

exatron MODEL 8000-PR

THE WORLD'S HIGHEST THROUGHPUT PRODUCTION PROGRAMMING SYSTEM

Up to 4,000 UPH
(units per hour)
depending on options

Add your choice of programmer to **Exatron** automation and create the **fastest**, most flexible programming system **in the world**.



Model 8000-PR with Two Input/Output Stackers, JEDEC Tray, Sixteen Program Sites, and Laser Marking

FAST

- 2,000 UPH with 15 sec program time and laser mark (as shown).
 - Special versions can exceed 4,000 UPH with additional test sites.
- Moves 8 devices at once (as shown).
- All sockets individually aligned under software control.
- Camera-aided socket alignment optional. (See back page.)

FLEXIBLE

- Virtually "kit-less."
 - Quick and easy changeover of socket adapters and pickup heads.
- Handles all package sizes
1mm x 1mm - 75mm x 75mm.
- 16 programmer sockets (as shown).
 - Can be made to fit 128 sockets.
- Exatron-built input/output stackers feed all JEDEC tray standards with no mechanical changeover.



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SPECIFICATIONS, FEATURES, AND OPTIONS

8000-PR Features:

- 2,000 UPH (units per hour) with 15 sec program time.
 - Special versions exceed 4,000 UPH with additional test sites.
- Virtually "kit-less."
 - Quick and easy changeover of socket adapters and pickup heads.
- 16 program sockets (as shown).
 - Can fit up to 128 sockets.
- All sockets are individually aligned under software control.
- Moves 8 devices at once (as shown).
- Z plunger opens/closes standard open top sockets.
- Interfaces with the 3rd party programmer of your choice. (See insert.)
- Handles device sizes 1.0mm x 1.0mm - 75mm x 75mm.
- 2 input/output tray feeders, hold 40 JEDEC trays each.
 - Feeds **all** JEDEC tray standards (thin, thick, vacuum-formed, waffle pack).
- 1 JEDEC reject tray.
- In-tray laser marking as shown.
- Multiple additional options. (See next page.)
- Fully enclosed on all sides, doors electrically and mechanically locked.
- Heavy duty welded steel frame.
- CE marked, RoHS compliant. Meets all ESD requirements.

Specifications:

Size: 2.8m x 1.7m x 1.6m (111.2" W x 66" H x 64.1" D) (as shown)

Weight: Approx. 2300kg (5,000 lbs)

Power: 100-240 VAC 50/60 Hz @ 240 Watts

Air: 5.9 bar (85 PSI) @ 3 CFM clean, dry air

Operational Temperature: 13-32° C (55-90° F)

Humidity: 35-90% RH non-condensing

Positioning System:

X Drive Gantry: Digital linear motors and linear encoders

X Axis Resolution: 0.03mm (0.001")

X Axis Max. Velocity: 150cm/s (60"/s)

Y Drive Tray: Servo motor-driven lead screws

Y Axis Resolution: 0.1mm (0.003")

-Y Axis digital linear motor upgrade available.

Z Plunger: Servo motor-driven lead screws

-Fits 2-8 Z plungers, up to 32 pickup tips.

Z Axis Resolution: +/- 0.1mm (0.003")

Z Axis Repeatability: +/- 0.1mm (0.003")

Placement Force: Up to 10kg (20 lbs) force with standard pickup heads

Theta Drive System: Precision stepper motors

Theta Axis Resolution: 0.1°

Theta Axis Repeatability: +/- 0.1mm (0.003")



Pickup Head Closes Programmer Sockets



Input Feeders and Reject Tray



Pickup Head at Socket



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SPECIFICATIONS, FEATURES, AND OPTIONS

Input Tape Option:

- Based on standard Hover-Davis feeders.
- Snaps on/off. Easy loading, no tools required.

Output Tape Option (Model 202 Tape and Reel):

