

What makes the world's best cutting technology?

# Low Ply Automated Cutting Machines



FASHION & APPAREL



TRANSPORTATION INTERIORS



FURNITURE



LEATHER



COMPOSITES & TECHNICAL TEXTILES



## L - SERIES

Low-Ply Cutting Machines

 **Pathfinder**  
Cutting Technology

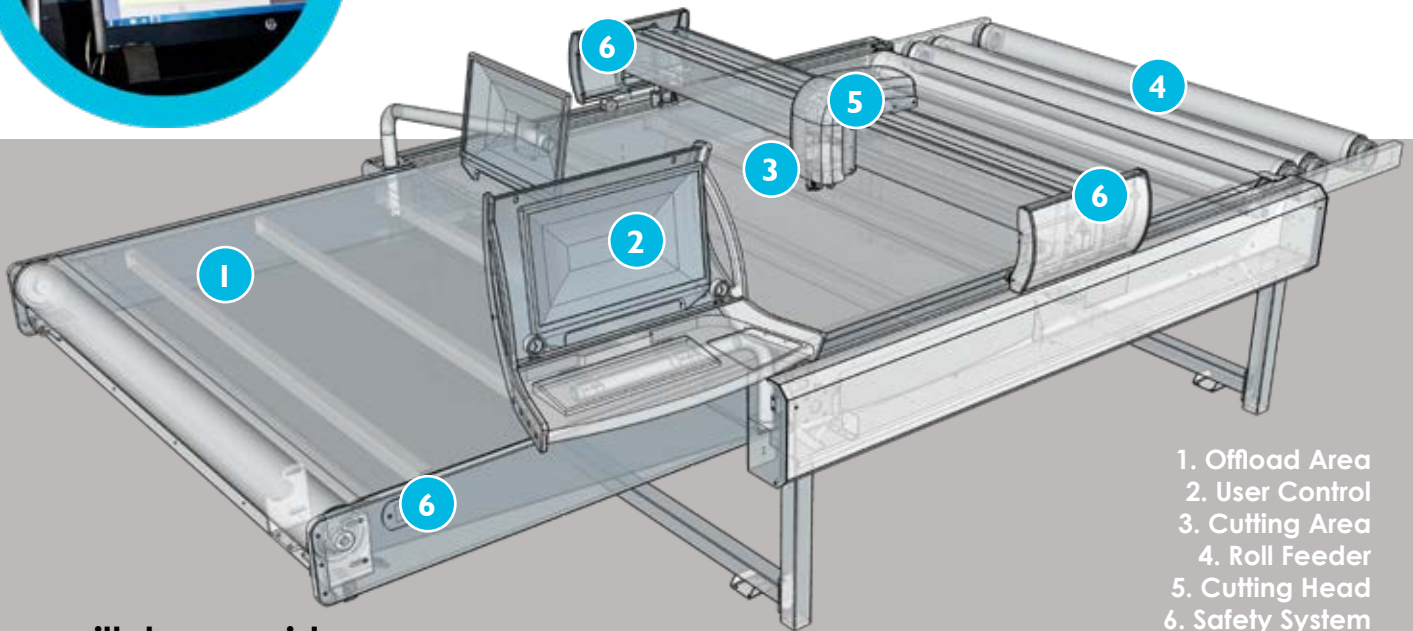
# L-Series

LOW PLY AUTOMATED CUTTING MACHINES



## Fast, accurate cutting

The L-Series range delivers a reliable and highly productive conveyerised cutting system that will dramatically enhance the speed and quality of your cutting room. The base range of 12 models come with a host of features as standard and can be optioned up to deliver solutions to even the most demanding application.



1. Offload Area
2. User Control
3. Cutting Area
4. Roll Feeder
5. Cutting Head
6. Safety System

## From silk to aramid

Whether you are a sample maker in the fashion industry or responsible for cutting challenging composite materials, upholstery fabrics or technical textiles, the advanced technology of the L-Series cutter will deliver consistent, trouble free and accurate cutting, time after time.

