# THE **EXTEC**® LABCUT 5000® ADVANCED COMPOSITE PLATE SAW SERIES



A completely new and upgraded design is your solution to accurate and repeatable test specimens. Highly accurate composite test specimens **go directly from the Extec Labcut 5000**<sup>®</sup> **to test.** 

## **ADVANCED FEATURES:**

- Stainless steel work chamber with laser engraved position reference and fully enclosed frame
- Easy to use computer based control module with conversational CNC interface and the ability to store unlimited programs for repeat operations
- Automatic programmable feed for multiple, highly accurate repeatable specimens.

#### **SPECIFICATIONS:**

- Two standard models:
  2' x 2' (600 x 600 mm),
  4' x 4' (1220 x 1220 mm)
- Panel thickness up to 55 mm, optimal up to 100mm
- Variable wheel (2000-4500 RPM) speed
- 415V, 3 Ph, 32A
- Conforms to CE Safety Standards



## THE EXTEC LABOUT 5000® ADVANCED COMPOSITE PLATE SAW SERIES

The Extec Labout 5000® Advanced Composite Plate Saw Series is designed to meet the needs of modern composite test laboratories for producing high quality test specimens from composite panels. The unit, available in 2 standard models, 2' x 2' (600 x 600 mm), 4' x 4' (1220 x 1220 mm), is built for precise cutting of composite materials producing highly accurate test specimens. Capable of cutting the full length of the panel, it is designed to cut specified material size cleanly with the blade passing beyond the panel.

The Extec Labout 5000® Advanced Composite Plate Saw Series is engineered for rigidity and high precision cutting of a diverse range of materials (carbon/glass composites, aluminum, honeycomb, thermoplastic and hybrid materials).

The stainless steel clad work chamber, constructed to accommodate both large and small pieces of material and specimens, is easy to clean and features a laser engraved position reference. It is fully enclosed providing a safe work environment with no open blades or particulates.

The computer controlled easy-to-use conversational CNC interface displays a digital readout of machine parameters and settings. It also features storage for unlimited part programs and materials profiles allowing for repeat operations.

Universal bar clamps hold both laminate and cut specimen the entire length of the cutting head traverse to ensure a firm hold for accurate sectioning.

Accurate positioning of the material by the Y axis fences achieves multiple specimen cuts without user intervention and is designed for precision accuracy over the longest cut lengths and is designed to maintain parallelism of 0.04 mm / 300 mm.

SPECIFICATIONS	MODEL 50282	MODEL 50484
Material Capacity		
Cleared Panel Size	600 x 600 mm / 2ft x 2ft	1220 x 1220 mm / 4ft x 4ft
Material Thickness/Cut Depth*	0-50 mm or 50-100 mm option	0-50 mm or 50-100 mm option
Overall Cross Cut X Axis	1100 mm	1555 mm
Fence Travel Y Axis	605 mm	1255 mm
Front Specimen Cut Part Table Size	400 mm	400 mm
Coolant Capability	Flood Coolant with Bag Filter	Flood Coolant with Bag Filter
Spindle		
Speed	2000 - 4500 RPM	2000 - 4500 RPM
Spindle Power	2.4KW	2.4KW
Blade Ø:-	250 - 300 mm	300 - 400 mm
Blade Thickness	1.5 - 4.5 mm	1.5 - 4.5 mm
Speed		
Rapid Speeds X,Y,Z	150 mm/s	125 mm/s
Cutting Speed	0.1-40 mm/s	0.1-40 mm/s
Accuracy / Repeatability		
Typical Specimen Perpendicularity /100 mm	0.03 mm	0.03 mm
Typical Specimen Parallelism / 100 mm	0.03 mm	0.03 mm
Typical Specimen Parallelism / 300 mm	0.04 mm	0.04 mm
Typical Specimen Parallelism / Panel	0.07 mm	0.08 mm
Typical Specimen Dimensional Accuracy	0.05 mm	0.05 mm
Typical Specimen Parallelism Z Plane	0.03 deg	0.03 deg
External dimensions		
W×D×H	1900 mm x 1920 mm x 1650 mm	2200 mm x 2500 mm x 1650 mm
Required Services		
Standard	415V 3Ph 32A	415V 3Ph 32A + N
Optional	N/A	N/A
Air – Dried & Filtered	70-125 PSI	70-125 PSI
Extraction	Application Specific	Application Specific

# Example of Rectangular Test Specimens:

- · Tensile
- · In-Plane Shear
- · Compression
- · Short Beam ILSS
- Compression Strength After Impact
- · Lap Shear
- · Lap Shear ILSS
- · Flexural
- · Flatwise Tensile
- Fracture Toughness Mode I and II

