

# R2D AMTECH GROUP



**AMTECH**  
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## Single Wafer Sorter

### The R2D Wafer Sorter provides:

- Randomization • Compacting • Single wafer transfers
- Preprogrammed factory recipes • Customizable recipes
- Drag and drop transfers

### Wafer management via:

- Wafer ID • Lot number • Batch number • Slot number

### Frontside, Backside or both Wafer ID reader:

- Cognex 1741/1742 • Wafer ID manual recovery

### Automatic Scanning after cassette loading

### Flat Panel PC provides clear wafer mapping

### 2, 3, or 4 Load Ports

### 3" to 12" wafer size

### 6" and 8" / 8" and 12" compatible system available

### OPTIONS:

- SECS/GEM communication
- Bar Code - Gun or fixed read
- Laminar Flow
- Manual wafer inspection
- Pod opener/load port
- Wafer flip function
- RFID read write detection
- Visual wafer inspection port

### STANDARD FEATURES:

- Integrated notch or flat finder with OCR
- ESD protected
- Wafer/Cassette detection sensors
- Double or cross slot wafer detection
- Auto recovery safety mode

### PERFORMANCE:

- 6" > 550 wph-320 wph w/ocr
- 8" > 500 wph-280 wph w/ocr
- Uptime: > 99.8 %
- MTBF: > 4000 hours
- MTBA: > 750 hrs
- MTTR: < 1hr



## Wafer ID Reader

- With its integrated Notch/Flat Finder, the CWIR is able to read a complete batch of 25 wafers in less than 1.5 min
- With its flat panel PC and the use of a friendly interface, the operator can read any wafer ID and slot position inside the carrier with just a click
- Equipped with the Cognex Insight 1741 or 1742 vision system, the CWIR provides high performance wafer identification
- 3" to 8" wafer size

### STANDARD FEATURES:

- Table top machine
- 12" color LCD Touchscreen
- Integrated notch or flat aligner
- Cognex 1741 or 1742 OCR
- Automatic mapping system
- Wafer detection in cassette
- Current limiters on all motors
- TCP/IP Host connection
- Error message and cycles recorded
- Clean concept documentation
- Light tower

### OPTIONS:

- SECS/GEM communication
- Bar Code - Gun or fixed read
- Frontside, Backside or both reading
- Automatic BCR and RFID

### PERFORMANCE:

- MTBF: > 4000 hours
- Uptime: > 99.8 %
- MTTR: < 1hr
- Throughput < 1.5 min



## Comet 1, 2 or 3 Station

- The Comet transfers 25 or 50 wafers to/from cassette to cassette or boat
- The Comet is fast, clean, reliable and accurate
- Simple to use and easy to maintain
- Customizable (for OEM customer)
- One button system operation
- LCD display indicating all cycle steps
- Setup machine directly from the onboard keyboard
- Electronic parts compatible for all Comet Systems
- 3" to 12" wafer size
- Thick and thin wafer transfer

### STANDARD FEATURES:

- Peek material for boat and wafer contact
- IR heat sensor
- Double cassette sensors
- Boat sensor
- Wafer detection into cassette
- Wafer detection into boat
- Current limit on all motors
- Power "off" security
- Automatic home position
- Carrier mechanical positioned
- Historical data recorded (error messages date time)
- Clean concept documentation

### PERFORMANCE:

- Cycle time: < 1 min
- MTBF: > 4000hrs
- MTTR: < 1hr
- Uptime: > 99.8%
- MTBA: > 750 hrs
- MTTA: < 0.005 hr

### OPTIONS:

- Back to Back
- Pitch Changing
- SECS/GEM communication
- Flip
- Wet process
- ESD system/ pusher
- Flat or Notch aligner
- Split 25 to 12/13
- Inline option (FSI Dummy management)
- Light tower



## Gemini Batch Transfer

- The Gemini is one of the smallest batch wafer transfer systems available on the market.
- Capable of a 25 wafer cassette to cassette semi-automatic transfer in less than 30 seconds.
- Since the wafers are positioned in the rear of the machine during the transfer, you will obtain good contamination results, and reduced operator interference.
- One button system operation
- 6" to 8" wafer size

### STANDARD FEATURES:

- ESD material for pushers and retainers
- Double cassette sensors
- Wafer detection into cassette
- Current limit on all motors
- Power "off" security
- Automatic home position
- Carrier correctly positioned (mechanical)
- Clean concept documentation
- Metal Cassette compatible (standard design)
- ASM compatible

### PERFORMANCE:

- Cycle time: < 1 min
- Uptime: > 99.8%
- MTBF: > 4000hrs
- MTBA: < 750 hrs
- MTTR: < 1hr
- MTTA: < 0.005 hrs



## Table Top Organizer

- The Comet 2 port TT Organizer provides:
  - Randomization
  - Compacting
  - Single wafer transfers
  - Preprogrammed factory recipes
  - Customizable recipes
  - Drag and drop transfers
- Designed for 6" and 8" wafers
- Light tower
- SEMI standards compliant
- Wafer mapping (cross slot detection)

### PERFORMANCE:

- Cycle time: < 2 min
- Throughput: > 500 wph
- Uptime: > 99.8%
- MTBF: > 4000hrs
- MTBA: > 750 hrs
- MTTR: < 1hr
- MTTA: < 0.005 hr

### OPTIONS:

- SECS/GEM communication
- Manual selected wafer visual inspection

