

SINGLE FIBER DRAW TOWER (POF, SOFT GLASS, AND FUSED SILICA) FOR SOLID OR HOLLOW CORE APPLICATIONS

Proven Technology

AEi's fiber drawing towers are in use today across many industry applications, including both high volume production as well as research and development oriented applications. AEi's experience from this broad installed base has resulted in a series of advanced standard designs for basic draw towers through very sophisticated systems with AEi available options.

Flexibility and Quality for Maximized Productivity

- Optimized tower implementation with AEi's modular designs
- Keep costs lower by eliminating unnecessary elements
- Minimize downtime and increase production yield with AEi's robust designs and high-quality components
- Ability to create and save multiple recipe configurations, enabling quick tower setup changes for different style fiber runs

Proven Design Elements for Optimal Performance

- Servo-controlled preform down-feed, tractor, and spooling
- Available HEPA filtered upper tower structure
- Precise drawn diameter control available via optional laser micrometer feedback
- Adjustable clamping pressure of the tractor drive draws fragile solid or hollow fiber without deforming the cross-section
- Available optional coating and curing heads for adding coatings and curing these during the draw process
- Either automated cutoff to length subsystem or automated spooling subsystem, optional as need.

Intuitive, Robust, and Flexible Control

- Advanced PC control – optimized over many years of implementations
- Easily configured different draw profiles or recipes, allowing for automatic changeover to produce different fiber styles
- Multiple password-protected permission levels, so operators can change only the parameters allowed
- Automated process data tracking log for maximum quality control
- Remote diagnostics via the web for effective service support



Improve Your Fiber Drawing Performance Now

Built-to-order for optimal performance, AEi's fiber drawing towers are in operation in North America, Asia and Europe. Designed and built by AEi using a high degree of modularity, specific unit pricing is determined by manufacturing functions and features required by the customer application and the number of units ordered. For more information, or a quote to deliver and deploy our fiber drawing towers, call AEi at (978) 658-1000 or email us at sales@aeiboston.com

System Specifications

Tower Height	4 m to 6 m for most applications
Tower Frame Footprint	1 m x 1 m
Minimum Required Floor Space with Spooler	3.5 m x 4 m
Minimum Required Floor Space without Spooler	2.75 m x 4 m
Max Preform Length	750 mm to 1200 mm typical
Max Number of Preforms	1
Preform Diameter Range	10 mm to 35 mm OD (available in +/-5 mm range collet chucks)
Furnace Temp Range	100 C to 2200 C range available, single or dual zone
Draw Speed Range	0.5 mm/sec to 1000 mm/sec typical (configurable and dependent on preform/boule diameter)
Laser Micrometer Measurement Range	40 μ m to 6 mm
Spool Diameter	Up to 300 mm, 150 mm to 200 mm width typical
Controls	FlexAuto™ PC Controls with touchscreen interface.

Automation Engineering Incorporated

Automation Engineering Incorporated (AEi) is a leading supplier of high-precision automation systems across the optoelectronics, medical devices, consumer products, aerospace/defense and other world-wide markets. AEi provides comprehensive design for manufacturing, process development, and pre-production build services in addition to complete turn-key automated manufacturing stations and lines. For more information, visit AEi's website: www.aeiboston.com