

HIGH SPEED NESTING CNC ROUTER EXCITECH EK SERIES

INNOVATION IN WOODWORKING



POWELL CNC

EXCITECH EK SERIES NESTING CNC ROUTER

INNOVATION IN WOODWORKING



A SINGLE WORK CENTRE FOR NESTING BASED CNC MACHINING OF PANELS

State of the art technology at an affordable price with robust components for long working life and rock solid reliability. The EK Series CNC Routers offer versatility for small to large workshops who wish to produce panel furniture of high quality with maximum precision.

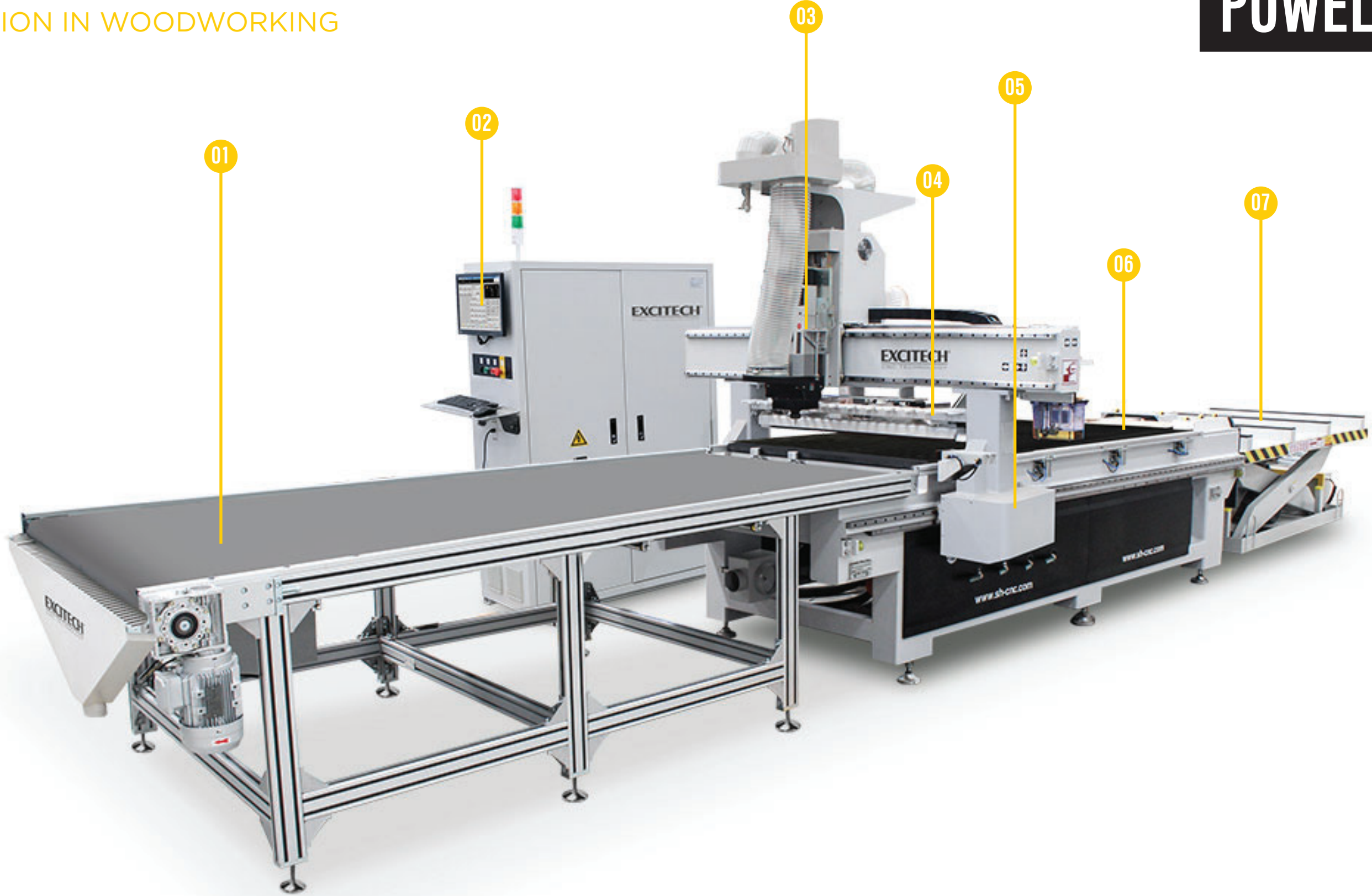
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EXCITECH EK SERIES THE HIGHLIGHTS

