Today's advanced electronics manufacturing processes pose tough challenges for failure analysis of components and boards. It is becoming increasingly challenging when gadgets are becoming smaller and are produced under large scale manufacturing in the state-of-the-art placement and assembling processes. All electronics systems are gradually becoming complex and more deeply embedded in our daily lives thereby the consequences of failure have become exponentially more serious. Therefore, it is important to find and fix failures before assembling the final products. The answer is to employ a comprehensive, multi-disciplinary approach test & measurement solution providing company i.e. iNETest Technologies India Pvt. Ltd.

iNETest Technologies India Pvt. Ltd. (a Global Technosoft company) offers a wide range of test & measurement solutions which are specifically designed to detect latent complex defects at various levels of boards. The solutions offered are to the specific needs and are highly flexible to meet any line capacity of manufacturing, testing or assembling processes.

iNETest Technologies is a right mix of resources, innovation, technology with agile service support to satisfactorily serve more and more critical test & measurement needs. Over a period of a decade, iNETest Technologies has increased its footprint and grown phenomenally to expand the scope of operations to PAN India level and has become the leading supplier of T&M solutions in electronics vertical. As a reliable solutions provider in industries like automobiles, LED, mobile phones, medical electronics and laboratory testing, iNETest Technologies has proved its merit to lead the index.

For more details you can visit our website - www.inetest.co.in

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**PARTNERS IN OUR PROGRESS**

**YXLON** – Germany
Headquartered in Germany, Hamburg, YXLON International was founded in 1998 and is the worldwide leading manufacturer & supplier of Industrial X-ray Inspection systems & Industrial Computed Tomography (CT) systems.

www.yxlon.com

**SAKI Corporation** – Japan
SAKI Corporation founded in April 1994 Tokyo, Japan. They are into development, manufacturing, and sales of 2D and 3D automated optical inspection, 3D solder paste inspection, and 3D X-ray inspection systems for use in the printed circuit board assembly process. SAKI Corporation has acquired a worldwide position in the field of automated visual inspection equipment for printed circuit board assembly. The Company has achieved this important goal guided by the motto embodied in its corporate principle — “Challenging the creation of new value.

www.sakiglobal.com

**Aurotek Corporation** – Taiwan
Established in 1980, Aurotek offers a wide Variety of PCB De-Panelling Systems, In-Line, Dual Stage & Desktop Routers. Aurotek is One-Stop Solution Provider for PCB, SMT, LCD, optical, solar and semiconductor equipment over three decades.

www.aurotek.com.tw

**ETSP Co. Ltd.** – Korea
ETSP Co. Ltd. provides wide range of Environmental Test Chambers which meet highly specialized customers request both standard & Custom designed chambers, viz. Temp. Humidity , Thermal Shock, Walk-In, Salt Spray, Altitude, Rain, Dust, ESS, HAST, PCT, UV, Chambers.

www.etsp.co.kr

**Spectral Dynamics** – USA
Spectral Dynamics, Inc. founded in 1961, Headquartered in San Jose, is a leading worldwide supplier of systems and software for vibration testing, structural dynamics, and acoustic analysis. Spectral Dynamics products are used for design verification, product testing and process improvement by manufacturers of all types of electronic and mechanical products. Spectral Dynamic offer a broad range of Electrodynamic shaker systems, Head expanders, Combo base slip tables and fixtures.

www.spectraldynamics.com

**Data10 Corporation** – USA
Data I/O is the world’s leading provider of manual and automated device programming solutions for Flash, Microcontroller and Logic devices.

www.data10.com

**JTAG Technologies** – The Netherlands
JTAG Technologies was formed in 1993, JTAG Technologies specializes in solving physical access problems involved in testing and in system programming printed circuit boards. This is done with technology based on the boundary-scan technique: IEEE Standard 1149.1.

www.jtag.com

**ETSP Co. Ltd.** – Korea
ETSP Co. Ltd. provides wide range of Environmental Test Chambers which meet highly specialized customers request both standard & Custom designed chambers, viz. Temp. Humidity , Thermal Shock, Walk-In, Salt Spray, Altitude, Rain, Dust, ESS, HAST, PCT, UV, Chambers.

www.etsp.co.kr

**Martin** – Germany
Martin GmbH is a world leader in manufacturing BGA Rework Stations. Martin was founded in 1982 in Munich Germany. Martin products deliver the key benefits needed for reworking advanced devices such as precise temperature, hybrid heating technology, outstanding placement accuracy and very large board handling capacity. In 2009 Martin GmbH, Germany (www.martin-smt.de) acquired Martin GmbH, & thus expanded their product range with manual and semi automatic rework systems.

www.martin-smt.de

**Takaya** – Japan
The first Takaya flying probe tester, introduced in 1986, was founded on a very simple principle—to provide a fast, easy to use, and dependable fixtureless tester for the manufacturing world. Now in its 14th generation, the Takaya flying probe tester continues to remain the #1 name and choice with the leading manufacturing companies around the world.

www.takaya.co.jp

**JBC Soldering S.L.** – Spain
JBC Soldering S.L. – Spain
JBC tools can efficiently solder at 350°C, competitors tools can’t.

www.jctools.com
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**Vision**

iNETest aspires to be the leading sales & solutions channel to the manufacturing & service industry, providing diverse technical products & solutions.

**Mission**

We offer innovative and integrated solutions to our customers and business partners, enabling their goals optimally.
X-ray Inspection System

YXLON International a company of COMET Group is worldwide leading manufacturing and supplier of Industrial X-ray Systems and Industrial Computed Tomography (CT) systems for non destructive testing of materials (NDT). YXLON offers Application and Testing services with customer support world wide.

