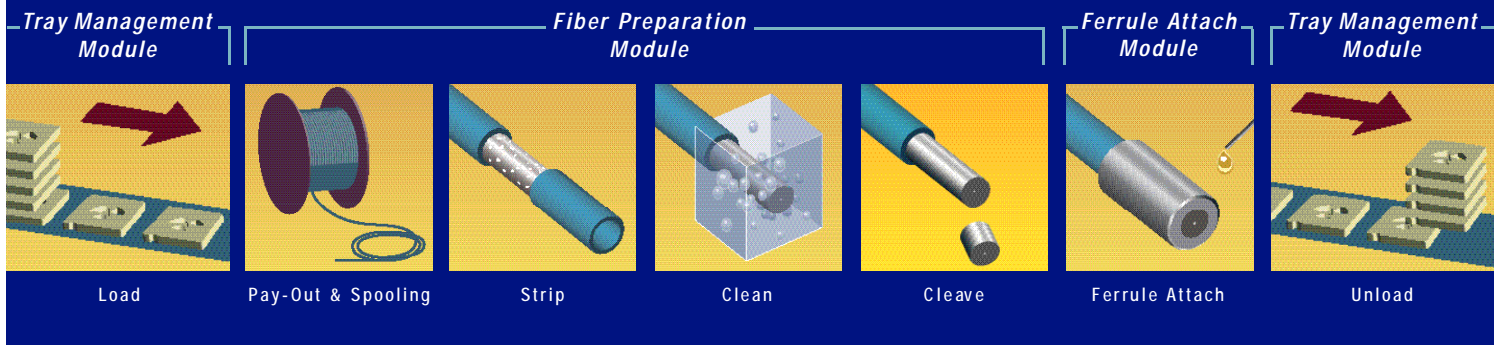


# kSARIA's Fiber Pigtail Fabrication System

The first in a series of platforms that automate the fiber-optic components assembly process.

The process begins with raw fiber, which is spooled onto a work tray then automatically transported through the system for fiber preparation and ferrule attachment. Every thirty seconds, it produces a pigtail in a fiber work tray ready for the next process.

## kSARIA's unique automation system: The three key modules.



### Tray Management Module

Each system has a work tray management module at either end that automatically loads trays into the system before processing and unloads them after processing. Simply load a cassette of 50 work trays into the transport module. These trays are then automatically transported through the system, processed, and unloaded into an empty cassette with a ferrule attached.



### Fiber Prep Module

After the tray is loaded into the system by the tray management module, the fiber preparation module automatically pays out a pre-determined length of fiber and prepares the end. This module contains four main operating tools – pay-out and spool, strip, clean, and cleave. These tools are in a linear configuration with trays automatically indexed to each tool for processing. The spooling and pay-out tool dispenses a pre-programmed length of fiber, coils it, then inserts it into an empty tray with the two ends secured for further processing. The spooled trays are then transported to the strip, clean, and cleave tools. When the fiber prep process is complete, processed trays are transported to the ferruling module for ferrule attachment.

### Ferruling Module

Next, a ferrule is automatically loaded and attached to the prepared fiber. Before attachment, a metered amount of thermally curable epoxy is dispensed into the ferrule. The fiber is then inserted into the ferrule and the assembly heated to cure the epoxy. After the ferrule attachment process is complete, processed trays are unloaded into an empty cassette as a fiber pigtail. Full cassettes of processed trays can now be transferred by operator to the next process.

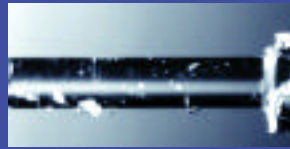


The WAY to AUTOMATE.

## See the True Automation difference.



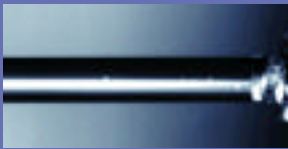
Manual Strip



Semi-Automated Strip



kSARIA Strip



Manual Clean



Semi-Automated Clean



kSARIA Clean

## Technical Specifications

Throughput	120 fibers per hour
Maximum Fiber Reel Size	12" outer diameter, 5" width, 2" core, 5 lbs.
Fiber size	180-900 micron outer diameter, 125 micron glass
Fiber Payout Length	.75 meters to 3 meters
Finished Strip Length	.25" to 1"
Cleave Angle	0°
Ferrule Epoxy	Thermal*
Yield	>99%
Downtime	<5%
Reliability	MTBF >1000 hours, MTTR <2 hours
Size	87"W x 45"D x 62"H
Utilities	Electricity: 200–240 VAC, 3 phase, 5 wire, 50/60 Hz, 30 amp. Compressed air: 90 PSI, 3 SCFM, CDA. Exhaust: 4" duct
Clean Room Class	Class 10,000 clean room or higher
Regulatory	UL, CE, CSA approved

\*Note: other bonding methods are available if your application requires a different adhesive.

### kSARIA's automation platforms: Designed with a modular core architecture.

That means they can be configured with different tools for different tasks and easily enhanced for your specific application. Modular automation platforms are built at the factory to quickly meet your automation needs without the expense and lead time associated with custom engineering. Tools can be configured for single or dual end processing.

### kSARIA's control system: A Windows NT computer.

The fiber prep and ferruling system is controlled by a Windows NT computer. The system software provides all operator controls, including multi-level user access, error logging, process statistics, logging and diagnostics.

### kSARIA: Get in touch with us.

To speak to a sales engineer now about your application, just call 1-866-4-kSARIA.

For more information, visit [www.ksaria.com](http://www.ksaria.com) or send an email to [sales@ksaria.com](mailto:sales@ksaria.com).

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