SPECTRUM TECHNOLOGIES



Sienna™ 300 Series

Laser Wire Stripper

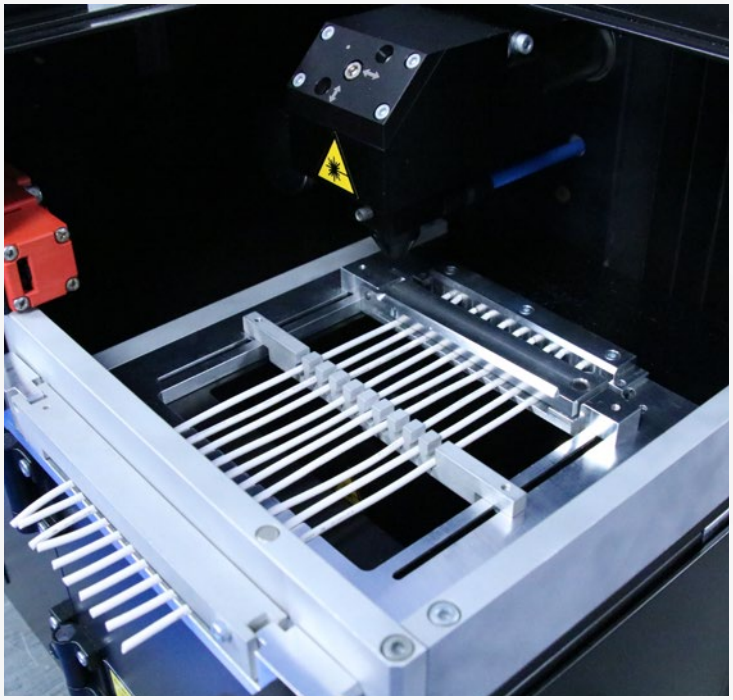
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Laser Stripping At Its Finest™

Sienna 300 Series

High-Powered, Precise Laser Stripping

The Sienna 300 Series is a high-performance, dual-axis laser wire stripping system engineered as a higher-powered evolution of the 200 Series. Designed for demanding industrial applications, it excels at processing cables with tougher, thicker or woven insulation materials, and delivers clean, damage-free results where mechanical or lower-power systems fall short.



Sienna 300 Series Processing Area

Benefits

- **High-Quality, Damage-Free Stripping:** The laser reflects cleanly from metallic conductors and plating, ensuring precise removal without harming the underlying surface.
- **Exceptional Performance on Tough Materials:** Efficiently strips high-temperature, hard, soft, fibreglass, and fabric-based insulations.
- **Accurate and Repeatable:** Consistent results across diverse wire types and production runs.
- **Versatile for All Wire Types:** Suitable for single wires, twisted pairs, coaxial cables and ribbon cables.
- **Multi-Wire Capability:** Process several wires or cables simultaneously to improve throughput.
- **Flexible Strip Patterns:** End strips, windows and complex configurations completed in one operation.

High-Power Precision for Demanding Materials

Designed specifically to meet the challenges of tougher insulation types, delivering clean removal without contact or mechanical stress. The dual-axis architecture enables complex strip patterns to be placed at any point along the cable length, including cross-cuts and slits for easy slug removal or mid-span window stripping.

Industrial Productivity in a Compact Form

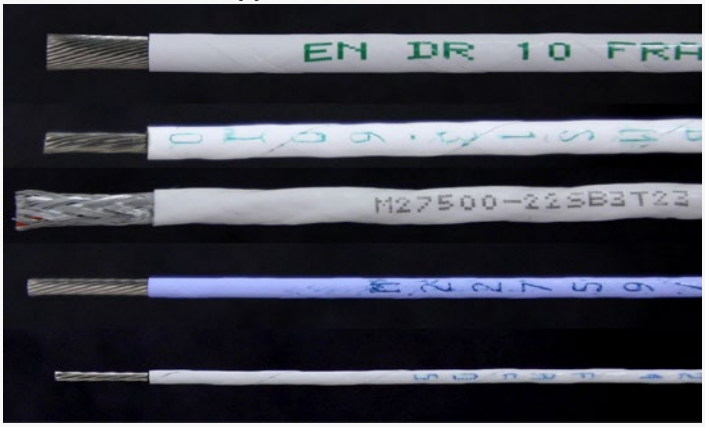
Despite its higher-power performance, the Sienna 300 Series retains a compact, bench-top footprint suitable for everyday manufacturing environments. Operators benefit from fast setup, easy loading, and consistent stripping performance, while optional higher-power configurations support more demanding industrial applications.