Y. Cougar

Fein Focus X-ray open tube technology
Detail detectability <1 µm (as per JIMA Standard)
25 – 160 kV, 0,01 – 1 mA, 10 W Target power; 64 Watt Tube power
Max. Target Power : 15W (Optional)
Standard 5 axis manipulation system (Optional 8 axis system)
True-X-ray Intensity Control (TXI) for steady long-term X-ray intensity
High resolution digital flat panel detector “Panel 1308 High Speed”
+/- 70° oblique viewing by tilting the detector, 140° in tilting total
Geometric Magnification 2,000X, Total Magnification 256,000 X
Max. sample size: 440 mm x 550 mm (17” x 21”)
Max. inspection area: 310 mm x 310 mm (12” x 12”)
Software modules available for automatic inspection of BGAs and die-attach
Micro 3D Slice (Optional)/Micro CT (Optional)
Oil free vacuum pump
Small footprint: WxDxH= 1100x1050x2200mm

True X-ray Intensity Control (TXI)

Y. Cheetah

Fein Focus X-ray open tube technology
Detail detectability < 500 nm & < 350 nm (as per JIMA Standard)
25 – 160 kV, 0,01 – 1 mA, 10 W Target power; 64 Watt Tube power
Max. Target Power : 15W (Optional)
Standard 5 axis manipulation system (Optional 8 axis system)
True-X-ray Intensity Control (TXI) for steady long-term X-ray intensity
High resolution digital flat panel detector “Panel 1308 High Speed”
+/- 70° oblique viewing by tilting the detector, 140° in tilting total
Geometric Magnification 3,000 X, Total Magnification 384,000 X
Max. sample size: 800 mm x 500 mm (31” x 19”)
Max. inspection area: 460 mm x 410 mm (18” x 16”)
Software modules available for automatic inspection of BGAs and die-attach
Micro 3D Slice (Optional)/Micro CT (Optional)
Oil free vacuum pump
Automated Optical Inspection System (AOI)

SAKI Corporation was established in 1994, Japan. SAKI Corporation designs and manufactures both 2D and 3D Automated Optical Inspection (AOI) systems for Printed Circuit Board (PCB) production. SAKI Machines can inspect all size Components such as 01005, 0201 and 0402s and packages like BGAs, CSPs, LGAs, PoPs, and QFNs for applications that include smart phones, tablet terminals, laptops, cloud servers, base stations, facility equipment, navigation systems, on-vehicle modules, and aircraft devices.

 Inline High Resolution and High Speed Automated Optical Inspection System:

BF-Frontier II provides accurate and stable inspection results. With a superior resolution of 18µm and scanning line color CCD camera Solder fillets on components as small as the high density mounted 0201 (0603) chip, as well as ICs with 0.4mm pitch lead are easily inspected and analyzed. Saki’s original alternate scanning system that captures several lighting images in one scanning. Newly developed color capturing system enable to make scanning speed twice faster than previous model. Only 10 seconds to capture L-size board [460x500mm]. Overall tact time including inspection also become shortened dramatically, due to algorithm based line scan technology.

Benchtop High Resolution, High Speed Automated Optical Inspection System

Saki new desktop AOI, BF-Comet C.

BF-Comet C is designed for high density mounting PCB with 01005 (0402) chips. Bench Top Model BF-Comet C supports PCB Size: 50*50 mm – 250*330 mm with the Resolution of 18µm. SAKI is having one of the fastest AOIs in the Inspection Field with Tact Time of approx. 13 sec and Image Scanning can be done within approx. 7 sec for this model.

Dual Lane High Resolution and High Speed Automated Optical Inspection System

BF-10D is a dual lane automated optical inspection system with Saki’s original alternate scanning system which provides high throughput. Additionally, programming has been greatly improved, and brings enhanced productivity.

Scan time is 30% faster. Operating system is 64 bit with multicores processing, enable faster throughput and at the same time, compatible with the conventional systems.

Tact time is about 16 seconds for two M-size 250 x 330 mm (10 x 13 in.) boards High resolution imaging system through the telecentric lens, it is able to inspect densely mounted 0402 (01005) chips.

Flexible dual lane conveyor design with automatic width adjustment to adapt to various placement machine and reflow ovens.
MODI GmbH has been a specialist for identification solutions and process optimization for more than 20 years. MODI’s vision systems are mainly used in the production area for the electronics and pharmaceutical industries. MODI is the right company for traceability solutions from Incoming goods area through the overall production. As an expert in image processing, MODI has developed different products over the past years in order to optimize the production lines efficiency with innovative and highly efficient technology.

Incoming Goods Scanner 4.0 – The Transparent Goods Receipt:

ADOMO® technology is used in industry for seamless and detailed control of codes and labels. The total hardware power is efficiently directed to the area to be scanned. This leads to shortest cycle times and highest reading accuracy.

100% TRACEABLE: In modern industry, components must be tracked through the entire production process. In this way, you can ensure sustainably which product which batch / lot number / date codes of components have been installed when and where.

The system uses the sum of all information from existing barcode / data matrix code labels on incoming goods as a read / data and traceability interface to store information and send it to all subsequent processes. Here, both barcodes with identifiers, without identifiers and contents of arbitrarily composed string formats are safely read and assigned.