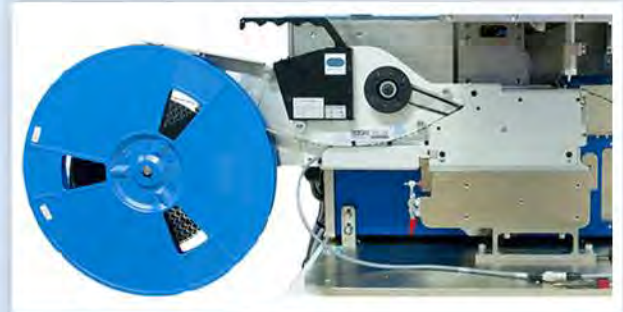
- Built by Exatron. Not a third party design.
- **Tape width:** 8mm-72mm.
- **Tape pitch:** 2mm-72mm.
- **Output reel size:** 18cm, 33cm, or 56cm (7", 13", or 22").
- PSA and thermal sealing.
- Handles all carrier tape types.
- Built-in vision standard:
 - Pin1 orientation.
 - Out of pocket, upside down, empty pocket.
- PC-controlled parameters:
 - Total filled pocket count.
 - Seal method, timing, and tape speed.
 - Leader/trailer pocket count.
 - Automatic tape alignment.
 - $\pm 2^{\circ}\text{C}$ seal temperature control.
- Powered takeup reel with slack/tension switch.
- Innovative carrier tape guide block aligns cover and carrier tape. Perfect seal every time, guaranteed.

Laser Marking Option:

- Easily integrate a wide range of OEM laser markers.
 - CO₂, 1064nm, 532nm.
- Mark in tray, no additional tooling required, no UPH hit.
- CDRH Class 1 enclosures.
- "Add a Mark" Vision upgrade aligns new marks to existing marks on each individual device.
- Laser mark options can be upgraded at a later date in the field.

Input/Output Tube Option:

Many options available for devices in tubes.
Contact Exatron for details.



Input Tape



Output Tape



Laser Marking



Input Tube



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Machine Vision Options:

- **Bottom-side Vision:**
 - Precision BGA, QFN, and leaded 3D inspections.
 - Economical 2D inspection.
- **Top-side Vision:**
 - 1D or 2D barcode scanning on device and/or JEDEC trays.
 - Optical Character Verification.
 - Optical Character Recognition.
- Most vision options can be added in the field.

Software Features:

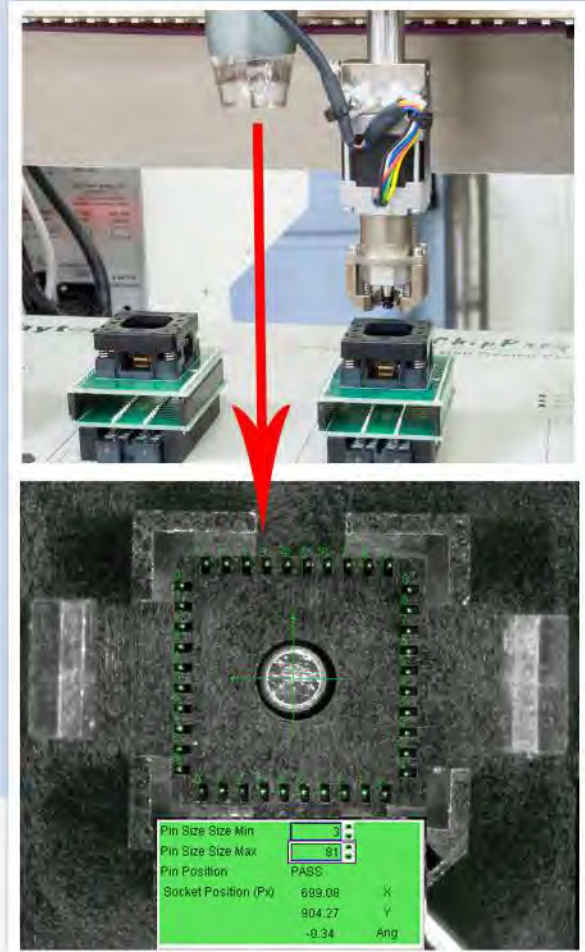
- Windows 7 operator GUI.
- Extensive built-in diagnostic software.
- Job data logs come standard.
- All software generated in-house at Exatron.

Software Options:

- Exatron "Smart Queue" upgrade:
Smart Queue software guarantees 100% perfect serialized order at output tape, remakes failed devices on the fly with no UPH hit, and ensures the correct external laser mark and internal serial number. Absolutely no missing, out of order, or duplicate numbers.

Ongoing Support:

- World's easiest handler to self-service.
- Handler self-calibrates on power up. No mechanical or electrical calibrations needed.
- Remote service, training, and software updates available via Internet.
- Error messages in plain English, no error codes.
 - Ask about messages in language of choice.
- Spare parts typically shipped within 24 hours ARO.
- Excellent, full-color documentation and extensive diagnostics provided.
- Worldwide on-site service available.



Optional top-side vision upgrade inspects socket position, making program site alignment fast and easy for any size device. Inspection can also determine pin position in socket, and device OCR/Pin1 orientation during production.



Optional Bottom-side Vision



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