

## Specifications:

- **Panel size range:** 12" x 14" (305mm x 356mm) to 24" x 30" (610mm x 762mm)
- **Panel thickness range:** 0.018" (.46 mm) to .250" (6.35 mm)
- **Drilled-hole-to-drilled-hole accuracy:**  $\pm .0005"$  (12  $\mu\text{m}$ )
- **Drill repeatability:**  $\pm .0002"$  (5  $\mu\text{m}$ )
- **Drilling Accuracy:**  $\pm .0008$  (20 $\mu\text{m}$ ) multiple point
- **Physical size:** 82" (2083mm) wide x 77.5" (1969mm) long x 70" (1778mm) high; pass height: 39" (990mm) high
- **Weight:** Approx. 5100lbs (2300Kg)
- **Power requirements:** Electrical; 120/ 220 VAC; 30/15 amp service; single phase
- **Drilling Hole Capacity:** 6.0mm max.
- **Spindle Speed:** 0 - 50,000 rpm
- **Spindle Type:** Brushless DC Servo
- **Spindle Distance:** X-axis 337~762mm Y-axis 0~600mm
- **Spindle Run-out Accuracy:** within 1 $\mu\text{m}$
- **X-ray Tube:** 100W (50kV@2.0mA)
- **Maximum X-ray Leakage:** <1 $\mu\text{Sv/hr}$  (0.5mr)
- **X-ray Spot Size:** 100 $\mu\text{m}$
- **Pneumatics:** 90 psi; clean; water, dirt and oil free; 5 cfm 0.6MPa @142 l/min
- **Through-put:** is dependent upon numbers of targets, drilled holes and amount of motion required.
- **Cycle time:** for two-target or four-target alignment with the drilling of three holes will be between 20 and 30 seconds per panel.



## Optional Off loader (XRO):

Off loader- an off loader can be provided which delivers panels to a conveyor table at the rear of the machine.

## Optional Software:

Run and Trend Analysis (RA™) and Multiline Predictive Registration Software (MPRS™)

## Features:

- Selectable drill sizes: Four drill heads allow for two different drill sizes without drill change
- Drill motors are electrically controlled with speed and torque feedback.
- Drill spindles are air cooled with ceramic bearings.
- Multiline Technology's own State-of-the-Art image-capture and image-recognition technology.
- 100 W x-ray tubes; liquid cooled.
- Split axis precision motion control system; servo and linear servo technology.
- Inspection mode and layer analysis prevents scrap and improves processes.

**MULTILINE TECHNOLOGY INC.**  
MANUFACTURERS OF REGISTRATION SYSTEMS  
AND LAMINATION FIXTURES FOR THE MULTI-LAYER  
PRINTED CIRCUIT BOARD INDUSTRY.

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