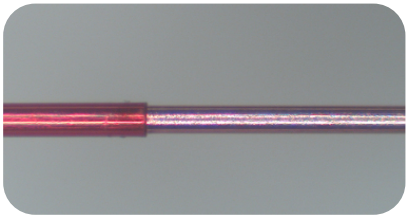
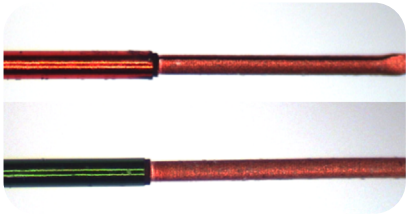
Datasheet

Odyssey-8

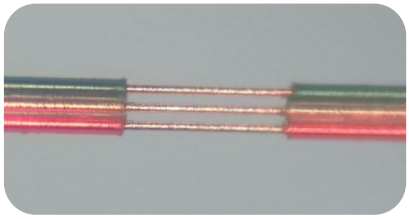
The World's Most Compact Single Wire Laser Stripper



Single Conductors



Twisted Pairs



Trifilar Wires

Compact & Versatile:

Exceptional Accuracy in a Small Footprint

Compact benchtop design with ergonomic front-loading aperture for single-wire insert.

Onboard camera

Laser safe housing for use in open factory

Quick-select recipes on a 7” touchscreen make operation simple and consistent.

Automatic wire tip detection and clamping ensures repeatable, hands-free processing.

Precision UV laser ablation removes insulation from wires as fine as 50 AWG without damaging conductors.

Recipe flexibility for both single filar and multi-filar (bi/trifilar) wire processing.

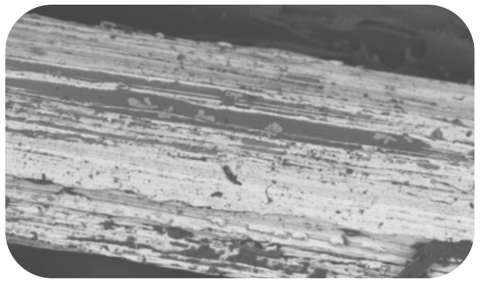
- **Compact & Lightweight:** Small footprint (180 × 340 × 480 mm, 6 kg) fits easily on any benchtop.
- **Operator-Friendly:** Single-wire insert design with automatic wire detection for ease of use.
- **Fast & Flexible:** Recipe-controlled touchscreen with rapid changeover between wire types.
- **Versatile Processing:** Handles single, bi-filar, and tri-filar wires with precision.

Laser wire stripping is the gold standard for delicate wire and cable processing where manual methods fall short.

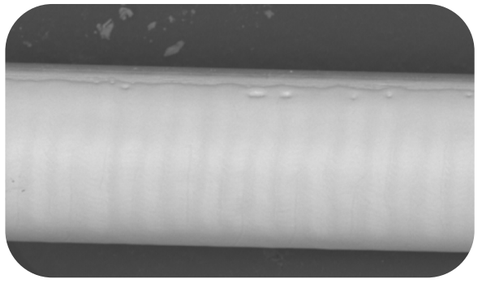
The Odyssey-8 has been designed from the ground up to handle the most demanding mission critical applications in medical, data, and aerospace, all whilst maintaining a small footprint.

Its ergonomic, single-wire insert system makes setup simple and operator-friendly. It allows engineers to quickly test and validate new processes.

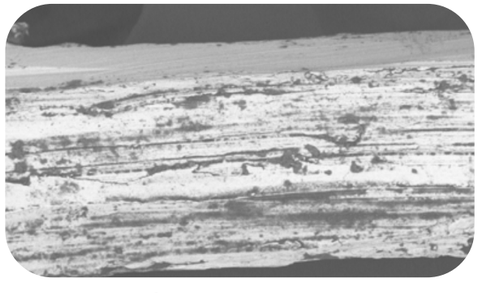
Ideally suited to low-volume production and R&D environments, the Odyssey-8 delivers precision without the footprint of larger systems.