Adaptable Handling for Complex Assemblies

The 300 Series' ability to process multiple wires simultaneously and accommodate different wire profiles makes it suitable for both straightforward and complex assemblies. Whether working with single core wire, multi-core cables or specialised insulation materials, the system provides clean, contact-free stripping.



Stripped Infiniband Cable



Stripped Fluoropolymer Wire and Cable

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Technical Specifications

STANDARD FEATURES

	Model	Sienna 325S	Sienna 325D	Sienna 350S	Sienna 350D
Processing Specifications	Wire size (OD)	< 4.5 mm / < 0.18 in (Optional jig for < 6 mm / 0.24 in)			
	Stripping length	< 101.6 mm / 4 in			
	Processing area	101.6 mm / 4 in (X or Y)	101.6 x 101.6 mm / 4 x 4 in	101.6 mm / 4 in (X or Y)	101.6 x 101.6 mm / 4 x 4 in
	Accuracy	±0.2 mm / 0.008 in			
	Wire type	Single core, twin lead, twisted pairs, multi-conductor, ribbon, coaxial			
	Insulation material	PTFE, ETFE, PVC, PUR, PI, PET, PE, SI, Fibreglass, Nylon, etc.*			
	Stripping speed (max)	45 mm/s / 1.77 in/s			
	Strip pattern	End strips	End strips, longitudinal strips, window strips, simple patterns	End strips	End strips, longitudinal strips, window strips, simple patterns
System Specifications	Laser type and power**	25 W CO_2 laser	25 W CO_2 laser	50 W CO_2 laser	50 W CO_2 laser
	Beam delivery system	Single axis (X or Y)	Dual axis (X and Y)	Single axis (X or Y)	Dual axis (X and Y)
	Configuration	Manual insertion with jig (Option for reel-to-reel processing)			
	Dimensions (W x D x H)	605 x 1045 x 510 mm / 23.8 x 41.1 x 20.1 in			
	Weight	65 kg / 143 lbs	68 kg / 150 lbs	69 kg / 152 lbs	72 kg / 159 lbs
Control and Software	Machine control architecture	Microprocessor X/Y motion			
	Interface	Keypad	Keypad or PC	Keypad	Keypad or PC
	Communications	RS-232			
	Program configuration	Spectrum Technologies bespoke program			
	Program recipes	Comma separated value files (.CSV), manual input			
Environmental and Operational Conditions	Operating temperature	+15°C to +30°C / 59°F to 86°F			
	Operating humidity	20% - 80%, non-condensing			
	Noise level	70 dB(A)			
Power, Air and Fume Management	Electrical connection	NA: 110 - 120 VAC, 50-60 Hz, 1Φ. EU: 220 - 240 VAC, 50-60 Hz, 1Φ			
	Electrical consumption	600 W		1000 W	
	Fume extraction	ACS-5 (Optional)***			
Compliance and Standards	Conformity	CE, FDA, FCC, Machinery Directive, Class 1 laser			
	Standards	ISO 9001			

*Non-exhaustive list.

**All Sienna 300 Series lasers are air cooled.

***To comply with health and safety requirements, adequate air extraction must be provided when operating any laser wire stripper. If this is not available in your facility, Spectrum's ACS-5 systems remove all smoke, odours, particles and fumes from the laser stripping area and return clean, filtered air to the room.

ACCESSORIES AND OPTIONS

Jig capable of holding < 6 mm / 0.24 in
Fume extractor (ACS-5)
Fume extractor replacement filters
Extended warranty

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About Spectrum Technologies

Company Overview

Spectrum Technologies has been at the forefront of laser wire processing technology for over 35 years, developing and applying leading edge technology to provide solutions to problems in advanced manufacturing.

Founded in 1989 as a spin-out from BAE Systems' Advanced Technology Centre, the Company pioneered and commercialised UV laser wire marking within the aerospace industry – a process that has since become the global industry standard for identifying aerospace wire and cable. Spectrum has been independently owned since the management buyout in 1994.

Today, Spectrum Technologies is recognised as the world leader in the design and manufacture of specialised laser-based wire processing equipment. Its solutions are widely used in the production of complex wire harnesses and assemblies across aerospace, defence, medical, rail, automotive, and other critical industries.

Excellence in Electronics Manufacturing

Electronics production demands fast, precise and reliable wire processing to keep pace with increasing product complexity and miniaturisation. Spectrum Technologies' laser systems provide the accuracy, repeatability and efficiency required by leading manufacturers in consumer electronics, industrial devices and emerging technology sectors. In addition to insulation removal, our laser marking solutions support clear source and destination coding at wire ends – helping operators work faster, reduce errors and maintain the highest manufacturing standards.

To discuss any of your requirements please contact us at sales@spectrumtech.com or on +44 (0)1656 655 437.

Scan for more information

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