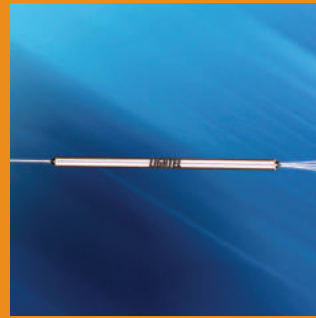
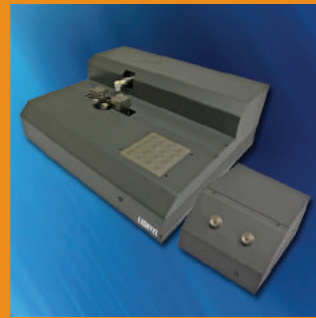
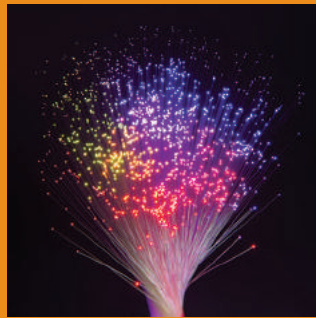


Workstations

for Fabricating Fused Fiber Optic Components



LIGHTTEL

Fabrication of Fused Optical Components

Today's fiber laser, sensor and communications equipment manufacturers demand specialized passive optical components to differentiate themselves from the competition. In addition, research laboratories and universities often have the need to produce highly specialized components for their projects. Lightel designs, develops and manufactures a line of workstations for the fabrication of fused passive optical components. Whether the need is for research, product development or vertical integration, Lightel has the workstation to meet your requirements.

CW-7000: Pump & Signal Combiners

Lightel's CW-7000 workstation is ideal for fabricating end- and side-pump and signal combiners for fiber laser applications. The unit can fabricate end-pump [up to 37x1 or (36+1)x1] or side-pump [up to (6+1) x1] combiners, active pump combiners, reverse combiners and polarization maintaining (PM) combiners. Furthermore, the CW-7000 enables the user to create combiners with or without capillary bundling tubes.

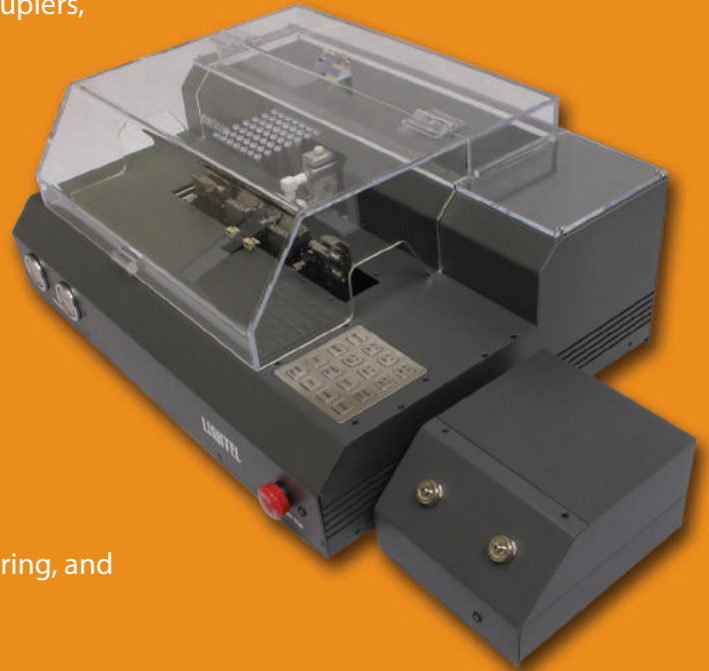


- Production of End-pump [up to 37x1 or (36+1)x1] or Side-pump [up to (6+1) x1]
- Ease of fabrication- No glass tubes or capillaries required
- Ideal for production and research
- Built-in ultrasonic cleaver
- No expensive consumables, minimal maintenance
- Comprehensive software for configurable pulling, torch scanning, gas flow control and cleaver positioning
- Multi-channel hybrid torch H₂+O₂
- Built-in fiber/bundle clamp with optional fiber bundle support & tensiometer ensures proper tension

CW-5000: Maximum Flexibility

The CW-5000 is our most flexible and powerful workstation and can fabricate 1x2, 2x2, 1x3, 1x4 couplers, WDMs, or tapers, including for special fiber (PM fiber), special WDM (w/ very close bands) and special coupler sizes (very short or very long), etc. Useful for both high volume manufacturing and research, this workstation features options for a parallel fusion platform, rotation platform, 1x4 platform and PM platform.

