

## Automated Placement Equipment (9)

### Hitachi GXH-1S Assembler

- 0201 (0603mm) to 100 x 26mm connector
- Mounting accuracy 50  $\mu$ m (3 $\sigma$ )
- Rated at 65,000 placements per hour

### Fuji CP43 Assembler

- High Speed chip shooter
- Rated at 12,000 placements per hour

### Tyco/Quad QSP-2/QSP-2+ Assembler

- VU8 Vision system
- Quad P4 placement head technology
- 16" maximum board size
- Maximum component size approximately 2" x 2"
- Placement accuracy down to 12 mil.
- Component sizes from 0402 to microBGA
- Rated at 18,000 placements per hour

### Tyco/Quad QSX/QSV Assembler

- VU7 Image Vision system
- VU12 component lead alignment and inspection
- BGA alignment and ball inspection
- Component sizes from 0402 to QFP400 lead pitch
- Rated at 9,000 placements per hour

### Tyco/Quad IVc Assembler

- VU6 Vision system
- Maximum component size approximately 2" x 2"
- Component sizes from 0402 to 15 mil. fine pitch
- Rated at 1,200 placements per hour

## Automated Thru-Hole Insertion

### Universal Axial Inserter

### Universal Dip Inserter

### Universal VU6 Vision System

## Selective Solder Equipment

### Ace Production Technologies KISS-102

- CNC Programmable

## Wave Solder Equipment (2)

### Vitronics Soltec Delta 6622

- Dual wave technology (laminare and chip)
- Finger conveyor with speed controls
- Spray fluxer
- 16" maximum board width
- Aqueous and no-clean capabilities
- Separate Pb and Pb free wave solder machines

## Cleaning Equipment

### Electrovert Aquastorm 100

- Closed loop system
- 100% deionized wash/rinse
- Programmable dwells

### Branson Ultrasonic Cleaner

- 40kHz system
- Heated five gallon tanks for wash/rinse
- 100% deionized water

### Aqueous Technologies Zero Ion

- Ionic contamination testing

## Reflow Ovens (6)

### Vitronics Soltec

- Convection reflow up to 350°C
- Up to 10 active zones
- Combination rail/belt conveyor
- Forced air cooling

## Screen Printers (6)

### Dek 265 GSX

### EKRA EI Printer

### Tyco/Quad AVX 400 Printer

### Ekra X5

- Maximum print area 16"
- Frame size 23"x 23" O.D.
- Optical positioning system

# EQUIPMENT LIST CONTINUED

## BGA Equipment

### Metcal BGA/CSP-3591 Rework System

- BGA, QFP, PLCC, TSOP, SOIC and CSP component types
- Large variety of rework nozzles

### Metcal MX Rework System

- Hand-held soldering/desoldering tools

### Metcal VPI-1000 Optical Inspection System

- Ability to visually inspect under BGA's up to eight rows deep

### Glenbrook RTX-113 X-ray Machine

- Real-time x-ray inspection system
- Image enhancer
- Variable angle viewing
- Manual X-Y positioning
- Video printer

### Micro Square MS-1000L

- Video microscope

### Sony TechnoLOOK TW-TL10S

- Video microscope
- 10x-100x magnification

## Inspection Equipment

### YESTech YTV2000

#### YESTech F1

- Automated optical inspection
- Thin camera technology
- Exceptional defect coverage
- Real-time SPC monitoring capabilities

## Testing Equipment

### GenRad 2283

- Analog and digital testing
- Data logging/failure analysis
- 1,152 test nodes expandable to 1,920

### Checksum In-circuit Tester - Model TR-7

## Conformal Coating Equipment

### PVA 2300

- Selective coating
- 3 dispensing heads
- In-line conveyor
- Programmable
- Circle and path interpolation

### Dymax UVC-12 Oven

- UV curing conveyor system
- Dual fusion lamps
- 12" conveyor and beam width

### Nordson Selective Coater Century System C708

### Speciality Coating Systems Precision Coater

- 2 dispensing heads
- In-line conveyor
- Programmable

### SCS-Precision IRT oven

## Ancillary Equipment

- OK Industries SMT8500 manual pick-n-place machines
- Metcal solder stations
- Hakko hot air rework stations
- Q Corporation lead trimming
- FKN Systek depaneling: Model K4000S, Model N200
- Vision Engineering Mantis inspection stations
- Sciencescope video microscope station
- GPS, Hepco and APS lead forming equipment
- Datapaq Thermal Management System
- Wire processing equipment
  - Komax Kappa 225
  - Komax 33
  - Eubanks 4600 processing center
- Hand soldering stations (70+)
- Hot air stations (23)
- Inspection stations (23)

## MORE THAN YOU EXPECTED

At Key Electronics, our commitment to providing exceptional quality and service to the customer transcends every aspect of our work environment. Consider us as your Electronics Manufacturing Services partner, and we believe you'll agree... we strive to always deliver **More Than You Expected!**

