

**L-SERIES**

ADVANCED CUTTING TECHNOLOGY



**Pathfinder**  
Advanced Cutting Technology

# ABOUT PATHFINDER

Our mission – “Providing the most advanced innovative Technology through a passion for our products, outstanding customer support and the highest level of reliability”.

## Providing Solutions to maximize your profit

Pathfinder is a manufacturer of CAD/CAM technology servicing all industries involved in cutting flexible and semi-rigid materials.

Since 1996 we have been providing automated cutting room solutions into the apparel, composite, furniture, technical textiles and automotive industry.

**“It’s not only about making the sale; it’s about developing relationships that will maximize your profit.”**

## Products

Pathfinder’s products include single-low ply automatic cutters (plotter cutters); Multiply cutters; Computer Aided Design software; automatic pattern nesting software; wide format inkjet plotters, electronic digitizers, production management reporting software; material spreading tables and automatic spreading machines.

## History

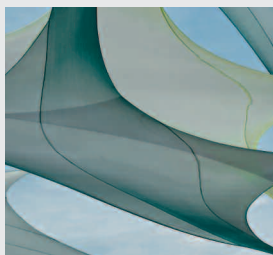
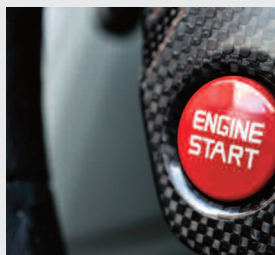
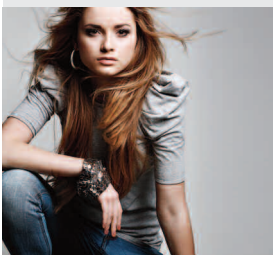
Pathfinder was founded in 1996 in Melbourne, Australia. Pathfinder’s first automatic knife cutting system was launched at GarmenTech '97, Melbourne-Australia. It all

started with two experienced engineers in their fathers’ factory shed, with the vision to create an advanced automatic cutting machine unlike anything available at that time-The K-series knife cutting system was born. Pathfinder’s self-serving strategy during the start-up phase was to minimise the resources required for installation and support, the K-series had to be engineered not to break down. What started as a strategy to reduce start-up costs is now key to the success of Pathfinder worldwide.

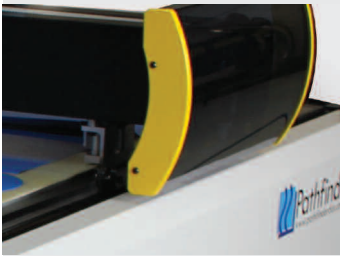
Today there are hundreds of Pathfinder customers maximizing their profits, enjoying the benefits of a machine that is productive and reliable. Pathfinder’s business model is not built around spare parts and service income, so you will not find yourself trapped into costly service contracts.

Pathfinder’s first machine installation in 1997 is still in production today, working harder than ever with less than 2 hours of lost production since 1997.

Today, Pathfinder is an international company designing and manufacturing CAD/CAM technology in Melbourne, Australia. Pathfinder employs a team of highly skilled production and software engineers, support and office staff. Pathfinder continues the tradition of outstanding customer support, product quality and technology.



Apparel | Composites | Furniture | Technical Textiles | Transportation Interiors



## L-SERIES

## AN AFFORDABLE CUTTING SYSTEM

The Pathfinder L-Series provides customers in Single Ply & Low Ply applications an affordable conveyerised cutting system that is fast, accurate and very easy to use. The new L-Series has been designed to maximise your profit potential by increasing production capacity and flexibility, improving cut quality, de-skilling the cutting function and reducing the labour component of each job.

The L-Series leverages Pathfinders decade of experience in building the most advanced multi ply cutting machines, borrowing much of its technology from the best in class M-Series Auto Cutter.

### Cutting Technology

Customised to your application and requirements the L-Series is available in three widths and cutting options include, Rotary Knife Crush Cutting or alternatively a Drag Knife or Ultra Sonic Knife. Additionally there is a host of pre and post cutting production enhancing tools and options including, drills, punches, notching and creasing tools as well as piece identification options, marking tool, inkjet printer, offload display and offload label printer. *(please refer to configuration & options menu on page 4)*

Designed to tick all the boxes the L-Series delivers customers a reliable and highly productive cutting system that is simply engineered to work:

- Reliability
- Productivity
- Quality
- Lowest Cost of Ownership
- Environmentally friendly

**Reliability:** Is designed into each Pathfinder machine, decades of experience servicing hundreds of customers around the world in 20 industries has resulted in an obsessive focus on reliability and engineering standards. Pathfinder cutting machines have a worldwide reputation for their minimal maintenance requirements.

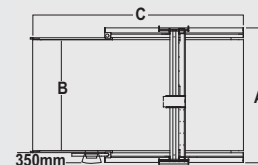
**Productivity:** Highest productivity is achieved by technology that can deliver and combine the best of multiple disciplines: Speed, Motion Control, Ergonomics and Application specific customisation.

