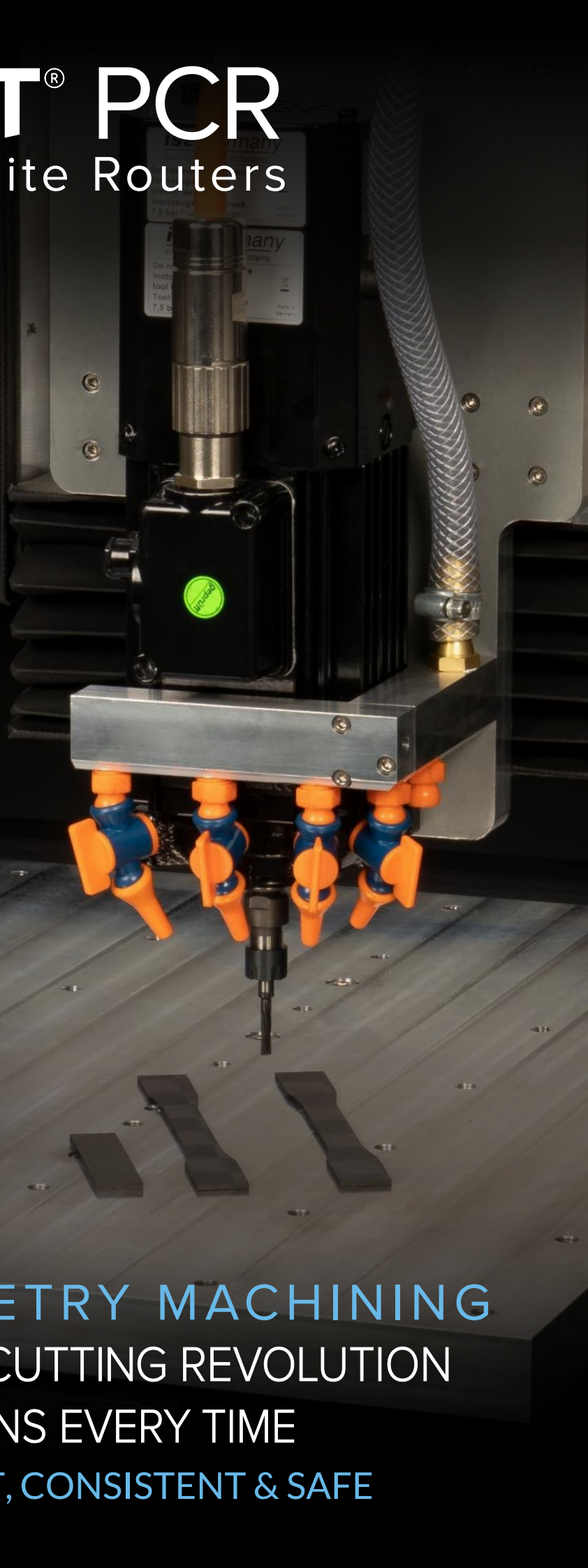
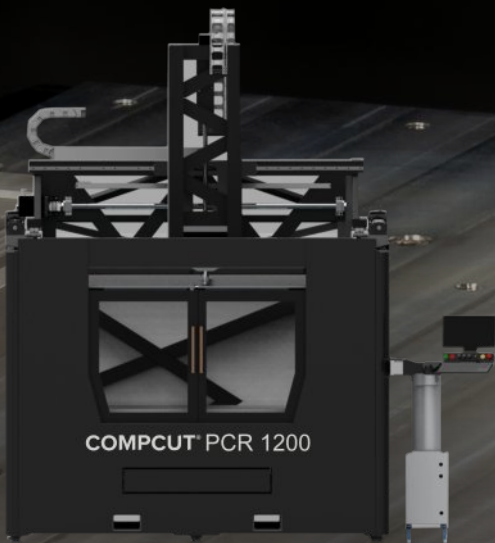