### Pathfinder L-Series cutters standard features include:

- Windows® operating system
- PathCut® cutter operating software
- Touchscreen user interface
- Utility drawer
- Digital vacuum control - 2 speed
- Vacuum Economiser® power saving function
- Import standard industry files - DXF, HPGL, ISO RS274d, NTV, ESSi
- Common line deletion - dynamic 'on the fly' calculation
- Notch identification and alteration
- Drill hole identification and transformation
- Cut line proximity awareness
- Automatic cutting window calculation- 'Whole piece cutting' where possible.
- Zoom and Scroll graphic finger gesture's
- Piece and cut order and identification
- Self diagnostics
- End cut - Operator programmable
- Cutting small pieces first - user definable
- Pre-set cutting parameters
- Multi-level user access - parameter protection
- MultiCut™ queuing of nested files
- QuickPath™ automatic cut piece ordering to reduce dry haul
- Integration - automatic cut job queuing, cutting list status and completed marker list
- Automatic selvage waste cut at programmable intervals
- Self adjusting software parameters optimising cut quality
- Marker manipulation features, notch selection, rotation, flip, drill omission, scaling and more
- Conveyor advance pause - automatic user definable
- Automatic conveyor advance - distance & time user definable
- Automatic pause at piece selected
- Selection of pieces - do not cut
- Automatic lay width checking
- System history file - production cut file verification
- Power fail re-start sequence - integrating intuitive operator prompts
- Maintenance Manager - automatic reporting of maintenance requirements and schedule
- Head parking - user definable
- Units display in metric, imperial/yards and inches
- Flaw avoidance- automatic piece movement avoiding material flaws
- Recut - Selection of single piece or from piece number
- Multi-language supported
- Roll feeder (bar and cradle feeding)

# What makes the world's best cutting technology?

## A range of fully customisable models for multiple applications

A single L-Series cutter is suited to a wide variety of applications.

Three widths are available:

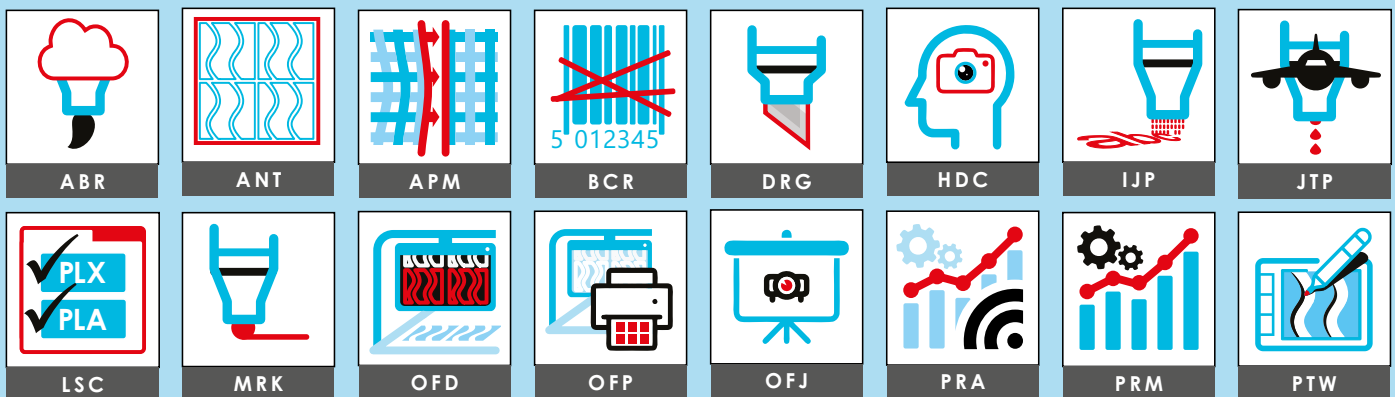
- (1800mm/71 inches)
- (2200mm/89 inches)
- (3200mm/126 inches).

