

Pick-and-Place Handlers

Model 8000

High-volume production handler

- One to five tray stackers, up to 40 trays per stack
- Single or dual large ATE test heads
- Up to 3 Z cars, up to 16 pick ups each
- 1 to 128 test sites
- Many building blocks can be added at a later date.
- -55°C to 155°C



Model 900

Most economical high-volume production handler

- 1 to 5 JEDEC trays/3-15 4" waffle packs
- Custom non-JEDEC trays as may be required
- 24" to 81" gantry lengths
- Up to 3 Z cars, up to 16 pick ups each
- 1 to 32 test sites
- Built with a specific combination of building blocks
- -55°C to 155°C



Walking Beam Handlers

Model 700

- Magazines input and/or output
- Boat-Strip-Waffle Tray Handling
- Add any combination of building blocks (see below)
- Build to order



Rotary Handlers

Model 2110 Rotary Handler

- Based on DDR digital drive rotary motors, no belts/pulleys
- Rotation tables from 4" to 48" in diameter
- 2 to 36 positions
- Most adjustments computer controlled
- Add almost any combination of building blocks (see below)



Laser Markers

Model 1900 JEDEC Tray Laser Marker

Laser marking of JEDEC trays, Auer boats, wafers, or lead frames

- Many media input and output choices
- CDRH Class 1
- "Smart Mark" vision alignment per device
- Servo motor driven, no belts



Single Tray 900 Laser marker



Magazine to Magazine Laser Marker



Gravity-Feed Handlers

Model 5000

Floor mounted production handler

- Input/output to tubes
- Optional temperature test to +155°C
- AC/DC/RF/Hi-pot test, 1 to 4 sites
- Fast & simple change over, usually without tools
- Add almost any combination of building blocks (see below)



Model 3000B

Benchtop medium volume handler

- Input/output to tubes
- Optional elevated test to +155°C
- AC/DC/RF/Hi-pot test
- Widest choice of change over kits
- Typically used for electrical test only



Particle Interconnect

- Contact resistance under 3 milliohms
- Capacitance approaches zero
- Inductance approaches zero
- Tested to 40 GHz
- -70°C to +300°C Temperature Range



Building Block Options

Machine Vision Systems

- Pin 1 location, orientation & position
- OCR/OCV mark inspection
- 2D/3D lead/ball inspection
- 1D/2D barcode matrix read/verification
- Top and/or bottom side vision
- Wide choice of OEM vision suppliers

Bowl Feed Input & Bulk Output

- Integrated OEM bowl, 4" to 24"
- Fast bowl change over, typically only two parts, one tool
- Add vision to simplify set up and correct orientation before leaving the bowl
- Simple and easy to remove standard output buckets
- "Smart bucket" with electrical/mechanical locks, bucket present & positive device drop input detection

Mark

- CO₂, 1064nm, 532nm, 355nm Laser markers
- CDRH Class 1
- "Smart Mark" vision alignment per individual device
- Laser obliteration, scribe, cut or weld
- Manually loaded and simply automated laser enclosures
- Label print and apply w/o vision alignment
- Pin stamper and inkjet integration

Magazine Input & Output

- 1 to 8 magazines per input loaders and/or output unloaders
- Lead frames, tiles/PCBs, wafers, Auer boats
- Input / output elevators for vacuum formed trays
- Servo motor driven push/pull, no belts

Pick & Place Tube Input & Output

- Gravity feed input
- Tray vibration input
- 8 tube output

Particle Interconnect Contactors and Test Sockets

- Particle interconnect (PI) contacts and interposers
- BeCu, leaf spring contacts built to order
- Repairable, spring probe sockets
- Integrates with most off the shelf OEM sockets
- High Pot test sockets
- Unique MEMS socket solutions
- CSP Chipscale Sockets

Tape & Reel Input & Output

- Stand-alone models or built into the handler
- Vision detection of empty/out of pocket, pin 1 orientation
- PSA and/or thermal seal
- Easy to adjust to any size tape tooling
- Powered cross reel mounts
- Fixed tooling production, fastest possible change over
- Snap on/off fast reload Detaper input

Hot-Ambient-Cold Test

- Hot Test to 155°C (+300°C Special Order)
- Controlled ambient
- Cold Test to -55°C
- Hot/ambient/cold 3 temp test in one insertion

Software

- Common look & feel over all PC based systems
- Extensive built in easy to use diagnostics
- No error codes, just easy to understand error messages
- Generated in house at Exatron
- All software adjustments saved in a unique JOB file
- Database management integration
- Remote service and updates via the Internet

Interface

- Up to 48 bit TTL or +24 Relay Logic
- Multiple RS-232 (one per test site)
- GPIB
- Ethernet
- SECS GEM
- Other

MEMS Testing

- Audio testing
- Air pressure and/or vacuum
- Shock/vibration/tilt/acceleration
- Light source/LED/light sensing/CCD
- Magnetic field sensing



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