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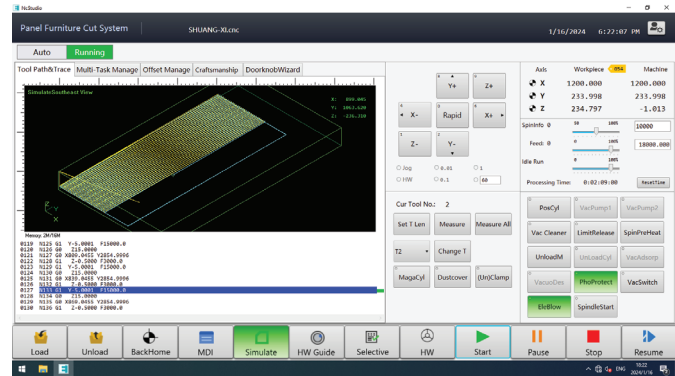
01 Optional Conveyor Unloading

The machine can be optionally equipped with an automatic unloading table for quick material changes after nested machining.



02 NC Control

State of the art NC Controller, simple to use with intuitive interface. Complete closed loop control with digital absolute servo motors with EtherCAT connectivity. Pinpoint accuracy and speed for reliable machining in both 2D and 3D.



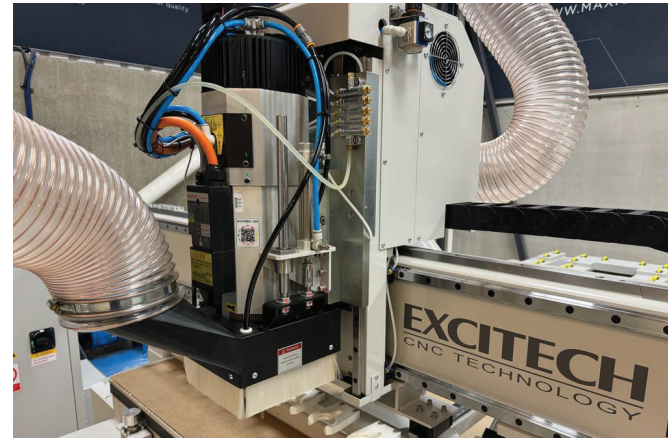
Dust Free Processing

Special nose cone dust blower, dislodges dust from the cutting groove to improve dust extraction efficiency.



03 ATC Spindle

High power 9kw Excitech air cooled spindle with ISO 30 tool interface. Inverter controller from 3000-24000RPM for perfect cutting.



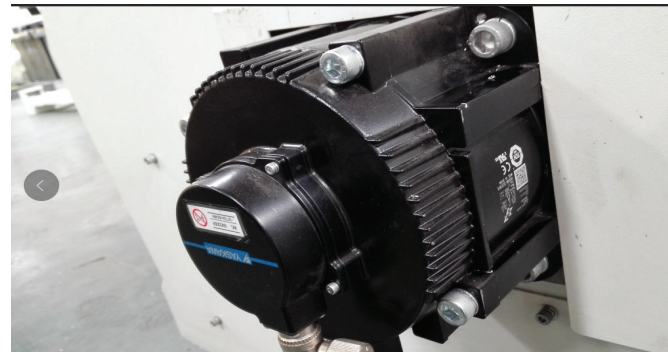
04 12 Position Linear ATC

Fast linear tool changer mounted under the gantry for quick tool changes anywhere on the bed. 12 Positions for maximum flexibility.



05 High Performance Transmission

High performance servo motors with absolute encoders and helical rack and pinion transmission provide high speed pinpoint machining.



06 Zoned Vacuum Table

Vacuum matrix table, zoned to suit popular sheet sizes for optimal material clamping.



07 Material Loading & Label Printing

Optional automatic material loading and/or label printing. Allows edging information to be printed directly to the panel for easy post processing.