**Quality:** Pathfinder L-Series is designed and manufactured in our Australian factory, guaranteeing customers the best; engineering standards, raw materials and technology that money can buy.

**Lowest cost of ownership:** The cutting solution that can offer the customer the longest productive lifecycle and produce the greatest volume of production, with the lowest running and maintenance costs guarantees the promise; the lowest total cost of ownership.

**Environmentally responsible:** The L-Series cutter is engineered with care for the environment. Lowest power consumption due to high efficiency vacuum system. Recyclability, 95% of the machines mass can be recycled at the end of its operational life. Greenhouse gases produced by outsourcing and parts transport are eliminated due to in-house manufacturing.

# TECHNICAL SPECIFICATIONS



		L-180	L-180-E	L-220	L-220-E	L-320	L-320-E
<b>Characteristics</b>							
Max. cut Width	(mm/inches)	1800/71	1800/71	2260/89	2260/89	3200/126	3200/126
Cutting Window	(mm/inches)	1750	3160	1750	3160	1750	3160
Max. material height	(mm/inches)	10/.393	10/.393	10/.393	10/.393	10/.393	10/.393
Speed	(m/inches)	72/2835	72/2835	72/2835	72/2835	72/2835	72/2835
Acceleration	(mps <sup>2</sup> /g)	10/1	10/1	10/1	10/1	10/1	10/1
Width 'A'	(mm/inches)	2290/90.2	2290/90.2	2750/108.2	2750/108.2	3690/145	3690/145
Width 'B'	(m/inches)	1960/77.2	1960/77.2	2420/95.3	2420/95.3	3360/132.3	3360/132.3
Overall Length 'C'	(m/inches)	3640/143	5050/199	3640/143	5050/199	3640/143	5050/199

<b>Supply</b>							
Electrical / 240 single phase	(KW)	2-3	2-3	2-3	2-3	2-3	2-3
Compressed air 1CFM	(bar/psi)	6.4/92	6.4/92	6.4/92	6.4/92	6.4/92	6.4/92

<b>Operating Environment</b>							
Operational temperature - max	(C/F)	41/104	41/104	41/104	41/104	41/104	41/104
Humidity-max (non-condensing)	%	80	80	80	80	80	80
Noise	dba	70	70	70	70	70	70

## Standard Features

- Windows® operating platform
- Touch Screen user interface (-Y standard, +Y on request)
- Utility drawer

## PathCut® cutter software

- Import standard industry files - DXF, ISO RS274d, ESSI
- Automatic cutting window conveyor advance calculation
- Full screen and zoom graphic display mode
- Display selection of cut order and piece identification
- Vacuum Economiser® power saving function
- Self diagnostic system
- Operator programmable 'end cut'
- Cutting small pieces first - user definable
- Pre-set cutting parameters
- MultiCut™ queuing of nested files
- QuickPath™ automatic cut piece ordering to reduce dry haul
- Visual marker display with scrolling facility
- Automatic Selvage waste cut at programmable intervals
- Comprehensive Self Diagnostics
- Self Adjusting software parameters optimising cut quality
- Marker manipulation features, notch selection, rotation, flip, drill omission, scaling etc...
- Automatic lay width checking
- System history file - production cut file verification
- Power Fail Re-start sequence - automatic operator prompts
- Maintenance Manager - automatic reporting of maintenance requirements and schedule
- Head parking - user definable
- Automatic conveyor advance pause - user definable
- Units display in metric, imperial/yards and inches
- Automatic proportional slowdown of cutting within critical areas

## Standard Tools

- RKA – Round Knife (Alpha 28mm)
- MRK Marking – tool holder accepts a variety of standard markers/pens-seam lines/text
- Drill / Punch Too

## Optional Tools

- Cutting –
  - USK – (Ultra Sonic Knife)
  - DRG – ( Drag Knife) ultra-fine cutting tool for speciality materials
- Creasing - CRT (Crease Tool) - creating crease lines or kerf cutting
- Notching Tool

## Options

- PM (Pattern Match) – for matching patterns to stripes, motifs and pre-printed textiles
- BCR (Barcode Scanner) – automatic opening of production cut request
- PRM (Production Manager) – integrated production reporting
- PRA (Production Analyst) - remote access to production manager data - standalone software
- HDC (Head Camera) – camera dynamically interacts with PathCut for Matching and other functions
- PTW (PathWorks®) – integrated within PathCut® enabling pattern creation and nesting

## Marking/Identification Options

- IKJ (Ink-Jet) – mounted inside the cutting head used for printing part identification
- ABR (Airbrush) – non contact paint marking for difficult materials such as fibreglass
- OFD (Offload Display) – synchronised display of delivered cut parts
- OFP (Offload Printer) – thermal self adhesive label synchronised with OFD and delivered cut parts

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