COMPCUT[®] PCR

Precision Composite Routers



COMPCUT[®]
ADVANCED COMPOSITE MACHINING

COMPLEX GEOMETRY MACHINING
JOIN THE COMPOSITE CUTTING REVOLUTION
PERFECT TEST SPECIMENS EVERY TIME
FAST, ACCURATE, EFFICIENT, CONSISTENT & SAFE

COMPCUT® PCR

PRECISION COMPOSITE ROUTERS

Fully enclosed 3 Axis hybrid machine tools designed for fast, accurate machining of complex geometries in composite materials

With a deliberate focus on the cutting of complex geometries from the most challenging of contemporary composites, the Compcut PCR precision composite router range offers a 'hybrid' solution. This unique machine cleverly incorporates elements from CNC routers such as a high speed spindle, large working bed and easy flat laminate compatibility together with the precision and flood coolant capability of a vertical machining centre – all of which is packaged within Compcut's fully enclosed and intuitively 'easy to operate' working environment.



FAST & PRECISE

Zero backlash ballscrews with precision guides on each axis. Rapid speeds up to 3000mm/m*.



ACCURATE & REPEATABLE

Test your specimens straight from the machine with unrivalled surface finish.



SAFE & SIMPLE

Your engineers can cut with confidence; Our fully enclosed work area protects from dust and spray.



TOOLS & MATERIALS

Compcut have developed a comprehensive range of cutting tools and processes to support machining across a wide variety of composite materials.

- Carbon Fibre Reinforced Polymer (CFRP)
 - Ceramic matrix composites (CMC)
 - Aluminum matrix composites
 - Thermoplastic Composites TPRC
 - GRP
 - Plastics
 - Aramid Fibre composites
- (See brochure for more info on tools)



PROGRAMMING

Pre-programmed with part-programs for supplied fixtures, or to customers' specific requirements.

- G Code programming
- CAD - CAM workflows for various CAM packages
- Drag and Drop Specimen layout creation - Coming soon.



JIGGING, WORK HOLDING, FIXTURES

The PCR allows for a full range of solutions, from a fully wet or dry vacbed, to custom made fixtures and tooling.

Common parts include:-

- CAI's
- Tensile Dog Bones
- V-Notches
- Bearing Response
- Specimens
- Open Hole Specimens

MACHINE TOOL or MACHINING SOLUTION

The Compcut PCR range is available as machine tool to be used by your CNC machinist, or as a 'Packaged Solution', featuring; cutting tools, jigging and work holding for your components, together with a full suite of part-programs.

TECHNICAL SPECIFICATIONS

The Compcut PCR range of precision composite routers are Fully enclosed 3 Axis hybrid machine tools designed for fast, accurate machining of complex geometries in composite materials