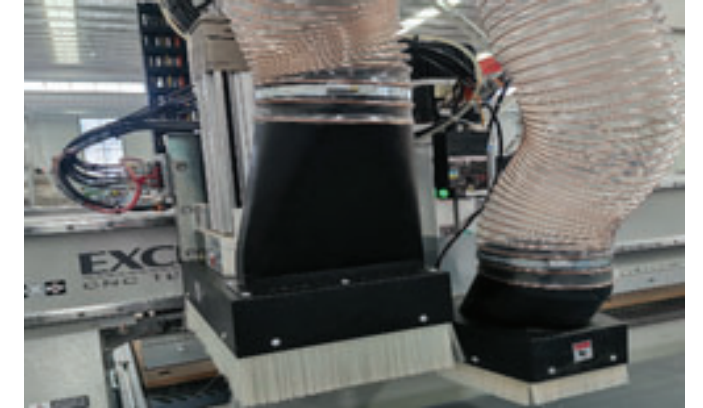
Safety Enclosure to CE

Safety enclosure for two sides plus one side photo-electric barrier to protect the operator at all times. (Three sides + 1 available on request).



Optional Drill Bank

Optional vertical drilling bank with 9 vertical drill positions for fast drilling of panels.



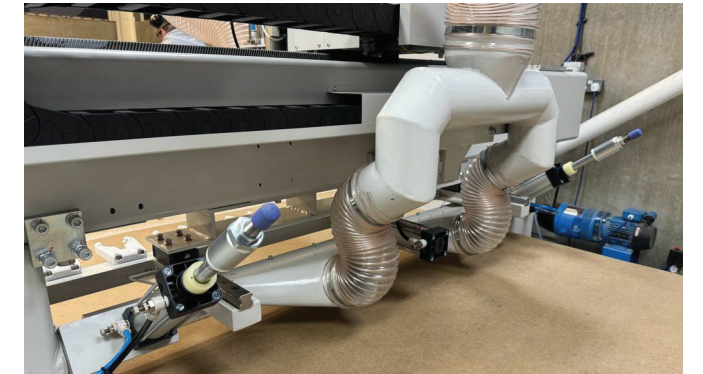
Professional Control cabinet

Professionally constructed control cabinet wired to CE standards.



Optional Sweeper Pusher

Sweeper under the gantry for extracting leftover dust on the spoil board.



EXCITECH EK SERIES SIZES & SPECIFICATION

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ITEM	EK-1228 (1230)	EK-1530	EK-2128 (2130)
TRAVELLING AREA	2900 (3140) x 1260 x 200MM	3140 x 1600 x 200MM	2900 (3140) x 2100 x 200MM
WORKING AREA	2850 (3050) x 1220 x 50MM	3100 x 1560 x 50MM	2850 (3050) x 2070 x 50MM
ACCURACY	WORKING ACCURACY: 0.05 mm		
	REPOSITIONING, 0.05/500 mm		
TABLE STRUCTURE	SINGLE LAYER PVC VACUUM MATRIX TABLE, DIVIDED IN ZONES		
TRANSMISSION	HELICAL RACK XY, BALLSCREW Z		
SPEED	MAX RAPID: X55 - Y90 - Z15 m/min		
	MAX FEEDRATE: 20 m/min		
SPINDLE TYPE	EXCITECH 9KW ISO 30 AIR COOLED ATC		
SPINDLE SPEED	3000-24000 RPM		
TOOL MAGAZINE	LINEAR 12 POSITION UNDER GANTRY FOR FAST TOOL CHANGES		
DRILL BANK	OPTIONAL 9 VERTICAL DRILL BANK		
VACUUM	1 X 250M3/HR	2 X 250M3/HR	2 X 250M3/HR
DRIVE	SERVO/PLANETARY GEARBOX		
NC CONTROLLER	EXICON DIGITAL CLOSED LOOP		
SOFTWARE	EXCICAM/VECTRIC & OTHER OEM CAD/CAM		
COMMAND CODE	ISO G-CODE		
ELECTRICAL	3-PHASE 400V, 1 X 32A MACHINE MAIN		
COMPRESSED AIR	CLEAN & DRY, 12CFM @ 8 BAR		
WEIGHT	2500 (2800)kgs	3000kgs	3400 (3800)kgs
INSTALLED FOOTPRINT	5000 x 4000 mm	6000 x 4000 mm	6000 x 5000 mm