- Production of 1x2, 2x2, 1x3, 1x4, fused WDMs, mini couplers, tapers, core expansion, optional PM components
- Modular design allows multiple optional platforms
 - Parallel fusion platform
 - Rotation platform
 - 1x4 platform
 - PM Platform
- Useful for both manufacturing & research
- Control panel provides easy regulation of 15 frequent actions
- Long tapering travel
- In-situ epoxy curing control
- Up to 5 input power monitoring
- Various torch head diameters
- Straightforward GUI interface for easy setting, monitoring, and control under different fusion modes



CW-200B: Ideal for Mass Production

The CW-200B is an intermediate level workstation developed to fabricate 1x2, 2x2, 1x3 couplers, WDMs, or tapers. The workstation's extensive functionality, ease of operation, and low maintenance makes the CW-200B the perfect choice for mass production of the aforementioned components.

- Production of 1x2, 2x2, 1x3 couplers, fused WDMs, tapers
- Parallel fusion and 1x3 upgrade options
- Suitable size and easy operation/maintenance for mass production
- Supports multiple wavelengths and fiber sizes
- Control panel provides easy regulation of 15 frequent actions
- High precision pulling stage & digital power meter
- Real-time graphic display for coupling ratio and excess loss monitoring
- Database management and networking capability



FiberForge: Cost Effective and Compact

Our FiberForge was specifically designed as a cost-effective, compact workstation for fabricating simple 1x2, 2x2, fused WDMs and tapers. Ideal for universities and research institutes, the machine features an integral PC running Windows-based user friendly software, 6 axis motion controller and real-time graphic display for coupling ratio and excess loss monitoring.

- Production of 1x2, 2x2 couplers, fused WDMs, tapers
- Compact size covering all basic workstation functions
- Integral computer to control the entire operation
- Built-in 2-ch high-precision digital power meter
- Built-in gas controller for hydrogen gas flow rate control
- Comprehensive, versatile, user-friendly operating software
- Cost effective



Accessories

GPST-1000 Gliding Plasma Stripper

In addition to fiber optic component workstations, Lightel has developed the GPST-1000 stripper for quick and easy optical fiber coating stripping. The GPST-1000 uses our gliding plasma stripping technology to strip harsh environment coatings, such as polyimide, carbon, hybrid polymer and multi-layer coatings. The unit supports both end-stripping and window-stripping with adjustable stripping lengths, and its non-contact process eliminates the risks associated with chemical stripping and blade-based mechanical systems.



LTL-H2-500-2 Hydrogen Generator

Lightel's workstations require high purity hydrogen in order to taper and fuse the optical fibers and fabricate the optical components. Hydrogen bottles can be difficult to replenish and maintain. Consequently, Lightel offers an optional adjunct hydrogen generator with all of its workstations. The unit uses high purity de-ionized water with Solid Polymer Electrolyte (SPE) technology to provide hydrogen with a purity of 99.999%.



About Lightel

Lightel designs, manufactures, and supplies a broad range of products and services to the fiber optic industry worldwide. Starting in 2000 with coupler workstations for manufacturing fused bionic taper products, Lightel has expanded into fused fiber components, micro-optic passive optical components, video microscopes for inspection purposes, and many other fiber optic related products and services. Our technology innovations have resulted in many US Patents awarded.

2210 Lind Ave SW Suite 100 Renton, WA 98057 USA
(425) 277-8000 ph (425) 277-5280 fax

sales@lightel.com
www.lightel.com