The cutting head can be fitted with four working tools at the same time including both Round Knife and Drag Knife, Marking Tool, and a Crease, Notch or Punch tool.

Additionally there are a host of pre and post cutting productivity enhancing options for material loading, piece marking and bundling.



## Options that improve productivity



The Pathfinder range of high-precision cutting machines are designed and manufactured to deliver the very best results. Pathfinder engineers will discuss your particular requirement and configure a solution that will be perfectly tailored to your production environment. A full range of options are available to ensure you receive maximum results from your investment.

- **ABR (Airbrush)** - non contact paint marking for difficult materials such as fibreglass
- **ANT (Automatic Nesting)** - automatic pattern nesting.  
*Available only with PTW.*
- **APM (Adaptive Pattern Matching)** - Bow & Skew adjustments for Stripes, motifs and pre-printed textiles
- **BCR (Barcode Reader)** - automatic opening of production using barcodes
- **DRG (Drag Knife)** - ultra fine cutting tool for specialty materials
- **HDC (Head Camera)** - camera dynamically interacts with PathCut for Matching and other functions
- **IJP (Ink-Jet)** - mounted on the cutting head used for printing part identification
- **JTP (JetPen)** - non contact high speed ink marking
- **LSC (LS Convert)** - automatic conversion of native PLA & PLX file format
- **MRK (Marking)** - tool holder accepting a variety of standard marking pens-seam lines/text etc.
- **OFD (Offload Display)** - synchronised display of delivered cut parts
- **OFF (Offload Printer)** - adhesive label (50mm x 35mm) synchronised with OFD and delivered cut parts
- **OFJ (Offload Projector)** - synchronised projected display of delivered cut parts directly onto the material
- **PRA (Production Analyst)** - remote access to production manager data - standalone software
- **PRM (Production Manager)** - integrated production reporting
- **PTW (PathWorks®)** integrated within PathCut® enabling pattern creation and nesting



### Standard Roll Feeder

Max roll weight = 80kgs (176lbs)

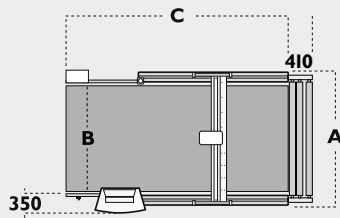
Max roll dia: = 350mm (13.78in)

Roll core: = C3 76mm (3in)

Note: Standard roll feeding device included may not be suitable for all materials

# L-Series

## Technical Specifications\*



Model Name refers to cutting width in cm  
 E= Extended cutting window version  
 F= Felt cutting belt