A COMPLETE SOLUTION FOR CNC NESTING

The EK series CNC machine comes in different table sizes to accommodate different sheet sizes available across various industries. Below is some of the key highlights of the machine specification:

- Excitech 9Kw ISO 30 Long Nose ATC Spindle.
- Spindle nose mounted dust blower for optimum dust extraction
- Tool Rack with 12 positions, linear type for fast tool changes
- Powerful Inovance digital servo motors and drivers with absolute encoders
- High performance vacuum table, zoned with high power vacuum pump
- State of the art NC Controller, with job manger for loading production lists
- Machine run statistics, program log and machining runtime data
- Remote access and fault finding
- Material location popup pins
- 90m/min rapid in Y axis
- MDF spoil board secured to the matrix table with bolts for accurate Z levels
- Compaible with most commercial grade CAD/CAM
- Vectric Cut 2D pro CAD/CAM
- MPG XYZ hand wheel for easy origin and work piece datum setting
- Installation and Maintenance manual
- 12 Month warranty
- Delivery, Installation (not unloading) , commissioning & training
- Safety Fencing and light barriers (2 sides fence 1 side light barrier) to CE
- Optional automatic loading
- Optional automatic labelling
- Optional automatic unloading
- Optional sweeper under gantry for cleaning residue dust

SOFTWARE FOR PANEL FURNITURE & STAIRS

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MAKE THE MOST OF YOUR NEW CNC INVESTMENT

- Fast and accurate parametric design software
- Direct transfer to your machine for manufacture
- Instant pricing and 2D/3D presentations for your clients

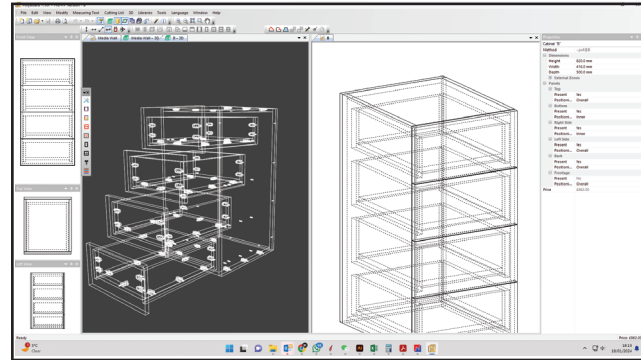
Polyboard for Furniture...



