

MERCURY-4E

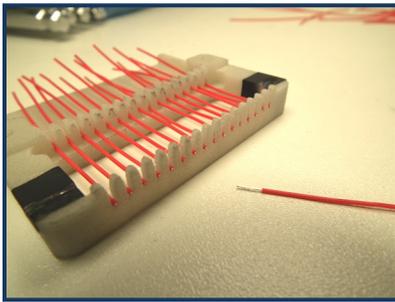
Precision Laser Wire Stripping Systems



High performance | Low cost | Compact | Flexible

MERCURY-4E

Laser Wire Solutions' Mercury-4E laser wire stripper is an extended version of the highly popular Mercury-4 model, allowing for a greater number of wires to be processed at any one time. The Mercury-4E is an excellent multi-purpose tool for any precision wire stripping requirements. Designed with cost in mind for general purpose stripping of performance electronics.



Features & Benefits

Compact: small footprint laser wire stripper: 14" x 28" (356 mm x 712 mm) and can be easily retro-fitted into existing production lines.

Versatile: strips single conductor, coax and ribbons; 0.0010 mm² to 16 mm² (50 AWG to 6 AWG). All insulations. With dual (X & Y) axis motion it handles all strip types: cross-cut, windows and area ablation; and any shapes: curves and hatched areas, not just straight lines.

Clean and precise: nick-free stripping, with +/- 0.004" (0.102 mm) repeatability for the best quality every time. In-built camera allows the whole process to be monitored.

Fast: up to 80" (2000 mm) per second stripping speed for fastest processing.

Ease of use: operator selects via touchscreen the desired stripping parameters from the programmed library and all parameters (strip lengths, laser power and speed, etc) are automatically set.

Flexible: fast loading of single wires / cable or use a fixture plate for complex multi-conductors or ultra-thin wires. In-line stripping operation is also available.

Lowest cost of ownership: no laser or machine wear parts. Mercury-4E delivers a demonstrable return on investment.

Technology

Unlike conventional laser wire strippers, the Mercury-4E utilizes high speed double-sided galvo-scanner technology. This allows high accuracy positioning of the laser beam at unprecedented speeds. The laser can be simply configured for end-strips, window cuts, slits or even area vaporization.

The Mercury-4E system is incredibly flexible and is able to offer single, multiple or in-line wire stripping applications. The interchangeable door fixtures allow for a quick change-over from single strip to multiple strip wires and the in-line option can be programmed quickly and used with an external de-reeler and controller. Any strip pattern can be accommodated, including angled lines, curves, windows, cross-cuts and slits to perfectly match your cable layout.

Specifications

Element	Mercury-4E
Operating environment	Light-duty, industrial environment. Cleanliness as a typical office. Bench mounted.
Operating temperature	60 to 90 degrees Fahrenheit (15.5° to 32° Celsius), 20-80% humidity (non-condensing).
Electrical power	230V - 50 Hz, 6 Amps (Europe) 115V - 60 Hz, 13 Amps (USA) Single phase supply, earthed and stable (spike and surge protected).
Processed material	Polymer insulation, such as PTFE, ETFE. PVC not to be processed unless agreed in writing. Strip length: zero to 2" (50 mm). Strip width: up to 2" (50 mm). Outer diameter: typically up to 0.24" (6 mm) to ensure bottom and top are joined up.
Laser type	Interlocked laser enclosure - Class 1 incorporating continuous wave Class 4 Carbon Dioxide laser.
Optical system	Dual scan heads for stripping top and bottom of cable with automatic beam switching between nozzles. Dual axis motion. 80" (2000 mm) /s positioning speed maximum. 4" (100 mm) processing length maximum.
User control	10" Colour touchscreen. Storage for unlimited recipes (power, speed, pattern). On-board diagnostics. Job start via MHi or footswitch.
Safety	Class 1 laser system incorporating a Class 4 laser product as per 21 CFR Chapter 1, Subchapter 1, EN60825-1:2007. Category 3 Safety Related Control architecture designed to meet performance level $PL_r = d$. Dual fail-safe interlocked enclosure with monitoring. Category 0 emergency stop.
Acoustic noise	Machine 65 dB(A), Machine and Fume Extractor 75 dB(A)
Power consumption	1.5 kW (typical)
Machine dimensions (L x W x H)	Bench Unit: 712 x 356 x 866 mm (28 x 14 x 34") Control Cabinet: 250 x 400 x 500 mm (10 x 16 x 20")
Weight	Bench Unit: 40 kg (88 lbs) Control Cabinet: 25 kg (55 lbs) Total: 65 kg (143 lbs) - uncrated

OUR MARKETPLACE



The Mercury-4E is distributed through the global sales network of our partner, Schleuniger. All of our products comply with the latest US and European safety standards. For a full list of international contacts, visit <http://www.schleuniger.com/sales-services/local-partners/>.

Laser Wire Solutions is a leading provider of laser stripping solutions for the highest quality medical, automotive, consumer electronics, defense and aerospace interconnects. We can support you with proof of principle samples, contract manufacturing services or machine supply, including customization. Check out our [website](#) for more information.

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The Mercury-4E bench unit contains the laser and optics, whilst the power supplies are located with the fume extractor unit under the bench linked by an umbilical. Plenty of room on bench for hand tools, wires, finished goods, etc.

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