Characteristics	L-180				L-220			
	L-180	L-180-F	L-180-E	L-180-E-F	L-220	L-220-F	L-220-E	L-220-E-F
Max. cut Width (mm/in)	1800 / 71	1800 / 71	1800 / 71	1800 / 71	2260 / 89	2260 / 89	2260 / 89	2260 / 89
Cutting Window Length (mm/in)	1750 / 68.9	1750 / 68.9	3160 / 124.4	3160 / 124.4	1750 / 68.9	1750 / 68.9	3160 / 124.4	3160 / 124.4
Max. material thickness (mm/in)	12 / 0.4	12 / 0.4	12 / 0.4	12 / 0.4	12 / 0.4	12 / 0.4	12 / 0.4	12 / 0.4
Max. cutting depth (mm/in)	3 / 0.1	3 / 0.1	3 / 0.1	3 / 0.1	3 / 0.1	3 / 0.1	3 / 0.1	3 / 0.1
Speed (max) - p/min (m/ft)	72 / 236	72 / 236	72 / 236	72 / 236	72 / 236	72 / 236	72 / 236	72 / 236
Acceleration (max) - p/s <sup>2</sup> (m/in)	8 / 315	8 / 315	8 / 315	8 / 315	8 / 315	8 / 315	8 / 315	8 / 315
Width 'A' (mm/in)	2290 / 90.2	2290 / 90.2	2290 / 90.2	2290 / 90.2	2750 / 108.2	2750 / 108.2	2750 / 108.2	2750 / 108.2
Width 'B' (mm/in)	1960 / 77.2	1960 / 77.2	1960 / 77.2	1960 / 77.2	2420 / 95.3	2420 / 95.3	2420 / 95.3	2420 / 95.3
Overall Length 'C' (mm/in)	3640 / 143	3640 / 143	5050 / 199	5050 / 199	3640 / 143	3640 / 143	5050 / 199	5050 / 199
Weight (approx) (Kg/Lb)	1000 / 2204	1000 / 2204	1200 / 2645	1200 / 2645	1200 / 2645	1200 / 2645	1400 / 3086	1400 / 3086
Cutting Belt	Urethane	Felt	Urethane	Felt	Urethane	Felt	Urethane	Felt
Supply								
Electrical/220-240V single phase (kW)	3	3	3	3	3	3	3	3
Compressed air / ICFM (bar/psi)	6.2 / 90	6.2 / 90	6.2 / 90	6.2 / 90	6.2 / 90	6.2 / 90	6.2 / 90	6.2 / 90
Operating Environment								
Operating temperature - max (°C/°F)	41 / 104	41 / 104	41 / 104	41 / 104	41 / 104	41 / 104	41 / 104	41 / 104
Humidity - max (non-condensing) %	80	80	80	80	80	80	80	80
Noise dBA	75	75	75	75	75	75	75	75
L-320								
Characteristics	L-320	L-320-F	L-320-E	L-320-E-F	Tools (all models)			
Max. cut Width (mm/in)	3200 / 126	3200 / 126	3200 / 126	3200 / 126	<p><b>Marking</b></p> <p>Standard: Tool holder to suit variety of markers</p>	<p><b>Spot</b></p> <p>Standard: Laser spot used for alignment</p>	<p>Three tool holders can be fitted simultaneously plus the laser spot and marking tool.</p>	
Cutting Window Length (mm/in)	1750 / 68.9	1750 / 68.9	3160 / 124.4	3160 / 124.4				
Max. material thickness (mm/in)	12 / 0.4	12 / 0.4	12 / 0.4	12 / 0.4	<p><b>Drag Knife</b></p> <p>30° or 45° carbide knife (with/without bearing)</p>	<p><b>Round crush-cut</b></p> <p>28mm 45mm</p>	<p><b>Notch</b></p> <p>Straight or V notch</p>	
Max. cutting depth (mm/in)	3 / 0.1	3 / 0.1	3 / 0.1	3 / 0.1				
Speed (max) - p/min (m/ft)	72 / 236	72 / 236	72 / 236	72 / 236	<p><b>Drill/Punch</b></p> <p>Range of sizes available</p>	<p><b>Driven Round</b></p> <p>(suitable on felt cutting belt version only)</p>	<p><b>Crease</b></p>	
Acceleration (max) - p/s <sup>2</sup> (m/in)	8 / 315	8 / 315	8 / 315	8 / 315				
Width 'A' (mm/in)	3690 / 145	3690 / 145	3690 / 145	3690 / 145				
Width 'B' (mm/in)	3360 / 132.3	3360 / 132.3	3360 / 132.3	3360 / 132.3				
Overall Length 'C' (mm/in)	3640 / 143	3640 / 143	5050 / 199	5050 / 199				
Weight (approx) (Kg/Lb)	1600 / 3527	1600 / 3527	2100 / 4629	2100 / 4629				
Cutting Belt	Urethane	Felt	Urethane	Felt				
Supply								
Electrical/220-240V single phase (kW)	3	3	3	3				
Compressed air ICFM (bar/psi)	6.2 / 90	6.2 / 90	6.2 / 90	6.2 / 90				
Operating Environment								
Operating temperature - max (°C/°F)	41 / 104	41 / 104	41 / 104	41 / 104				
Humidity - max (non-condensing) %	80	80	80	80				
Noise dBA	75	75	75	75				

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\*Specifications are subject to change