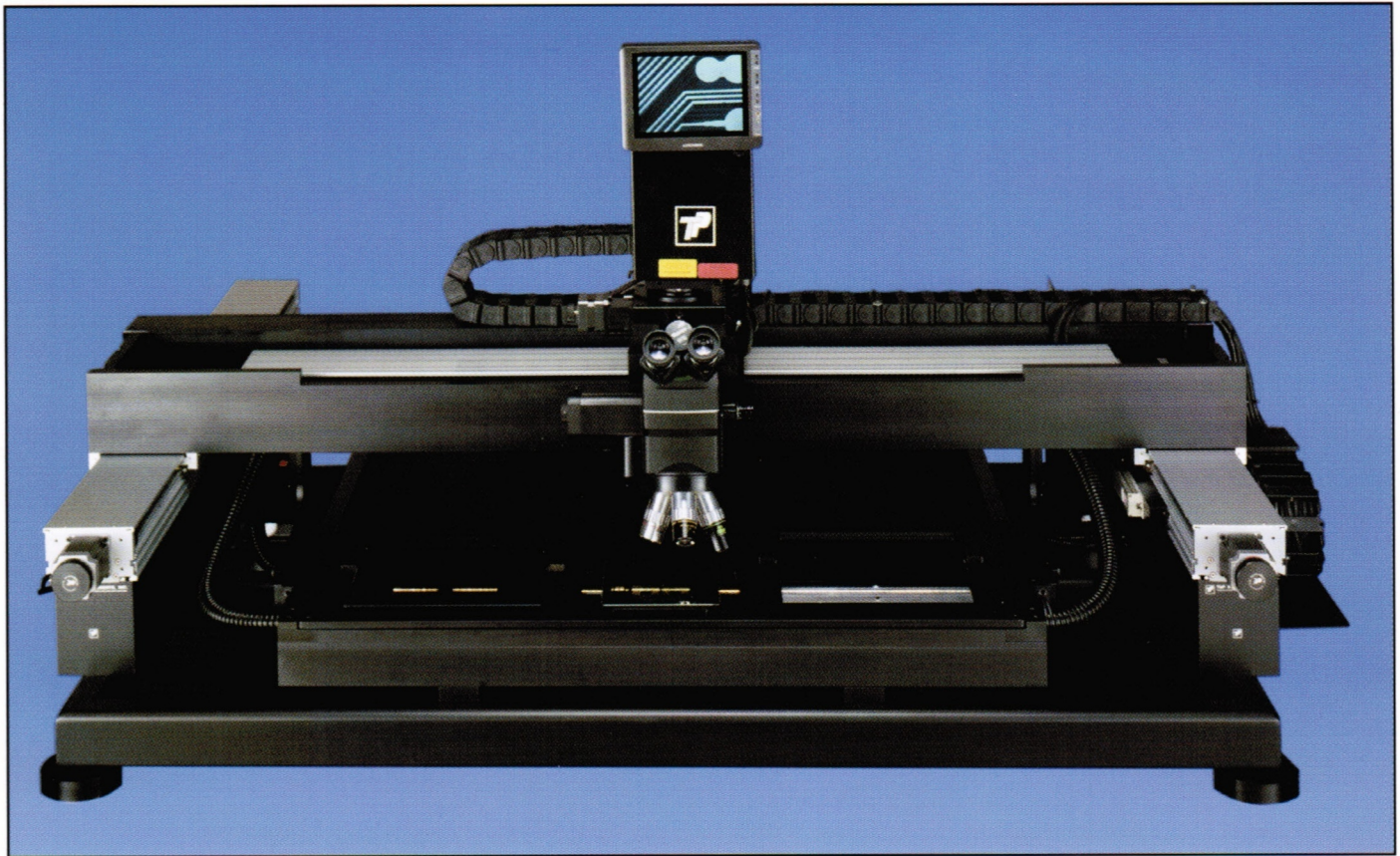


## Semi or Fully Automatic Laser Repair System

- ❑ Accommodates panel up to 2 x 2 meters
- ❑ Flat Panel Display, Large Photomask and Color Filter Repair
- ❑ Triple Wavelength (1064, 532, 355 nm) Laser Cutting Systems
- ❑ User-Friendly Windows 95/98/NT Software
- ❑ Motorized Laser Theta Stage (+45°)
- ❑ Auto Loader/Un-loader (Optional)



## Specifications

**The TNP Model 6400-L** offers an exceptional Laser Cutting System that exceeds the requirements for Flat Panel Display, Large Photomask, and Color Filter Repair. Fully automatic remote controlled, the 6400-L comes with single, dual or triple wavelength to achieve optimum results in the removal of Aluminum, Chromium, ITO, and Polyimide on panel before or after assembly.

### Laser System

The TNP Model 6400-L provides a convenient laser system operation for LCD repair. Designed as a one-step operation, and accompanied with customized software, the 6400-L achieves optimum results in the precise removal of aluminum, chromium ITO, and polyimide. Fully controlled and operated away from the microscope, the 6400-L comprises a complete automated repair station.

Wavelength: 1064/532/355 nanometer. Nd:YAG Laser.  
Pulse Width: 7 nanosecond  
Energy: .6mJ  
Cutting size:  
    50X obj. 50 x 50 Micron Max.  
            1.2 x 1.2 Micron Min.  
    100X Obj. 20 x 20 Micron Max.  
    (Optional) 0.6 x 0.6 Micron Min.  
Cooling: Ambient Air  
Beam Mode: TEM<sub>00</sub>  
Motorized Laser Theta Stage

### Motorized Gantry System

Travel Up to 2 x 2 meters  
Accuracy  $\pm 20 \mu\text{m}$  over travel distance  
Repeatability  $2 \mu\text{m}$   
Resolution  $1 \mu\text{m}$   
Substrate Holder Up to 2 x 2 meters

### Computer Control Unit

Software Operates under Windows 95/95/NT.  
"Point-and-Shoot" on-screen navigation.

**Multimedia Video:** Digitizing graphics card displays live video image on screens. Supports point-and-shoot; drag-and-drop; video image measuring, retrieval, and printing.

### Optional Features

- Auto Loader/Un-loader
- AF-405 Auto Focus
- MT-405 Motorized Turret
- Motorized Laser Theta Stage



*Motorized Laser Theta Stage*

**Input Sources:** Reads data from KLA Acrotech, KLA Tencor, PDI, Orbotech, Hitachi Engineering Research, and Tokyo Cathode Lab. Other manufacturers also available.

### Anti-Vibration Table

Active air provides vibration isolation for small geometry cutting.

### Size and Weight

**Main Unit** For 1 x 1 meter system:  
60" x 66" x 57"  
Approximately 800 pounds  
**Inst. Rack** Approximately 400 pounds  
**Tot. Weight** Approximately 1,200 pounds

### Facility Requirements

**Power** 117/220 VAC, 50/60 Hz,  
Single Phase, 12 Ampere  
**Air** 80 psi  
**Vacuum** 18 mHg

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