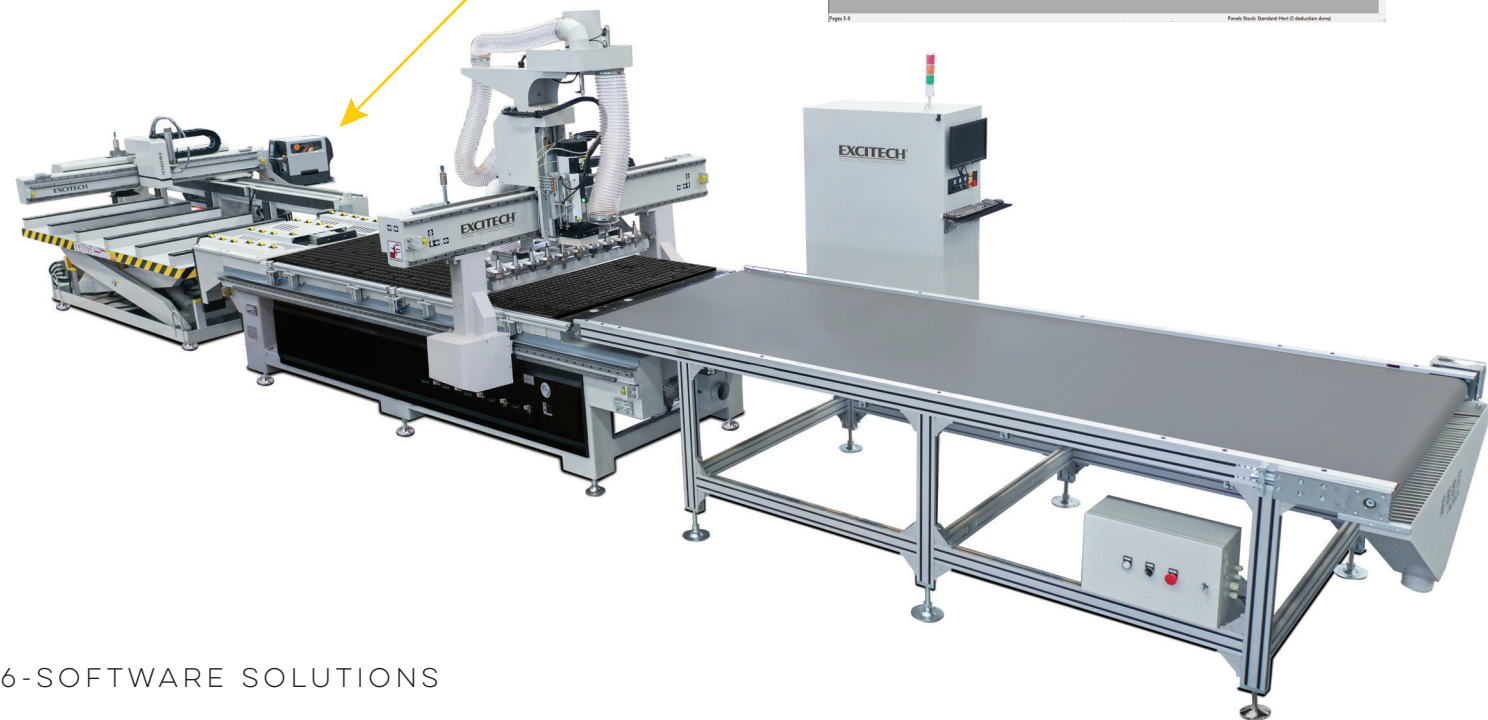
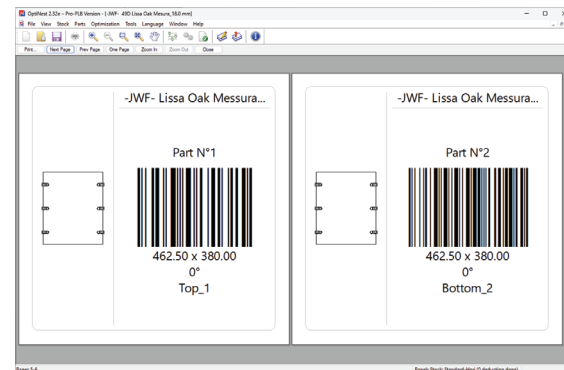
Powerful and easy to use:

- Fully parametric 2D/3D design
- Simple materials based workflow
- Automatic assembly, manufacturing and hardware management

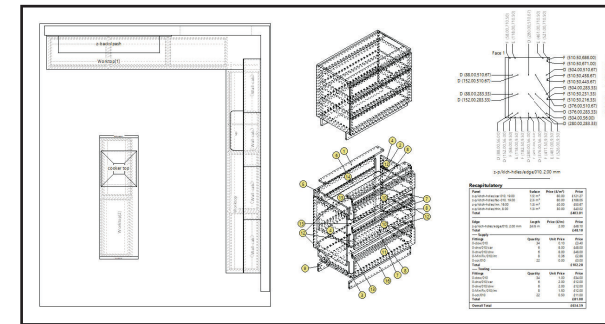
Quick design libraries with all major hardware



