

VYTRAN GPX-3400 OPERATOR TRAINING CURRICULUM

The GPX-3400 Splice and Glass Processing Work Station:

The GPX-3400 is designed to perform high-quality fusion splicing and tapering of specialty fibers. The system consists of a filament-based heater, precision stages with multi-axis control, microscopic high resolution CCD imaging system, and a personal computer. The multi-axis stages precisely control and align the fibers for high quality splicing and tapering. The imaging system display magnified fiber image with sub-micron resolution. The fiber can be viewed both from fiber side and fiber end. The GPX-3400 has the ability to rotate fibers. This makes it possible to align PM fibers, eccentric core fibers, or non-circular fibers. The GPX-3400 can be equipped with an optional tension monitoring system, which displays the fiber tension in situ during fiber process.

GPX-3400 Operator Training:

This level of training is intended to provide a user with a basic understanding of the GPX-3400 use and functionality. A full description and demonstration of the equipment is given with emphasis on user hands-on interaction with the machine. The training will focus on the following main areas in accordance with the needs of the user.

1. System Overview

- Introduction of filament fusion technology
- Overview of the system
 - Machine nomenclature
 - Hardware and software
 - Features and functions
 - System splicing and tapering demo

2. Basic Hands-on Training

- Detailed description of the system
- Argon gas setup
- Fiber positioning system
- Vision system
- Software functions
- Splicing process including fiber stripping and cleaving process
- Hands-on practice by the user
- Fiber tapering process
- Hands-on practice by the user
- Filament normalization and replacement process
- Hands-on practice by the user
- System start-up and shut-down procedures
- Questions and answers

3. Advanced Hands-on and Application Training

- Software user-interface navigation and operational parameters
- Techniques to achieve high strength and low loss splicing
- Splicing process and parameter optimization
- Hands-on practice
- Splicing optimization and development for customer's applications
- Tapering parameter optimization
- Hands-on practice
- Questions and answers
- Wrap up and summary