Incoming Scanner – Robo Wis – Fully Automated Robot Unit

MODI uses the latest robot technology in the ROBO WES. The robotic arm mounted on the table has been designed to handle all work quickly and reliably. The risk of misadministration due to human inattention or carelessness is not given here. The ROBO Incoming Goods Scanner is also not tied to times and can do his job 24/7.

FULLY AUTOMATED RELIABLE STATION: The robotic arm mounted on the table has been designed so that it can quickly and reliably handle all incoming goods processes. It is used for recording, registering and comparing electronic modules on component rollers.

With the ROBO WES, MODI has achieved technological progress that scores above all with its precision and speed. The stepless speed setting of the robot arm reaches three times the speed of all available goods receipt scanners in a zero-defect strategy.

RELIABILITY OF CODE RECOGNITION: The ROBO WES works with the MODI-developed Top-Scan, a device that uses the latest ADOMO® technology to recognize plain text as well as any kind of code system and sends it to the MODI software for evaluation.

SPEED: With the ROBO WES, MODI has achieved technological progress that scores above all with its precision and speed. The stepless speed setting of the robot arm achieves twice the speed of a human operator in a zero-error strategy.
PCB De-paneling System

Aurotek Corporation was founded in 1980, Taiwan. Aurotek offers a wide variety of PCB De-Paneling systems like In-Line – Dual Stage and Single Stage Systems. Aurotek is one-stop solution provider for PCB Routing Solutions in Segments Automotive, EMS, LED, Telecom, over the decades. With high-tech industry experience Aurotek delivering high value-added service and solutions and helping customers to achieve greater value through its advanced and quality equipment.

AUO 3000/4000 Series

Semi-Automatic PC- based 4-axis motion PCB Separator with 2-way sliding work exchanger.

AUO 3000/3000C Working area- 330mmx350mm
AUO 4000/4000C Working area- 450mmx520mm

Features

- 2-way Sliding Exchanger: This work exchanger provides a simultaneously in-and-out working space to limit the idle time, which in turn reaches the utmost output value.
- Easy teaching with image processing with Fiducial Recognition feature helps in mark alignment and maintaining high accuracy.
- Routing Bit Sectioning: The user may set a designated distance and have the routing bit shift-up or -down in order to make a new section of routing bit to cut boards for multiplying the life of the routing bit.
- Friendly GUI: Based on Windows operating system for easier usage. A 10-x zoom-in image is shown on screen for setting all points.
  - Safety area sensor assures the operator’s safety
  - Precision of cutting ± 0.08mm

AUI 3000/4000 Series

Fully Automatic PC based 8 axes In-line PCB separator with inlet Conveyor

AUI 3000/3000C Working area- 330mmx350mm
AUI 4000/4000C Working area- 430mmx450mm

Features

- Fully automatic loading/unloading processing in line Machine
- Friendly Touch Panel with 10X CCD Camera to minimize the programming time
- Auto fiducial mark point check and cutting route auto compensation to ensure the cutting accuracy.
- High-Speed Cutting Precision
- Automatic router bit check to prevent the bit break and incomplete cutting
  - Precision of cutting ± 0.08mm
- Carrier with Nozzles: Moving carrier with smart nozzle design enables automatic material input and production outflow
Stencil and PCBA cleaning solutions

PBT Works s.r.o was founded in 1992, Czech Republic is a leader in cleaning solutions. PBT offers products includes Stencil Cleaning, PCBA cleaning, Misprint Cleaning, Pallet Cleaning, Parts Cleaning catering to various industries such as Automotive, Aerospace, Electronics and Semiconductor.

SUPER SWASH
DIRECT SPRAY AGAINST SURFACE TECHNOLOGY FOR PCBA & STENCIL CLEANING

APPLICATION
Universal cleaning solution
(PCBA, misprint, stencil in one system)
Designed to clean difficult Hi-density PCBA, with low standoff components
Cleaning before wire bonding
High throughput & low process cost stencil cleaning
Excellent PUMP PRINT® stencil cleaning
Solder pallet cleaning

UNIQUE FEATURES
4 step process - each split to 5 substeps
Easy process optimization due to glass door
Efficient air knife for drip-off and fast drying

COMPACLEAN
HIGH PRESSURE/ HIGH VOLUME PCBA CLEANING SYSTEM

APPLICATION
High capacity & low process cost PCBA cleaning
Solder pallet cleaning

UNIQUE FEATURES
Fixed nozzle system
Basket oscillation
Uniform covering of cleaned area
All processes totally separated
Closed DI water loops available

STENCIL CLEAN MINI SWASH
AUTOMATIC CLEANING SYSTEM FOR STENCILS AND PCB

APPLICATION
Price-effective & reliable stencil cleaning
Very suitable also for PUMP PRINT® stencil
Effective for PCBA cleaning
Very competitive price/performance level

UNIQUE FEATURES
Double motor driven manifold with liquid and air knife system to ensure direct effect
Synchronous spraying and drying from both sides
This prevents stencil from damaging
Rinsing by cleaner, water or DI water
Controlled drag-out compensation
Heating in cleaning medium
BGA Rework System

Finetech is a 23 year old company founded in Berlin, Germany. Finetech manufactures innovative, high-accuracy equipment for leading micro assembly and rework challenges. The FINEPLACER® systems are designed to be modular for maximum process flexibility and come in manual, semi-automatic or automatic configurations.

FINEPLACER COREPLUS

The FINEPLACER® coreplus is an all-round hot air rework station for electronic components and assemblies. The complete rework cycle, including desoldering and soldering the component, residual solder removal and reballing can be performed on the same compact rework system. The spectrum of compatible surface-mount devices ranges from very small (01005) to large components (BGA).