Custom labels with edge information

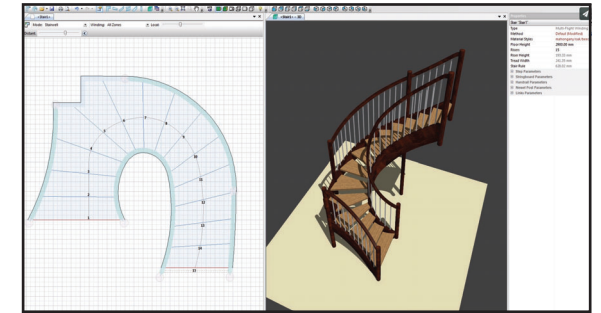


and StairDesigner



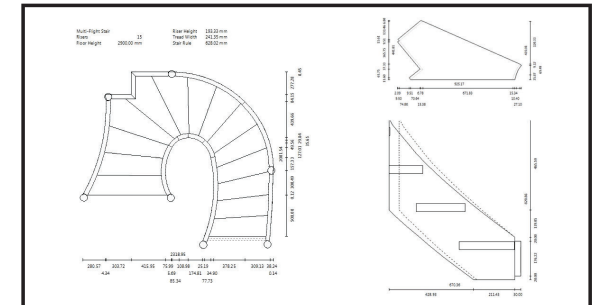
Instantaneous working documents:

- 100% accurate project plans
- Plans of each unit and each part
- Cutting and materials lists
- Costs dynamically updated
- Maxicam/Powell CNC ready output



Design any stair in minutes:

- Straight and winders,
- Curved and geometrical stairs
- Rails and banisters
- Wood, cement and metal stairs



Input dimensions for immediate:

- 2D plans of the stair and all parts
- Real 3D models for verification and client presentations
- Working documents for manufacturing
- DXF files for CNC machining

Seamless integration of your entire design and manufacturing process

EK PRO CNC

in association with



POWELL CNC ABOUT US

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Powell CNC UK



Production workshop 1



Powell CNC France



Milling Machine Workshop



Excitech China



Production workshop 2

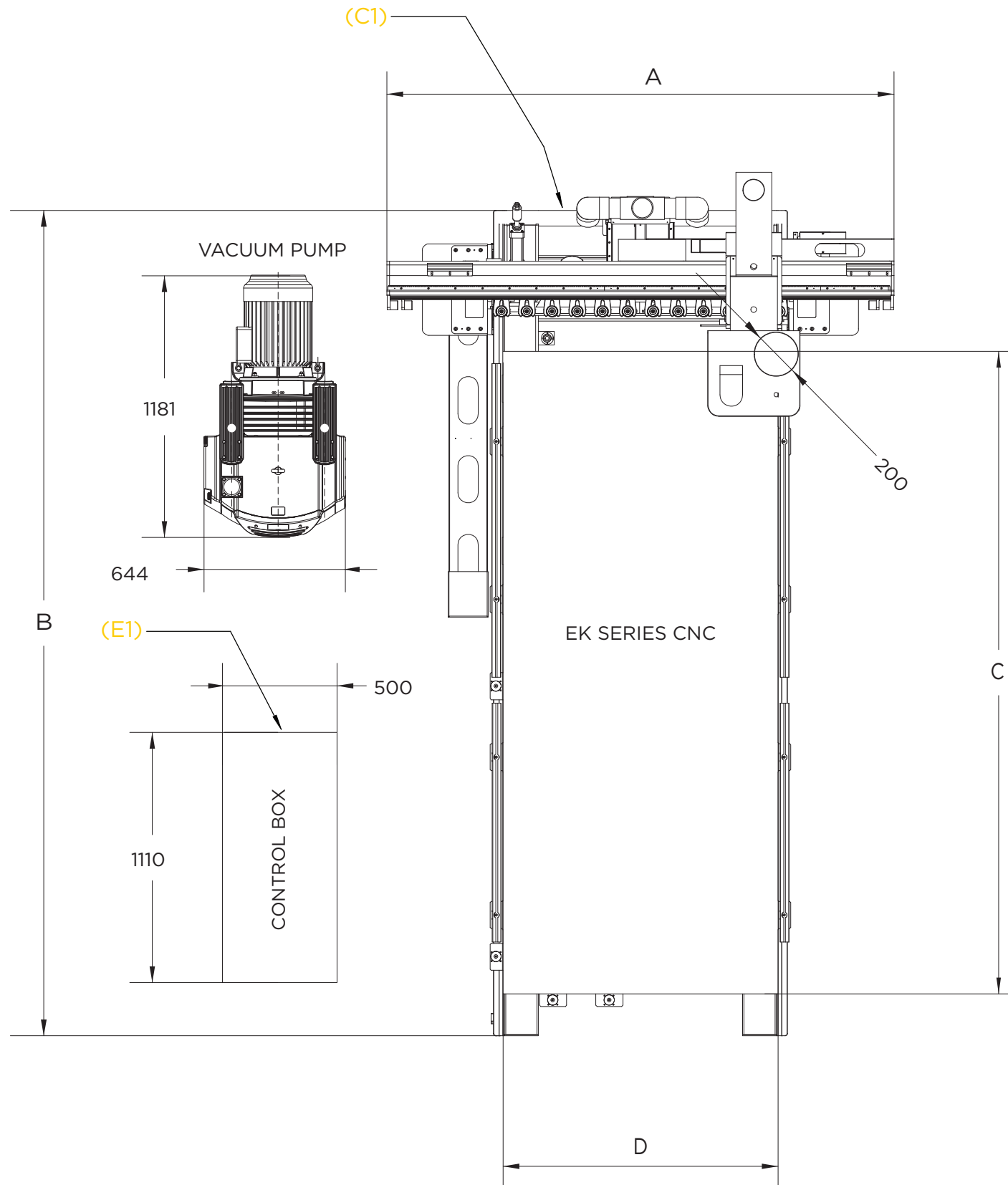
WHY CHOOSE POWELL CNC?

