MRSI-M3 3-Micron Die Bonder. An industry standard for ultra-precision, high-complexity die attach in high volume production environments. This system includes force control, ultra-precise placements, and 360° die orientation, the MRSI-M3 die bonder ensures high yields, high quality and high reliability in advanced packaging. The system has 3-micron accuracy, automation, speed and reliability; in-situ assembly processes such as eutectic die bonding, UV epoxy die attach and flip chip assembly are all possible. The MRSI-M3 3-Micron die bonder is used for ultrasound modules microwave modules, IR sensors, MEMS, multi-chip modules, stacked assemblies, hybrid devices and photonic packages. The MRSI-M3 3-micron die bonder supports sizes from mall dies to large sensors provides all the capability and flexibility to assemble the most advanced packages.

West Bond – Wire bonding Packaging tool. Semi-automatic wire bonding tool. Supports ultrasonic, thermo-sonic and thermo-compression fine wire, ribbon, and ball bonding. Unique design features qualify the 353637F Series for the microwave, semiconductor, R.F., and hybrid devices where precision and repeatability are critical. Custom mounting brackets can be designed to join to customer's mechanism. A simple exchange of wire clamp assemblies, provided with this model, allows conventional 45º wire feed, deep access 90º wire or ribbon feed, ball-wedge, ball-stud, and single point tab/lead bonding, all within a single tool head. All programmed bond variables and machine settings are retained in memory and retrieved automatically upon conversion.

BSET ATV SRO-700 Tabletop Soldering Chamber. IR Vacuum Reflow System. SRO-700 table top IR vacuum reflow oven, has rapid thermal annealing and brazing capabilities the SRO-700 supports reflow soldering applications. A cold wall chamber principle in combination with the IR lamp heating technology and vacuum support process repeatability and void free solder joints. 100 mm clearance over the heated surface the system can handle products like IGBT and power electronics packages. Supports flux, flux less or solder paste – a versatile reflow oven for

semiconductor and MEMS application. Chamber Height: 100mm, Heated Area: 230 x 217mm, IR Heating: Array of 8 IR lamps in Quartz glass tubes (2 Heating zones). Common Applications SRO-700:IGBT/DBC, Power Semiconductors, Sensors, MEMS Devices, DIE Attachment, High Power LED, Hybrid Assembly, Flip Chip, Package Sealing. Features SRO-700:Flux-less, with Flux and solder paste, formic acid enriched atmosphere, direct IR Heating, multiple TC monitoring, process temperature 450°C up to 700°C, temperature ramp-up rate 3.5K/sec, temperature cool-down rate 2K/sec., Rapid single wafer processing < 20°C/sec, oxygen < 1,0ppm with purified N2.

AP-600 Plasma Treatment Machine. AP-600 plasma treatment machine is a benchtop-style, completely self-contained, system. The system chassis houses the plasma chamber, control electronics, 13.56 MHz RF generator, and the automatic matching network (only the vacuum pump is external to the system). Maintenance access is provided through an interlocked door or removable panels. The plasma chamber supports up to 7 removable and adjustable powered or grounded shelves to accommodate a wide range of piece-parts, components, and part carriers including magazines, trays, and boats. The vacuum plasma treatment systems can accommodate a wide range of process gases including argon, oxygen, hydrogen, helium, and fluorinated gases. Both models come standard with two (2) electronic mass flow controllers for optimal gas control, with another two (2) available (4 total max.). Convenient hook-ups for periodic calibration requirements used in validation processes.

Mitutoyo – QV active 202. Mitutoyo Quick Vision Active Series CNC Vision Measuring System. Combines the flexibility of multiple high-quality zoom lenses with features: High-quality zoom optics with interchangeable lenses, High-resolution and high-speed color camera, QVPAK 3D vision software, contact and noncontact measurement, programmable LED stage, coaxial, and 4-quadrant ring light. Range (X,Y,Z-axis) with vision head 250 x 200 x 150 mm. Resolution 0.1 µm. Accuracy 0.2 µm. Illumination: white LED / contour / coaxial / 4-quadrant ring light. Zoom optical system with 8 positions. High-resolution CMOS

color camera. Objective lenses: 1X and 2X magnification.

PXI GenX 90 series x-ray inspection system. The GenX series x-ray inspection systems, 90kV power level, can be configured with various detectors to provide a wide range of high resolution imaging options that cater to different application needs from identifying solder joint opens, cold solder, and head-in-pillow defects, to internal semiconductor component verification of bond wire attachments and die inspection. Combined with the PXi-Pro imaging analysis software, the GenX system provides a complete solution to a broad range of x-ray inspection requirements.