



SIENNA™ 800 SERIES



HIGH PERFORMANCE SCANNING LASER WIRE
STRIPPING SYSTEMS

For the highest quality stripping of wire and cable insulation

SIENNA™ 800 SERIES

HIGH SPEED, SCANNING LASER WIRE STRIPPING SYSTEMS

The SIENNA 800 Series of laser systems offers a range of models configured with high speed, scanning optics and different lasers optimised to your particular application. SIENNA 800 systems are particularly suited for stripping bonded insulations that are difficult to remove from conductors, e.g. enamel magnet wire insulation and flexible flat cable (FFC) and flat laminate cable (FLC) insulations.



Key features and benefits of the SIENNA 800 series

Strip accuracy: +/- 0.2mm (0.008")

- Large process areas of up to 110 mm x 110 mm (4.33" x 4.33"), depending on application
- PC controlled with colour touch-screen HMI for fast programming
- Large job store memory
- Password protection access at different levels
- Simple to set-up and maintain

• Choice of laser type and power depending on application for:

- Standard wire stripping
- Shield scribing
- Magnet wire stripping
- Fine magnet wire enamel removal
- Suitable for batch manufacturing operations
- Optional Rotary Axis for automatic Dual Sided Stripping
- Optional bespoke stand with storage area for ACS5 extraction unit and integrated power supply

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



The SIENNA 800 series of laser wire processing systems has been designed with the ability to integrate different laser types according to your application. This versatility provides the ability to process a wide range of components to an exceptionally high standard. Applications include: stripping (skinning) of enamelled copper wire, wound components, bonded polymer-based insulations, braided wire and various plastic and metallic components.

The SIENNA 800 Duo system features our patented MWS Magnet stripping process for the precise, selective, high-quality ablation of enamel from copper wire in preparation for bonding and termination.

The SIENNA 800 is not limited to wire stripping and the ablation of surface materials. The range and combination of lasers available with the different models allows SIENNA 800 to be applied to a wide variety of applications. This includes dark and colour marking of a multitude of polymer based materials and metal alloys. Please see the separate data sheet for marking applications.

The 800 series offers a process area of up to 110 mm x 110mm (4.33" x 4.33") with easy to insert tooling that can be customised for your needs to achieve repeatable, quality batch processing. With the integration of an optional rotary axis, the SIENNA 800 series offers further versatility with the ability to undertake double sided processing of components.

| Model | SIENNA 850 | SIENNA 830 SR | SIENNA 800 FMWS | SIENNA 800 Duo |
|---------------------------------|---|--|--|---|
| Control | Integrated PC and colour touch screen | | | |
| Wire Types | <ul style="list-style-type: none"> • Single core wire • Twin leads • Twisted pairs • Multi-conductor shielded cables • Ribbon cables • FFC/FLCs | <ul style="list-style-type: none"> • Shielded wire • Shielded ribbon cables • Coax / Micro-coax | <ul style="list-style-type: none"> • Small gauge enamelled wires • Copper or Aluminium • Round, square, flat or solid | <ul style="list-style-type: none"> • Enamelled wire • Single core wire • Twin leads • Twisted pairs • Multi-conductor shielded cables • Ribbon cables • FFC/FLCs • Shielded wire • Shielded ribbon cables • Coax / Micro-coax |
| Wire Sizes | <6mm (0.24") diameter or ribbon cable <110 mm (4.3") width | <1 mm (0.04") diameter, ribbon cable <110 mm (4.3") width or enamelled wire >0.2 mm (0.008") diameter | 30 AWG to -50 AWG | As per SIENNA 850 & SIENNA 830SR |
| Material types (non-exhaustive) | Kapton®, PTFE, ETFE / XLETFE, PFA, FEP, XL-Polyalkene, PVF2 / PVDF, PVC, Silicone, XLP, Formvar®, Polyester, Fibreglass, PET and Nylon® | Metal shields, PUR, PES, PEI, PEI-Al, PAI and other enamels and resins | PUR, PES, PEI, PEI-Al, PAI and other enamels and resins | All materials able to be processed by the SIENNA 850 & 830SR |
| Power Requirements | 100-240VAC, 60/50 Hz | | | |
| Operating Conditions | <ul style="list-style-type: none"> • Ambient temperature +15°C to +35°C (59°F to 95°F) as standard • Relative humidity 20% to 80% (non condensing) | | | |
| Dimensions L x W x H | 1267 mm x 639 mm x 676 mm (50" x 25" x 27") | | | |
| Weight | 113 kg (250 lbs) | | 126 kg (278 lbs) | |
| Options | <ul style="list-style-type: none"> • ACS-5 Air Cleaning System • Rotating jig • Bespoke stand with power distribution panel | | | |

- All SIENNA 800 systems are Class 1 laser products for use on open shop floor
- Complies to CAT 3 electrical safety category and all CE marking and FDA regulations
- 12 month parts and labour warranty on all systems
- Worldwide customer support from a dedicated team of Field Service Engineers or by fully trained Service Agents
- Technical helpline
- Operational training for Production and Technical personnel carried out at installation
- Maintenance contracts available to keep systems operating at optimum performance



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