We are passionate about our machines. Your success is our success. We want your business to thrive and flourish and our goal is to help you take your business to the next level. Excitech CNC machines are manufactured in our own modern designed purpose built factory. Excitech are the largest router manufacturer in Asia with current orders of 200 machines per month, supplied domestically and through a network of 36 dealers worldwide. Powell CNC has been the exclusive dealer for Excitech for the UK and Ireland territories for nearly 15 years and has a huge amount of retained CNC experience drawing on over 20 years experience.

- Only use components from the leading brands in automation
- Huge amount of spare parts in stock
- Emphasis on after sales support, average call out response 48 hours
- 80% of technical queries solved within 1 hour via remote access or telephone/email
- Expert knowledge in CNC Controls and servo motor tuning for superior edge finishes and productivity.
- Input in to the machine design and controller for nearly 10 years to supply a truly European quality machine.
- Expert technical knowledge on machining a wide variety of materials, such as composites, engineering plastics, plywood, hardwood, softwood, aluminium, brass, acrylic, diabond etc
- Expert advice on tooling, tooling and consumables can be supplied directly from our own online store www.shop.powellcnc.com
- We don't just sell machines all our engineers are fully trained in their operation for production purposes.
- Powell CNC machines can be run from any CAD/CAM system, we have Post Processors for a wide range of software e.g. Vectric, ArtCAM, Fusion 360, SolidCAM, SolidEdge, AlphaCAM, DelCAM, MasterCAM
- Due to the vast array of machines in our range we retain expert technical knowledge covering many different industries, such as pattern making, furniture, sign making, plastic fabrication, woodworking, arts and crafts, engineering and many more.

EXCITECH EK SERIES FLOOR PLAN

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MODEL	EK-1228	EK-1230	EK-1530	EK-2128	EK2130
A	2250mm	2250mm	2580mm	3190mm	3190mm
B	3660mm	4170mm	4170mm	4030mm	4170mm
C	2850mm	3105mm	3105mm	2850mm	3105mm
D	1220mm	1220mm	1560mm	2130mm	2130mm
Net Weight	2500kgs	2500kgs	3000kgs	3400kgs	3800kgs

ELECTRICAL (E1)

1 X 5PIN C-FORM SOCKET 3-PHASE 32A MACHINE MAIN

COMPRESSED AIR (C1)

