| | RD-0020 Equipment List including Software Packages | | |
|---|---|---|---|
| **REV 06** | **Revision Date** 01-29-2018 | | **Process Leader:** Ed Fitzsimmons |

| **SMT** | **Qty** | **Description** | **Website** |
|---|---|---|---|
| | 5 | MPM Momentum screen printer | www.speedlinetech.com |
| | 1 | MPM UP2000 HiE screen printer | www.speedlinetech.com |
| | 6 | Yamaha YSM20 pick and place machine | www.global.yamaha-motor.com/business/smt/ |
| | 3 | Assembleon Topaz-XiII SMT pick and place machine | www.assembleon.com |
| | 4 | Assembleon MG-1 SMT pick and place machine | www.assembleon.com |
| | 3 | Philips Topaz SMT pick and place machine | www.assembleon.com |
| | 2 | Heller Convection Reflow Oven 1809 MK III | www.hellerindustries.com |
| | 1 | Heller Convection Reflow Oven 1800EXL | www.hellerindustries.com |
| | 2 | Heller Convection Reflow Oven 1809S | www.hellerindustries.com |
| | 1 | Conceptronic HVA-70 Convection Reflow Oven | www.conceptronic.com |
| | | | |

| **Inspection** | **Qty** | **Description** | **Website** |
|---|---|---|---|
| | 1 | YesTech AOI System YTV-FX | www.nordson.com |
| | 1 | Glenbrook Technologies Jewel Box 70T X-ray machine | www.glenbrooktech.com |
| | 1 | Glenbrook Technologies RTX-113 X-ray machine | www.glenbrooktech.com |
| | | | |

| **Rework** | **Qty** | **Description** | **Website** |
|---|---|---|---|
| | 1 | Air-Vac DRS-25 rework station | www.airvac.com |
| | 1 | Pace Craft 25SMD rework and prototyping station | www.pace.com |
| | 2 | Pace Thermo Flo system PPS-95 | www.pace.com |
| | | | |

| Wave Soldering | Qty | Description | Website |
|---|---|---|---|
| | 2 | Electrovert Vectra ES2 Wave Solder machine | www.speedlinetech.com |
| | 1 | Technical Devices MP-16 Wave Soldering machine w/ Nordson pulse-spray fluxer | www.technicdev.com |
| | 1 | Pillarhouse Jade Handex Selective Soldering | www.pillarhouseusa.com |
| | 1 | On Site Gas N-70-TGN Nitrogen Generator | www.onsitegas.com |
| | | | |

| Cleaning | Qty | Description | Website |
|---|---|---|---|
| | 1 | Electrovert Aquastorm 200 Board Washer | www.speedlinetech.com |
| | 1 | EMC Cyberclean 400 Aqueous Board Washer | www.emcgti.com |
| | 1 | EMC Cyberclean 1000 Stencil Cleaner | www.emcgti.com |
| | 1 | Aqueous Technology Zero Ion Ionic Cleanliness Tester | www.aqueoustech.com |
| | | | |

| Routing | Qty | Description | Website |
|---|---|---|---|
| | 1 | Ge-Tech Semi-Automatic Router ESR-1000 | http://www.getecha.com/ |
| | | | |

| Test | Qty | Description | Website |
|---|---|---|---|
| | 2 | Teradyne Z1850VP ATE | www.teradyne.com |
| | 1 | Agilent HP3070 Series III ATE | www.Agilent.com |
| | 1 | Agilent HP8595E Spectrum Analyzer | www.Agilent.com |
| | 2 | CSZ-32 Environmental chambers | www.cszinc.com |
| | 1 | Tenney BTS Environmental test chamber | www.tenney.com |
| | 1 | Sencore Video Pro VP300 | www.sencore.com |
| | 1 | Quadtech Sentry 20 AC/DC High Potential Tester | www.quadtech.com |
| | 1 | Quadtech Sentry 50 Ground Bond Tester | www.quadtech.com |
| | | | |

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| Dispensing | Qty | Description | Website |
|---|---|---|---|
| | 1 | Camalot FX-D Dispenser | www.itweae.com/products/dispensers |
| | | | |

| Component Storage/ Handling | Qty | Description | Website |
|---|---|---|---|
| | 5 | White Systems Horizontal Storage Carousel | www.whitesystems.com |
| | 3 | White Systems Vertical Storage Carousel | www.whitesystems.com |
| | 1 | V-Tek TM-50 Reeling Machine | www.vtekusa.com |
| | 1 | V-Tek TM-4450 Automatic Reeling Machine | www.vtekusa.com |
| | 1 | Blue M Electric 1406 Series Bake-Out Oven | www.thermalproductsolutions.com |
| | 1 | Blue M Electric DCC-1406F Curing oven | www.lindberg-bluem.com |
| | | | |

| Component Programming | Qty | Description | Website |
|---|---|---|---|
| | 1 | Data I/O 3980xpi Advanced Component Programmer | www.dataio.com |
| | 2 | Microchip PM3 Programmers | www.microchip.com |
| | 1 | BPM microsystems Flashstream2800 | www.bpmmicro.com |
| | | | |

| Pin Insertion | Qty | Description | Website |
|---|---|---|---|
| | 1 | Autosplice Compact CNC automated pin insertion machine | www.autosplice.com |
| | | | |

| Software Packages | Qty | Description | Website |
|---|---|---|---|
| | 2 seats | Altium Designer | www.altium.com |
| | 1 seat | CAM 350 Gerber editor | www.downstreamtech.com |
| | 2 seats | AutoCAD Lite | www.autodesk.com |

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|---|---|---|---|
| | 2 seats | Aegis CircuitCam | www.aiscorp.com |
| | 2 seats | Aegis CheckPoint | www.aiscorp.com |
| | 1 seat | Yamaha P-Tool off-line programming station | www.global.yamaha-motor.com/business/smt/ |
| | 10 seats | Yestech Offline Review Stations for FX AOI | www.nordson.com |
| | | | |