Highlights
- Components from 0.125 mm x 0.125 mm to 90 mm x 90 mm
- JEDEC/IPC conform thermal management with top and bottom heating systems
- Automated pick-up and touch-down with force measuring
- Automated processes
- Process traceability with Smartdent
- Intuitive user experience with SmartControl
- Compact machine design

FINEPLACER pico RS

The FINEPLACER® pico RS is an enhanced hot air rework station for assembly and rework of all standard types of SMD components. A high level of process modularity allows all rework process steps within one system. The system is at home in production environments, R&D, process development and prototyping.

Features
- Automated soldering processes
- Overlay vision alignment system (VAS) with fixed beam splitter
- Modular design
- Integrated Process Management (IPM)
- Real time process observation camera
- Adaptive process library

Application
Soldering of: BGA, µBGA/CSP, QFN, DFN, PoP, QFP, PGA, SON, Small passives down to 0201, RF shields, RF frames, Connectors, sockets, Sub assemblies, daughter boards, Flipchip (C4), (P/P) Pin in Paste, (THR) Through Hole Reflow and Single ball rework.
Martin BGA Rework Station

Bernhard Martin started the company in 1982 in Germany. Martin is one of the leading manufacturer of BGA Rework Stations. They have BGA Rework Station for small Mobile PCBs to very big Telecom PCBs. In 2009 FINETECH GmbH, Berlin acquired Martin GmbH. Together they have a wide range of Rework Stations for a wide range of applications.

Expert 10.6 HXXV BGA Rework Station

Features
- Maximum recommended PCB Size: 480x480mm
- Motorised XYZΘ Axes
- Automated Pick-up, alignment and placement.
- Alignment is with A/V (Advanced Vision Placement) Software
- Bottom Heater: 5000 W, 8 IR Lamps

Technical Specifications
- Component Sizes: 1x0.5m² - 65x85m²
- 5 Mega Pixel CMOS Camera
- LED Ring Light Illumination
- IR Sensor
- Auto Lens Detection
- Resolution Motion System: 0.001mm
- Flux Dipping

Expert 10.6 Series BGA Rework Stations

EXPERT 10.6 HXXV 480x480mm², max. 5,500W
EXPERT 10.6 HV 305x305mm², max. 3,000W

www.martin-smt.de
Robotic Soldering

RuiChi Robot (Shenzhen) Co., Ltd. is a national high-tech enterprise specializing in R&D, production and sales of solder robots. It is mainly engaged in R&D and sales on intelligent soldering robots, intelligent production lines, automatic dispensing robots, automatic locking screw robots, intelligent control cards and non-standard automation equipment’s. After years of development, our company is in the leading position in the fields of industrial robot structural design, motion control algorithms, image recognition algorithms, industrial robot applications, and smart factories.

Product Portfolio

Inline and Offline robotic machines for below applications:
- Robotic Soldering Machine
- Robotic Screw Locking Machine
- Robotic dispensing Machine
- Robotic Odd shape component Insertion Machine
- Automatic production line Machine

Core Technologies

Fast and high precision temperature control technology based on power compensation
Solder system based on Windows system
Automatic detection technology of solder joint quality
Cloud-based soldering machine condition monitoring,
Fault warning and diagnosis technology
Non-standard plug-in soldering technology
Visual System: Optical elements and photographs, position profile, motion detection

Core Competitiveness

Motion control algorithm
Image recognition algorithm
Solder pure algorithm process
Smart After-sales Cloud Platform

Core Competence

Advanced design tools: computer-aided design (CAD), finite element analysis, modal analysis, virtual prototyping, etc.
Precision Mechatronics System: Taking vibration, force balance, calibration, and control components into consideration to design and analyze dynamic closed-loop systems with the latest analytical and measurement tools.
Servo System: Trajectory planning, multi-axis synchronization and overlap motion, self-tuning, and adaptive intelligent control, nonlinear error compensation.
Temperature control system: original 600W high power welding system, high precision thermostat system, instantaneous temperature recovery system.
Specialty Coating System

The Global Leader in Specialized Coating Solutions

Specialty Coating Systems is the global leader in delivering innovative coating solutions for advanced technologies. For more than three decades, customers have turned to SCS for the planning, development, engineering and application of thin-film Parylene polymer coatings to their critical components. In addition to coating services, SCS also designs and manufactures industry-leading coating, curing and testing equipment. Being an exclusive distributor of SCS iNETest is very glad to introduce most Competitive Coating Solution in India.

SCS Precisioncoat V (Conformal Coating Systems)

The SCS Precisioncoat spray and dispense system precisely applies 100% solids, solvent-based and water-based coatings, such as photo-resists, acrylics, adhesives, solder mask and anti-microbial coatings, to virtually any surface or substrate, with maximum accuracy. The Precisioncoat’s standard configuration applies coatings with a three-axes system with an accuracy of 0.001 inches. The Precisioncoat is controlled by proprietary software on a operating system and features convenient offline Windows®. Optional features, including programmable tilt and rotate, fiducial recognition, needle calibration and barcode reader capability, are available to maximize efficiency and meet any production requirement. The System is SMEMA Compatible & has safety interlocks for Spray booth door & Exhaust. High throughput with ease of programming.