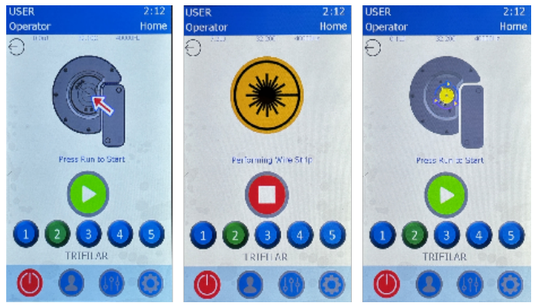
Spinning Abrasion



Laser Stripping



Sharp Tweezers



Odyssey-8 HMI (trifilar instruction)

See the Odyssey-8 in action

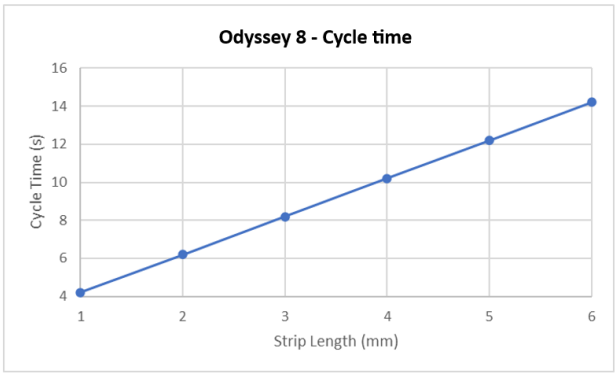
Odyssey-8 Technical Specifications	
Operating Environment	Light-duty Industrial Environment. Cleanliness as a typical office.
Operating Temperature	18 to 28 degrees Celsius, 10-80% humidity (non-condensing)
Processed Materials	Typically, polyimide insulations – no fluoropolymers or PVC. Other insulation types may be processed following consultation with the equipment supplier. Strip length: up to 3 mm Wire Diameter: typically to a maximum of 0.15 mm
Stripping Laser Type	Class 4 Frequency Tripled diode pumped solid state laser (0.8 Watts nominal average power @ 355 nm)
Optical System	High speed optical scanner with focusing lenses. 15-20 micron spot diameter
User Control	7” Colour Touchscreen Status indicator lights for power and safety.
Power Supply	Voltage 230 / 120 VAC (±10%) Frequency 50 / 60 Hz Current 0.7A / 1.4A Single phase supply, earthed and stable (spike and surge protected)
Extraction	Maximum 180 m3/hour air flow Pre-filter (F6 as per ISO 16890) HEPA/Carbon filter (99.997% @ 0.3 microns compliant with EN1822:2009) 100V-230V, 140Watts
Noise Level	Machine 65 dB(A), Machine and fume extractor 75 dB(A)
Safety	Class 1 capable laser system incorporating Class 2 and Class 4 laser products as per EN60825-1:2007 Category 3 Safety Related Control architecture designed to meet performance level PLr = d. Dual fail-safe interlocked enclosure with monitoring Category 0 emergency stop
Machine Dimensions & Weights	Head Unit: 478(h) x 168(w) x 278(d)mm, Weight: 16kg PSU: 68(h) x 193(w) x 287(d)m, Weight: 3 kg FumeCube Extractor: 366(h) x 308(w) x 294(d) mm, Weight: 17kg
Important Notes	Laser Wire Solutions recommends producing a small sample of wire or cable for testing to ensure processing suitability. We will then provide a sample report with our findings.

Scan for an Odyssey-8 machine walkthrough

As an industry leader in automated wire processing, Laser Wire Solutions delivers cutting-edge solutions to customers around the world.

Our comprehensive portfolio includes top-quality laser wire processing machinery with intelligent software, ensuring safe, flexible, and efficient processes. Our global sales and service network supports customers in maximizing their investments.

For queries contact sales@laserwiresolutions.com



Indicative Cycle Time by Strip Length Required

LASER WIRE SOLUTIONS