1 X LEVER BALL VALVE WITH 12MM PUSH FIT CONNECTION
CLEAN DRY AIR @ 12CFM 8 BAR (CONSTANT)

NB: FOR LONG TERM STABILITY A SUITABLE FLAT CONCRETE FLOOR OF 350MM IS REQUIRED

SOLUTIONS FOR PANEL FURNITURE

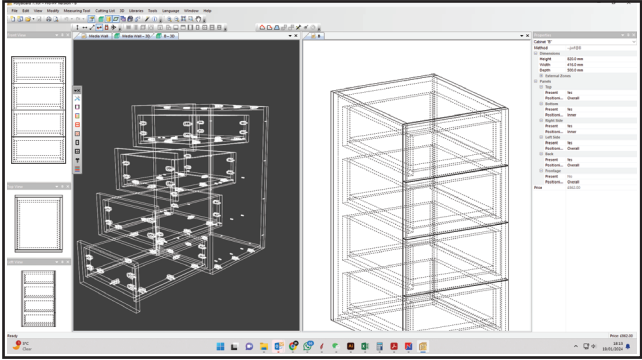
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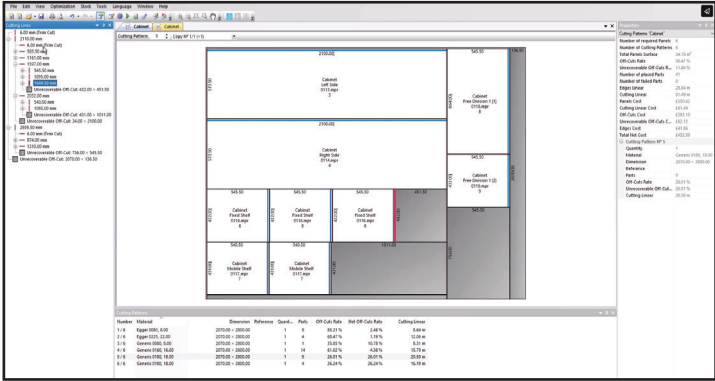
COMPLETE SOLUTIONS FROM POWELL CNC

- Create projects fast with parametric design 2D & 3D design
- Direct transfer to your machine for manufacture with working documents
- Label information for edgebander, no guessing which side to be edged
- Drilling data direct to the drilling machine for all hardware fixings

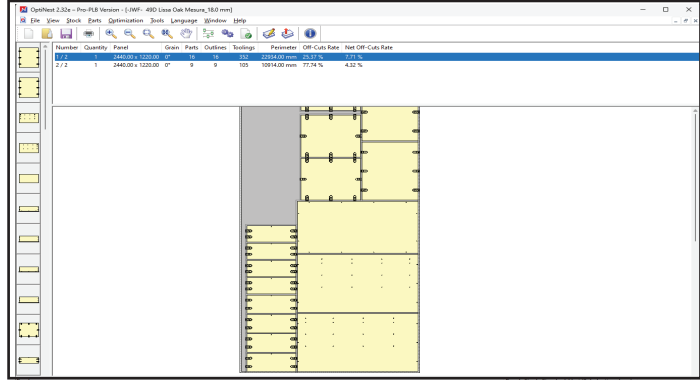
POLYBOARD PARAMETRIC DESIGN



OPTICUT NESTING FOR BEAM SAWS



OPTINEST CNC NESTING SOLUTION



EP SERIES BEAM SAW



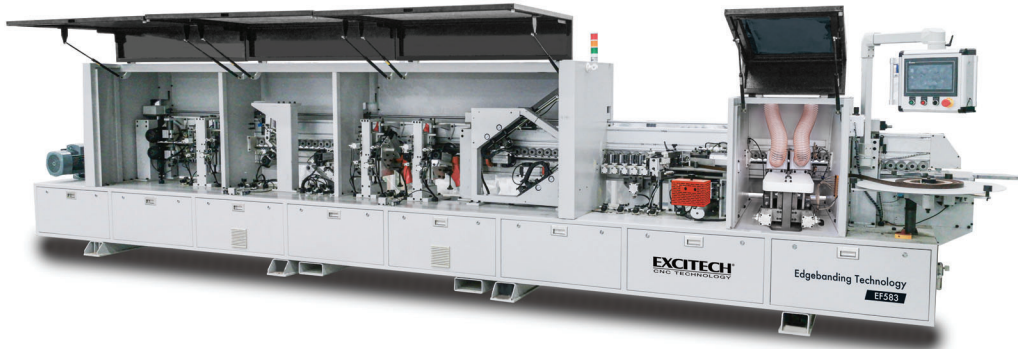
EHS 6 SIDE DRILLING MACHINE



EK SERIES AUTOMATIC LABEL & NESTING CNC



EF583 AUTOMATIC EDGE BANDER



POWELL CNC CONTACT DETAILS

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