Ionic Contamination Tester

SCS Ionograph SMD V & BT Series

SCS Ionographs® are designed for fast and accurate ionic contamination cleanliness testing. Each module uses an ultra-pure alcohol/water extraction media and a “dynamic method” to test product samples quickly and non-destructively. The family of test equipment offers a full range of capacities and controls to fit the needs of any lab or manufacturer. For those performing ionic contamination testing using “static test” methodology, the SCS Omegameter is the industry standard and provides effective and practical quality assurance for commercial cleanliness as well as accurate, repeatable and rapid results.

Labcoter 2 Parylene Deposition System (PDS 2010)

For Parylene laboratory research, applications development and testing, the SCS Labcoter 2 Parylene Deposition System (PDS 2010) performs reliable and repeatable application of SCS Parylene conformal coatings. The portable Labcoter 2 applies Parylene coatings to components such as circuit boards, sensors, wafers, medical devices, MEMS and elastomeric components for research, development and repairs. Interchangeable chamber module (Optional) along with continuous process monitoring increases reliability of coating.
Takaya Corporation: Flying Probe Tester APT-1400F/ SL

The APT-1400F is a next-generation flying probe test system which has unprecedented performance in terms of test speed, positioning accuracy and test coverage, thus making APT-1400F Ultrafast machine & capable of having the probes contact to extremely small test pads deployed on the latest SMT boards with a high degree of accuracy.

The APT-1400F has no compromise between speed, reliability and long life. The design of the XY table has been completely reworked and optimally adapted to the high traversing speed of the test needles as well as the new mechanical design of the axes. An outstanding measuring unit and numerous innovative test algorithms enable a significant increase in the test coverage on your modules.

In addition, the APT-1400F is provided with the breakthrough 4-heads & 6-flying probes and additional sensors i.e.,
- 4 Tilted probes
- 2 Vertical probes
- 2 IC open sensors
- 2 LED color test sensors

MEASURING DEVICE
- 16-bit DAC / ADC measuring device including 3x DC 4 quadrant voltage supplies
- R, L, C measurements
- Transistors / FET / Optocoupler / Relay / etc.
- DC / AC current and voltage measurements
- Voltage regulators / operational amplifiers / transformers
- Frequency measurements & AC signal generator
- Cluster tests
- IC Open Sensor & LED tests (color and intensity)
- Integration of external power supplies and test systems (Boundary Scan, In System Programming, etc.)

DRIVE TECHNOLOGY AND MECHANICS
- 25% more accurate, smallest contact area 60μm
- New design of the axes and the XY table in granite
- Soft Touch Control (Attenuating contact Pressure of Probes)
- Transport system with automatic width adjustment and SM

OPTICAL SYSTEM
- High density CCD color camera
- Detection of reverse polarity, missing, offset or incorrect components
- Color recognition of components
- Color Real Map Function for graphical view of assemblies and contact points
Device Programming Solutions for Global Market

Data I/O is the world’s leading provider of manual and automated security provisioning and device programming systems for Flash, Microcontroller and Logic devices. Since 1972 Data I/O has developed innovative solutions to enable the design and manufacture of electronic products for automotive, Internet-of-Things, medical, wireless, consumer electronics, industrial controls and other markets. Today customers use Data I/O’s security provisioning and programming solutions to reliably, securely and cost-effectively bring innovative new products to life.

Data I/O with headquarters in Redmond, Washington and offices located in Shanghai, China and Munich, Germany, is the only true global programming solutions provider offering local service and engineering support 24/7.

PSV Family—Automated off-line programming solutions

Scalable up to 24 programmers (96 FC3 sockets / 112 LumenX sockets)
Concurrently installed media options for zero mechanical changeover
- Tape-in / Tape-out
- Static tray-in/tray-out
- Automatic trayfeeder
- Tube-in/Tube-out
- Fiber-laser marker
- 3D co-planarity
- Small parts handling down to 1.5mm x 1.5mm
- Large parts handling up to 42.5mm x 42.5mm

FlashPAK III – Desktop Manual Gang Programmer

Programs up to 4 devices in parallel
Programs at the speed, Read and write speeds > 20MBytes/s,
Support for files > 16GBytes
Ethernet connectivity (100 Base-T)
Stand alone operation, using Compact Flash Card

RoadRunner 3: Just-in-time Inline Programming

In-line device programming solution
Attaches directly to SMT placement systems, the RoadRunner family supports most major SMT machines.
- 100% good/tested parts passed to mounter for placement
- Lean manufacturing – no offline preprogrammed inventory
- Optimizes testers by removing programming burden
- FlashCORE III technology – fastest programming possible
- Network addressable - Remote monitoring, IP security

Universal Device Support

Flash Memory (NOR, NAND, MCP, MMC, e.MMC, SD, MoviNAND, OneNAND, iNAND, Serial Flash, EEPROM, EPROM and more), Microcontrollers and Logic devices (CPLD, FPGA’s, PLD’s and more), Universal Flash Storage (UFS 2.1)

Package Support

PLCC, SOIC, SON, WSON, SSOP, CSP, BGA, uBGA and FPGA, QFP, TQFP, TSOP, PoP, DIP and more

Socket Adapters Support

Standard Socket Adapters
Receptacle Socket Adapters

Device Testing

Continuity, checksum, blank check, mis-insertion test, verify & backwards device.
Boundary Scan Testing

JTAG Technologies, The Netherland based company was formed in 1993. Since then they have lived and breathed the technology that has revolutionised the manufacture and test of digital and mixed signal PCBs the world over. JTAG Technologies remain the number one dedicated boundary-scan company. Through network of sales offices and in association with valued distributors have been able to solve thousands of board test problems by actively engaging with customers & world-wide support network.