COMPCUT® PCR Precision Composite Routers

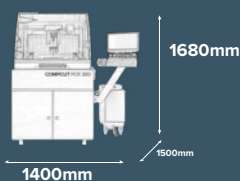


	COMPCUT® PCR 300		COMPCUT® PCR 600	COMPCUT® PCR 1200	
Material Capacity					
CLEARED PANEL SIZE	300 X 300 MM		600 X 600 MM	1200 X 1200 MM	
MATERIAL THICKNESS/CUT DEPTH*	0 - 50 MM - SUBJECT TO TOOL		0 - 50 MM - SUBJECT TO TOOL	TBA MM - SUBJECT TO TOOL	
AXIS TRAVEL X, Y, Z	310, 310, 130 MM		620, 620, 130 MM	1250, 1250, 700 MM	
BRIDGE / TABLE CLEARANCE	130 MM		130 MM	800 MM	
COOLANT CAPABILITY	FLOOD COOLANT WITH BAG FILTER		FLOOD COOLANT WITH BAG FILTER	FLOOD COOLANT WITH BAG FILTER	
Enclosure					
ENCLOSURE	FULLY ENCLOSED - EXTRACTABLE		FULLY ENCLOSED - EXTRACTABLE	FULLY ENCLOSED - EXTRACTABLE	
Spindle					
SPEED	5,000 TO 50 000 RPM	5,000 TO 50,000 RPM	5000 TO 50,000 RPM	5,000 TO 50,000 RPM	
SPINDLE POWER	3KW S1 5KW max	3KW S1 5KW max	3KW S1 5KW max	3KW S1 5KW max	
TOOL HOLDER & COLLECT	HSK-E25 & ER16		HSK-E25 & ER16		HSK-E25 & ER16
AUTOTOOL CHANGER	OPTION	3 STATION	5 STATION	10 STATION	
TOOL SHANK	1 - 10 MM		1 - 10 MM	1 - 10 MM	
CONCENTRICITY / RUN-OUT	< 1uM		< 1uM	< 1uM	
Speeds					
RAPID SPEEDS X, Y, Z	50 MM/S	300 MM/S	300 MM/S	300 MM/S	
CUTTING SPEEDS	0.1 - 50 MMS	0.1 - 100 MMS	0.1 - 100 MMS	0.1 - 100 MMS	
Accuracy, Perpendicularity, Parallelism					
TYPICAL SPECIMEN PERPENDICULARITY	TBA		TBA	TBA	
TYPICAL SPECIMEN PARALLELISM / 100MM*	TBA		TBA	TBA	
TYPICAL SPECIMEN PARALLELISM / 300MM*	TBA		TBA	TBA	
TYPICAL SPECIMEN PARALLELISM / PANEL	TBA		TBA	TBA	
TYPICAL SPECIMEN PARALLELISM / CUT L	TBA		TBA	TBA	
TYPICAL SPECIMEN DIMENSIONAL ACCURACY	TBA		TBA	TBA	
TYPICAL SPECIMEN PARALLELISM Z PLANE	TBA		TBA	TBA	
Required Services					
POWER	220V 1PH 16A	415V 3PH 16A	415V 3PH 16A	415V 3PH 32A	
AIR - DRIED & FILTERED	100 - 150 PSI		100 - 150 PSI	100 - 150 PSI	
EXTRACTION	APPLICATION SPECIFIC	APPLICATION SPECIFIC	APPLICATION SPECIFIC	APPLICATION SPECIFIC	

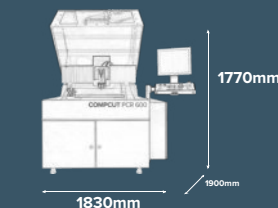
* PCR300 PRO, PCR600, PCR1200.
Weights are approximate and exclude packaging/shipping.

External Dimensions: (W)x(D)x(H)

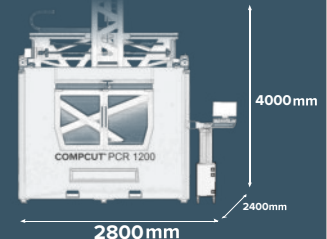
COMPCUT PCR 300



COMPCUT PCR 600



COMPCUT PCR 1200



Working area / Panel sizes:



Why not take the **Compcut Challenge**

When producing test samples,
are you traditional or cutting edge?



Supply a selection of your materials for us to cut on the Compcut machines,
and we can demonstrate how Compcut can enhance or improve your cutting
processes and provide you with a selection of test ready samples.

Scan the QR code to find out more:

**The PCR range stands out as a truly unique machine tool system
geared to the cutting of complex geometries from the most
challenging, contemporary composites.**

The end result of this comprehensive development pathway - is essentially
a hybrid machining solution – incorporating elements from CNC routers
such as a high speed spindle, large working bed and easy flat laminate
compatibility together with the precision, flood coolant and fully enclosed
structure common to a vertical machining centre.

The PCR Range therefore offers a unique machining approach tailored to the cutting of
complex geometries from the most challenging, contemporary composites,
such as the ever increasing variety of complex materials that include;
thermoplastics, ceramics and aluminium matrixes.

POWERED BY **SHARP & TAPPIN**

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