

## DESCRIPTION

The FTP-100 fiber tapering system is designed to fabricate fiber taper with total maximum heating length up to 40 mm and minimum taper diameter down to $1 \mu \mathrm{~m}$. In the standard configuration of the FTP-100 fiber tapering set-up, the brushing flame was lit-up by fusion of the LPG and oxygen gas. To ease the fabrication operation, a user friendly GUI is provided that the desired tapered diameter and length could be manipulated in the automation program.

A fiber taper can be fabricated by gently stretching an optical fiber while it is flame-brushed, such that the glass becomes soft. This procedure makes the fiber thinner over some length of e.g. a few millimeters or centimeters.

## APPLICATION

$>$ Mode Matching
> Mode Filtering
> Fiber Coupler
> Tapered fibers with few-micron taper regions are interesting for a number of applications, such as supercontinuum generation, fiber optic sensors, or acousto-optic fiber modulators

## ORDERING INFORMATION

FTP-100
Automated Tapering Set-Up

## SPECIFICATIONS

| Drawing precision (min) | 3 um |
| :--- | :---: |
| Drawing speed | $25-10,000 \mathrm{um} / \mathrm{s}$ |
| Drawing distance (max) | 100 mm |
| Holding fiber diameter | $0.1-0.5 \mathrm{~mm}$ |
| Heating Unit Torch scanning range | $0-20 \mathrm{~mm}$ |
| Moving speed | $0-4 \mathrm{~mm} / \mathrm{s}$ |
| Gas used | Oxygen and LPG |

STANDARD ACCESSORIES

| AC power cord | 1 Unit |
| :--- | :--- |
| Power Adapter | 1 Unit |
| USB communication cord | 1 Unit |
| Motor controller | 1 Unit |
| Brushing Motor | 3 Units |
| Stepping motor | 2 Units |
| Fiber Holder | 2 Units |
| Flame torch with two regulators | 1 Unit |
| Oxygen gas tank | 1 Unit |
| LPG gas tank | 1 Unit |

Customizations are available upon request