Why boundary-scan?

Boundary-scan solves circuit access problems that arise from the use of advanced IC packages, such as ball-grid arrays (BGAs). The technique, based on the industry-standard IEEE 1149.1 specification, enables rapid precise testing and high-speed in-system programming (ISP) of densely-packed printed circuit boards. Boundary-scan’s effectiveness is proven in thousands of applications across every segment of the electronics industry.

Advantages:
- Shorter time-to-market
- Reduced capital investment and operating cost
- Faster, automated generation of test vectors and ISP files
- Easier troubleshooting of structural faults
- Simpler flow for PLD and flash programming

JTAG ProVision

Test Development Software

Go from design to ready-to-run, fast and thoroughly. With JTAG ProVision, you don’t have to be a JTAG expert to prepare top-notch tests and ISP routines. ProVision’s wizard automates the import of netlists from virtually any CAD system and guides you step-by-step. No need to build the scan chains: JTAG ProVision does it for you.

Want to partition the chains for top system performance? It’s done, with JTAG ProVision. Use the built-in links to JTAG Visualizer™ and coverage analysis reports to optimize your design before layout. Then start testing.

JTAG ProVision
All Station

Controller Types:
JT3705/USB
JT37x7/TSI/PXI/PCI/RMI

Hardware

Rugged equipment, reliable operation

Boundary-scan test and programming applications are only as dependable as the hardware they run on. JTAG Technologies has the industry’s most reliable IEEE 1149.x controllers, specifically designed by us for high throughput and the best signal integrity. High-speed DataBlaster controllers are available in all of the popular formats (PCI, PCIe, PXI, USB, Ethernet, Firewire) and are performance-scalable. If economy is a priority, the Explorer controller with a USB interface is the ideal choice.
Functional Test Solutions

UNITES Systems a.s. is a private company located in the Czech Republic, Valašské Meziříčí with extensive experience in development and production of dedicated test and measurement systems – ATE solutions for semiconductor devices and FCT/ICT platform for assembled PCB testing (PCBA) since 1991.

DMT – Desktop Modular Tester

Field of Applications:

- Robust and Flexible test platform for assembled PCBs, cables, LED lights, etc.
- Universal tester for Automotive, Defense, Aerospace, Power Electronics Etc.
- Ideal for High volume production, Incoming inspection, Low volume production testing, R&D, Diagnostics, Engineering testing, Failure analysis.
- End of Line Tester (EOL)

DMT – Desktop Modular Tester

Field of Applications:

- Universal tester for various applications
- ICT-In-Circuit Tester (SMT & discrete components)
- FCT (Functional Testing)-Current & Voltage measurements,
- CAN / LIN applications
- Processor flashing
- Automatic Loading of Test program using fixture ID
- Vision tests
- LabView, TestStand, SCADUS support
- VPC G12 Interface-Cards are connected directly with the fixture (without cables)
- Exchangeable fixtures
- Self-test implemented on each card
- 3rd Party HW Compatible

Platform allowing fast test fixture exchange for various products Using Durable G12 VPC interface
Discrete Component Tester

UNITES Systems a.s. is a private company located in the Czech Republic, Valašské Meziříčí with extensive experience in development and production of Discrete Semiconductor tester, mainly two types Universal Tester for Semiconductor Test at Labs & High speed high volume production testing for small signal discrete Semiconductors.

Applications
- Incoming Inspection
- Component Qualification
- Failure Analysis
- Component Characterization
- Burn-In, Re-lifting

Test Adapters
- TA02B - Relays
- TA03B - Voltage regulators
- TA06B - Opto Couplers
- TA07B - Discrete semiconductors
- TA08B - AD / DA Converters
- TA09B - Operational Amplifiers
- TA10B - Digital ICs
- TA11B - Switching ICs
- TA16B - Memory Devices
- TA17B - VLSI Devices
- SMX32 - Relay Matrix 4 x 8
- SMX64 - Relay Matrix 8 x 8
- HVm07 - High Voltage module
- HVm20 - High Voltage module Up to 3kV / 19mA
- TA39 - Operational Amplifiers
- TA37 - Discrete semiconductors
- TA37.TIM - Time meas. Extension
- TA37.CAP - Capacitance meas. Extension

Software
SCADUS

SCADUS (Smart Control and Development Universal Software) runs on Microsoft Windows hence providing an easy-to-use solution for controlling the tester. It allows 2 modes of operation – Engineer and Operator mode. It also contains debugging tools such as Visual Debugger which helps the engineer to debug testing tasks.
ICT Fixture

We offer complete line of ICT / ATE test fixtures and program development for Teradyne TestStation, Spectrum 8862/52, GenRad, Agilent i3070 & i1000D ICT, MDA tester and also specialise in custom mechanical fixtures along with Servo motor and Pneumatic activation. With more than 10 years of fixturing experience, iNETest strives to deliver high end fixture with many advance test solution embedded like FCT during ICT, Parallel Digital contact testing, dual stage etc....

