

3SAE PLASMA WORK STATION (PWS)



The 3SAE Technologies Plasma Work Station (PWS) is a precision instrument providing non-contact, chemical-free window stripping and end stripping of polyimide-coated optical fibers in a compact and affordable package.

The PWS features 3SAE's patented Ring of Fire® Technology, which surrounds the fiber with uniform heat and controlled ionic conditions. The PWS generates a partial vacuum from an external air supply for optimal stripping conditions and maximum performance. A unique seal and baffle design allows for sufficient sealing around the optical fibers without causing fiber coating damage. The resultant low-temperature arc window strips or end strips polyimide-coated optical fibers cleanly without mechanical blades, acid or any other chemicals. Many stripped optical fibers maintain > 400kpsi tensile strength, with cleanly tapered interfaces and no charring.

The PWS is built for resilience with electronic and mechanical systems designed for heavy production use, ensuring durability and consistent performance. The user-friendly LCD and keypad interface offer real-time feedback and give operators full control of the stripping recipe parameters, including arc temperature, and position. The operator can quickly and easily recall and store parameters in any one of up to ten available recipe locations. This allows quick transitions between different stripping programs. The automated process provides consistent stripping results without requiring special operator skills.

The PWS is configured for window stripping polyimide coated fibers with cladding diameters ranging from 80-125um and accommodates a fiber with a cladding diameter up to 1000µm, with available alternate fixtures. The PWS is compatible with polyimide, carbon and gold fiber optic coatings.

Key Features: Plasma Work Station (PWS)

- Compact bench top design
- Chemical free optical fiber stripping and cleaning
- Variable strip lengths from 2 mm to 55 mm
- Translation speed: 2 µm/sec – 20 mm/sec
- Software adjustable parameters
- Store and recall up to 10 programs.

Technical Specifications

| Feature | Specification |
|-------------------------|--|
| Dimensions | 285 (W) x 170 (D) x 170 (H) mm |
| Weight | 6.4 kg |
| Power Source | 100-240VAC, 50-60Hz, 120W |
| Cladding Diameter Range | 80 µm - 1000 µm, appropriate fixtures required |
| Compressed Air | External compressor, 95 psi - 5 SCFM flow |

Standard Package

| Part Number | Product | Includes |
|-------------|--------------------------------|--|
| PWS-01-0101 | 3SAE Plasma Work Station (PWS) | Includes fixed clamps (80-200um coating diameter), power supply, tool kit, spare electrodes (set), 4mm airline, 4mm pipe adapter, electronic user's manual, Manufacturer's 1-year parts and labor warranty |

Accessories and Consumables

| Part Number | Description |
|-------------|---|
| ACC-01-0141 | Power Supply 150W/12V (LCC/PWS) |
| ACC-01-0064 | Fiber Holder 80um, Left - 3SAE (FPU II/PWS) |
| ACC-01-0065 | Fiber Holder 80um, Right - 3SAE (PWS) |
| ACC-01-0119 | Fiber Holders 80um (pr) - 3SAE (PWS/FPU II) |
| CON-10-0022 | Electrode Cleaning Discs - Black (Pack of 25) |
| CON-10-0025 | Electrode Set (FPU II/LDS/LFS/PWS) |