



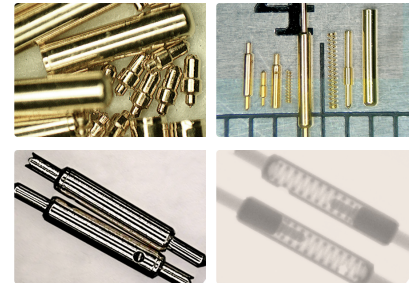
CAMTEK | automated optical inspection

Advanced AOI systems for silicon wafers, MEMs, TSV, PCB, PBGA, CSP, Substrates for solder & gold bump inspect, post-diced inspect, probe mark defects, wafer scratches, debri, contamination, deposition defects, CMP, photo etch, wafer edge inspection, discoloration, shape violation, high-speed macro inspection.



HYPERSPACE | pogo pins, sockets

For Test Sockets, Probe Cards, LCD Testing. High Performance “Black Gold” solution for Lead-Free and Solder Migration Issues for all types of electrical testing applications from Semiconductor Package Test, Wafer Test, LCD Panel Testing. Both Manual and Automated. Easy to maintain, High throughput with Superior Hardness.



JOHNSTECH | test sockets

High-Performance Test Sockets for production and characterization testing at DC to 40GHz. Package types include QFN, QFP, SOIC, TSSOP, etc. Center Body Grounding, Lead-Free Solutions, Manual and Automated Handler Test, Easy to maintain, High throughput, Superior Contact Resistance.



MECHANICAL DEVICES | temperature controllers

Wide range of products as well as custom design to meet all your required heat dissipation needs. Providing fully integrated solutions specializing in thermal, mechanical and electronic packaging.



GE-PHOENIX X-RAY | real time x-ray

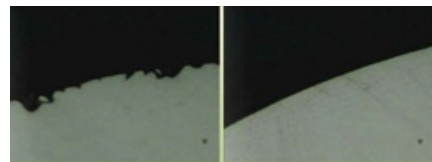
2D X-Ray, 3D Computed Tomography X-Ray inspection of BGA, CSP, QFP, QFN, Voiding Calculation, Wire Sweep, Printed Circuit Boards, and other applications.





NIPPON | solder balls, solder paste

Advanced Lead Free Solder Balls, that are void less, oxidation free, smooth surface. We also offer Advanced Raw Solder Paste also void less and oxidation free. Solder applications include Flip Chip, Bumped Wafers, PCB, Solder Plated Lead Frames, etc.



SELA | SEM, TEM, STEM sample preparation

Leader in SEM, TEM and STEM sample preparation, eliminating conventional (manual) sample preparation that is imprecise & involves many time consuming steps, and high maintenance. SELA automated sample prep tools reduce sample preparation processing times from hours to less than ten minutes. Lower cost of ownership. Pristine surface not effected by the artifacts remnant of a typical of polishing process.



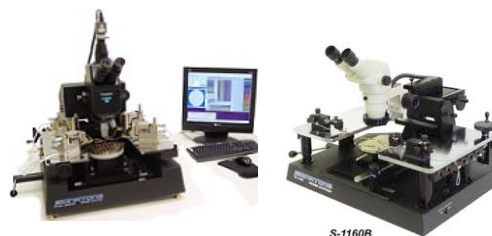
SEMICAPS | photon emission & laser scanning microscopes

Photon Emission Microscopes (PEM), Laser Scanning Microscopes (LSM), PEM, OBIC, SCOBIC, TIVA, LIVA, OBRICH SEI and other advanced failure analysis test methods. Optical Digital Imaging systems for SEM, TEM, Augers, and FIB.



SIGNATONE | probe stations

Probe Stations, Micro Positioners, Micro Probes, Probe tips, Hot & Cold Chucks, Thermal Chucks, Resistivity Four Point Probes, Dark Boxes, Light Tight Enclosures, UV, Green and Infrared Cutting Lasers, Vibration Tables



S-1160B

SUMICARRIER | carrier tape, cover tape, plastic reels

PVC Cover Tape, PET Cover Tape, PC Cover Tape, PS Cover Tape, Carrier Tape, Plastic Shipping Reels.



SUMITOMO | lead frames, substrates

Etched and Stamped Lead Frames, QFN & BCC, Taped BGA, Taped CSP, Multiple plating options, Multi-Strand Production Capability.