Test Technology Consultant services: Design for test and test nodes reduction
Probe Capability: 100 mils, 75 mils, 50 mils, 39 mils

Programming Capability:

**Standard ICT Programming**
- Short - Open testing
- Standard Analog Test
- Vectorless Test
- Standard Digital Library Test
- Powered Analog Test
- Voltage & Frequency Measurements
- Polarity Test

**Advance Programming**
- Boundary Scan and Chain Testing
- ISP On-Board Programming
- Flash, EEPROM, OTP, CPLD
- MAC Address, Barcode Programming
- Enhance Program Services
- MCU Programming
- Cluster Test
- Test Node Reduction/Split
- Fixture Programming

**Test Options:**
- Vectorless test options
  - OpenXpress, Framescan FX
  - TestJet, VTEP
- LED color test
  - Smart FINN
  - Feasa Analyzer
  - Optomistic light probe
- Strain Gauge Test Repor

** ICT Projects (Application)**
- Automotive Boards
- Network Products
- Aerospace Products
- Industrial Products
- Defence Products
- Test Instrumentation Products

**Fixture Clamp options:**
- Types of clamps
  - Mechanical hold down gate
  - Vacuum enclosed cover
  - Pneumatic top press

---

TERADYNE TSO Fixture with Top Cover
(2 up Dual Test Head, Bar code Scanner, Vacuum gauge)
Improve your product yield and reliability, throughout the product life cycle.

In today's electronic design and manufacturing climate, there is an increasing emphasis to shorten time-to-market, improve product quality and reduce cost. The ability to verify that PCB designs have been developed with adequate DfT (design-for-test) in mind and determine the most effective test strategies based on accurate test coverage estimations, is crucial in improving competitive advantage, lowering cost and determining the quality of a product.

Test coverage metrics: PPVS devised by ASTER Technologies

The PPVS model defines the coverage balanced against the defect opportunities. So where there is a greater opportunity for defects occurring (such as a 100 pin BGA device), you need to have a greater level of test coverage than is required for a 2 pin resistor or capacitor.

Selection of Test Strategy

Define the manufacturing line; including a combination of assembly, inspection and test machines. This helps to Maximize test and inspection coverage by estimating coverage aligned to selected test strategies. Perform ‘what-if’ analysis to select the optimal test strategy, to achieve maximum coverage. Eliminate redundant test steps.

Test strategies include: AOI, AXI, BST, ICT, FPT, Functional test.

Program Generation (Output Processors)

ASTER offers assembly, test & inspection program generation for assembly machine, in-circuit test (ICT), flying-probe, X-Ray, Automated Optical Inspection (AOI) and Boundary-Scan (BST) test, i.e., these programs can be generated automatically during test strategies simulation.

There are numbers of current assembly/test/inspection machines that ASTER have developed output processors for. For any non-developed machine, ASTER is always willing to develop according to customer demand.

eDFT Analysis

Provides an efficient method for ensuring a consistent and comprehensive eDFT analysis. Ensures that each board analysis is verified for adequate implementation of electrical DFT. Identify design & DFT violations early in the product life cycle so improvements can be implemented prior to committing to layout. Inadequate testability will lead to poor test coverage and an increased number of bad boards shipped to customer. Inadequate eDFT will place more emphasis on functional test to detect structural faults, leading to poor diagnostics &
Mobile Test Solutions

For more than 80 years, Rohde & Schwarz has stood for quality, precision and innovation in all fields of wireless communications. The privately owned company is strategically based on four pillars: test and measurement, broadcasting, secure communications, radiomonitoring and radiolocation. The electronics group, headquartered in Munich (Germany), has a global presence and is among the world market leaders in all of its business fields.

The R&S®CMW wideband radio communication tester offers universal, efficient test solutions for all modern cellular and non-cellular standards. The R&S®CMW is the world’s most widely used T&M platform for development, production and service. It meets all of the requirements for a state-of-the-art wireless communication tester. The R&S®CMW can also emulate network operation under realistic conditions for protocol and RF tests.

Today’s production lines for wireless devices require an optimal combination of flexibility, performance and capacity utilization. As the leading supplier of T&M equipment for the production of wireless devices, Rohde & Schwarz meets these stringent requirements with the R&S®CMW platform. The R&S®CMW500 wideband radio communication tester and the R&S®CMW100 communication manufacturing test set are ideal for use in production.

CMW500 Wideband Radio Communication Tester

The R&S®CMW protocol tester provides a complete protocol stack reference implementation of various cellular technologies such as LTE, WCDMA, NB-IOT, CAT-M1, GSM. The protocol tester can be flexibly configured and tailored to create any wireless signaling test care for verification & integration of a wireless device protocol stack.

Advantages of CMW500

- Supports both signaling & non-signaling in one box
- Supports WLAN for 802.11 a/b/g/n/ac and ax
- Bluetooth: Support for BR/EDR and LE
- Frequency range upgradeable upto 6GHz
- Supports all cellular & non-cellular technologies in one box
- CMWrun turnkey production software for both signaling and non-signaling
- CMWrun supports both cellular and non-cellular technologies
- CMWrun supports all the popular and widely used chipsets in the market
- Fully tested with chipset reference designs
- Fully optimised and customisable (testing configuration, frequencies, BW, etc)

CMW100 V 06 Communication manufacturing Test Set

The R&S®CMW100 V 06 can perform receiver and transmitter tests for cellular and non-cellular technologies. Like the R&S®CMW500, the R&S®CMW100 V 06 features high measurement accuracy. The R&S®CMW100 V 06 offers parallel testing and can be used to optimize test time and capacity utilization.

