 6321	ALU RANGER VGroove 10121
Working table (mm) Working table (imperial)	X 4200 - Y 2100 - Z 90 X 14' - Y 6' 11" - Z 3' ½	X 6300 - Y 2100 - Z 90 X 20' 8" - Y 6' 11" - Z 3' ½	X 10100 - Y 2100 - Z 90 X 33' 2" - Y 6' 11" - Z 3' ½
Panel holding, vacuum by working table with MDF sacrificial board (selection by PLC)	6 zones AUTO	8 zones AUTO	12 zones AUTO
Panel holding vacuum by zones combinations with manual activation (1000, 1250, 1575, 2050 mm) (39" - 50" - 62" - 80")	24	32	48
Vacuum pump	1 x 250 m3/h 1 x 147 Cfm	2 x 250 m3/h 2 x 147 Cfm	4 x 250 m3/h 4 x 147 Cfm
Axis speed (Rapid)	X 50 - Y 30 - Z 10 mt/min X 164' - Y 98' - Z 32' ft/1'		
Electrospindle R75A	7,5 Kw - collet ER32 up to 24000 g/min		
Automatic tool changer - head side TC6L	Rotary tool changer - 6 positions - ISO30 cones		
Automatic tool changer - working table side (for aggregates)	2 Std + 1 Opt.		
Routing head VGroove V175	5 Kw up to 8000 g/min		
Total power	ca. 14 KW	ca. 19 KW	ca. 35 KW
Max weight of panel under process	ca. 250 Kg ca. 550 Lb	ca. 350 Kg ca. 772 Lb	ca. 500 Kg ca. 1102 Lb
Total weight	ca. 2700 Kg ca. 5950 Lb	ca. 3600 Kg ca. 7930 Lb	ca. 5000 Kg ca. 11020 Lb



ALU RANGER 4221 VGroove

WORKING TABLE
X 4200 - Y 2100 - Z 90 mm
X 14' - Y 6' 11" - Z 3' ½
 SURFACE OCCUPIED
L 6,3 m - P 2,1 m - H 3,5 m
L 20' 8" - P 6' 10" - H 11' 6"
 WORKING TABLE SURFACE
8,8 m² - 95 sq ft
 SURFACE OCCUPIED
ca. 13 m² - 140 sq ft

ALU RANGER 6321 VGroove

TABLE SURFACE
X 6300 - Y 2100 - Z 90 mm
X 20' 8" - Y 6' 11" - Z 3' ½
 SURFACE OCCUPIED
L 8,3 m - P 2,1 m - H 3,5 m
L 27' 3" - P 6' 10" - H 11' 6"
 WORKING TABLE SURFACE
14 m² - 151 sq ft
 SURFACE OCCUPIED
ca. 17,5 m² - 188 sq ft

ALU RANGER 10121 VGroove

TABLE SURFACE
X 10100 - Y 2100 - Z 90 mm
X 33' 2" - Y 6' 11" - Z 3' ½
 SURFACE OCCUPIED
L 12 m - P 2,1 m - H 3,5 m
L 39' 4" - P 6' 10" - H 11' 6"
 WORKING TABLE SURFACE
21 m² - 226 sq ft
 SURFACE OCCUPIED
ca. 25,2 m² - 271 sq ft

MY DIMENSIONS



— **ProComposite**Tech —

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