

GEMINI-6

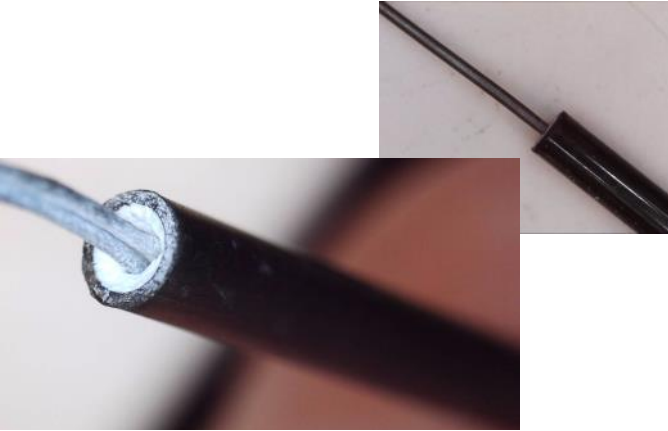
Precision Laser Wire Stripping Systems



**High performance laser machine
for metal solid shield cutting**

GEMINI-6

Laser Wire Solutions' Gemini-6 laser wire strippers are the ideal solution for cutting the outer metallic jackets of small round parts, such as high temperature thermocouples. Results are quick and clean, minimising potential for rejects of value-added parts.



End stripped from high temperature thermocouple using the Gemini-6

Application Example

The Gemini-6 utilises a high power Q-switched fiber laser to cut the jacket of the cable with a clean, burr-free edge. Using a rotary and linear optical assembly, the laser can make a circumference cut as well as a number of longitudinal slits. This allows the jacket to be more easily removed by gently flexing the cable and squashing the slug to release the jacket and Magnesium oxide (MgO) insulation.

The laser does not damage the inner conductors as the white MgO powder offers a reliable barrier. The focus is set automatically via the touchscreen process recipe. The optical assembly is indexed about the cable axis to produce the circumferential cut and moves the laser beam down the axis at high speed to make the longitudinal slits (up to 4 possible).

Features & Benefits

Clean and precise: damage-free stripping with minimal burring, reducing rejects of high value parts.

Easy to configure: a custom control system enables simple programming of strip length, strip speed and number of passes.

Flexible and versatile: quick loading of single wires / cables up to 1 mm (0.04") stainless steel wall thickness; parts can be cut from 1.5 mm (0.06") to 10 mm (0.4") outer diameter and up to 100 mm (4") slitting length.

Effortless stripping, simple to operate: operator inserts part into the system and selects on a color touchscreen a pre-programmed recipe from a list. This automatically sets focus, laser power, etc and activates stripping to pre-set parameters.

Safe and reliable: Class 1 safety enclosure allows safe use of a Class 4 laser system on an open shop floor. Process door is safety interlocked to prevent laser from firing when door is opened. Fume extraction system filters particulate fume from the process.

Low maintenance: no laser or machine wear parts.

LASERWIRE
S O L U T I O N S

Specifications

Element	Gemini-6
Operating environment	Light duty industrial environment. Cleanliness as a typical office. Floor standing unit.
Operating temperature	60 to 90 degrees Fahrenheit (15.5° to 32°Celsius) 20-80% humidity (non-condensing).
Electrical power	230V – 50 Hz / 120V - 60 Hz, 5 Amps Single phase supply, earthed and stable (spike and surge protected).
Compressed air	Dry and oil-free, 5 bar / 90 PSI.
Laser type	Sealed, maintenance-free, industrial Q-switched fiber laser for 24/7/365 operation. Air cooled. Interlocked laser enclosure – class 1 incorporating a continuous wave class 4 fiber laser. - 100 Watts standard - other laser options available.
Materials processed	Any metals, including stainless steel round parts. Send samples for free evaluation.
Stripping processes	Rotary and linear optical assembly for: - circumference cut (outer diameters 1.5 mm / 0.06” to 10 mm / 0.4”) - length slit up to 100 mm / 4”.
User control	7” Color touchscreen. Storage for 999 recipes (power, speed, pattern). Jobs created on a PC and then downloaded to flash storage on scanner controller. On board diagnostics. Job start via proximity sensor.
Safety	Class 1 laser system incorporating a Class 4 laser product as per 21 CFR Chapter 1, Subchapter J, EN60825-1:2007. Category 3 Safety Related Control architecture designed to meet performance level PL4 = d. Dual fail-safe interlocked enclosure with monitoring. Category 0 emergency stop.
Power consumption	1.0 kW (typical)
Machine dimensions (uncrated)	950 x 1274 x 1586 mm (37.5 x 50 x 62.5”) (W x D x H) Control cabinet integrated. Monitor arm stowed in transit position.
Weight (uncrated)	430 kg / 948 lbs

OUR MARKETPLACE



We serve the global market, both directly and through the local Schleuniger sales network. All of our products comply with the latest US and European safety standards. For a full list of international contacts, visit us at www.laserwiresolutions.com.

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](http://www.laserwiresolutions.com) for more information.

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A key feature of the Gemini-6 is its ability to strip the newest generation of small gage stainless steel round cables, such as high temperature thermocouples.

No more need for pipe cutters for the circumference cut and mechanical devices (hammers, ultrasound) to remove the MgO.

Effortless stripping with great results!