Key facts for the R&S®CMW100 V 06 communication manufacturing test set

- Turnkey R&S® CMW run based production solution for different chipset suppliers
- Support for NB-IOT, CAT-M1, ZigBee and 5G (Sub 6 Ghz)
- Support for WLAN 802.11 a/b/g/n/ac/ax for Bluetooth BR/EDR/LE
- Multi-technology solution
- Parallel testing on up to eight RF ports
- High measurement performance
- High measurement accuracy
- Support of a wide range of methods for reducing test time and maximizing capacity utilization
Environmental Test Chamber

ETSP is one of the leading manufacturers of modular & cost-effective environment-simulated equipments. These include Temperature & Humidity chamber, Hot & cold chambers, Walk-in chambers, Temperature ovens, Thermal shock chambers, Salt spray chamber, CCT chamber, HAST chamber, PCT chamber, Dust chamber, Rain chamber, UV chamber, Altitude chamber etc.

**TEMPERATURE & HUMIDITY CHAMBERS**

Temperature range: -40 ~ +180 °C & -70 ~ +180 °C (changeable according to user’s demand)
Accuracy: Less than ±0.1 °C & ± 1.5%RH
Temperature uniformity: Less than ±0.5 °C
Humidity range: 20% ~ 95% RH (10% ~ 98% RH is option)
Volume: 60L, 150L, 392L, 1000L
Controller: Programmable type TFT color LCD 5.7” controller (Max

**INDUSTRIAL OVEN**

Temperature range: RT ~ 250 °C & RT ~ 350 °C
(changeable according to user’s demand)
Temperature stability: Less than ±0.5 °C
Temperature uniformity: Less than ±0.85% of the set point
(Less than ±3.0 °C at 350 °C)
Heat up rate: More than 6 °C / min

**THERMAL SHOCK CHAMBER**

Both Three Zone and Two zone chambers are available.
Temperature range: Cold zone RT to -75 °C, Hot zone RT to +200 °C (changeable according to user’s demand)
Temperature stability: Less than ±0.5 °C
Temperature uniformity: Less than ±1.5 °C
Temperature recovery within 5 °C / min

**WALK IN CHAMBER/ Solar module chamber**

Temperature range: -65 ~ +180 °C (Solid construction type)
Temperature range: -40 ~ +70 °C (Panelised type)
Temperature stability: Less than ±0.5 °C
Temperature uniformity: Less than ±2 °C
Heat up rate: More than 5 °C / min
Cool down rate: 0.5~5 °C / min
Laser Marking and Laser Cutting Machine

Wuhan HGLaser Engineering Co., Ltd is one of the largest laser equipment manufacturers in China. HGLASER, relying on HUST Background, set up in 1997, located in Wuhan, China. HGLASER is the 1st Chinese stock listing company in the laser industry, it's the core subsidiary company of HGTECH Group.

PCB LASER MARKING MACHINE

PCB Laser Marking Machine from HGLASER is designed for laser permanent marking Barcode, 2D Code, Characters, Graphic and other information on different kinds of Printed Circuit Board, to instead of Label Sticker or Ink Printing. Integrated with high-performance CO2/Fiber laser source, high-pixel CCD camera and micron-level motion module, PCB Laser Marking Series is competent to pre-marking automatic positioning, tiny or big dimension marking, and post-marking feedback reporting.

TECHNICAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>Description</th>
<th>LCD 10C</th>
<th>LCD 20F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laser</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laser Type</td>
<td>CO₂</td>
<td>Fiber</td>
</tr>
<tr>
<td>Laser Wavelength</td>
<td>10600 nm</td>
<td>1064 nm</td>
</tr>
<tr>
<td>Output Power</td>
<td>10W</td>
<td>20W</td>
</tr>
<tr>
<td>Marking Area</td>
<td>500mm*460 mm</td>
<td>500mm*460 mm</td>
</tr>
<tr>
<td>Repositioning Resolution</td>
<td>≤0.10 mm</td>
<td>≤0.10 mm</td>
</tr>
<tr>
<td>Min. Line Width</td>
<td>&lt;0.15 mm</td>
<td>0.10 mm</td>
</tr>
<tr>
<td>Min. Character Height</td>
<td>&lt;0.20 mm</td>
<td>0.20 mm</td>
</tr>
<tr>
<td>Configuration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positioning System</td>
<td>Paraxial CCD Camera</td>
<td>Paraxial CCD Camera</td>
</tr>
<tr>
<td>Control System</td>
<td>IPC</td>
<td>IPC</td>
</tr>
</tbody>
</table>

FPC LASER CUTTING MACHINE

Adopted with high-performance UV laser cold light source, high-precision CCD image positioning technology and self-developed visual laser control software, the Flexible PCB Laser Cutting Machine from HGLASER perfectly implements contour cutting, drilling and marking of FPC and PCB, and precision processing of composite membrane.

TECHNICAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>Description</th>
<th>LBA12U</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laser</td>
<td></td>
</tr>
<tr>
<td>Laser Type</td>
<td>UV</td>
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<tr>
<td>Laser Wavelength</td>
<td>355 nm</td>
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<tr>
<td>Output Power</td>
<td>10W-20W</td>
</tr>
<tr>
<td>Scan Area Range</td>
<td>45 mm x 45 mm</td>
</tr>
<tr>
<td>Focus Spot Diameter</td>
<td>&lt;20μm</td>
</tr>
<tr>
<td>Cutting Area</td>
<td>435mm x 335mm</td>
</tr>
<tr>
<td>Cutting Thickness</td>
<td>&lt;1.0 mm</td>
</tr>
<tr>
<td>Minimum Line Width</td>
<td>20μm</td>
</tr>
<tr>
<td>Stitching Accuracy</td>
<td>±5μm</td>
</tr>
<tr>
<td>X-Y Table Repositioning Accuracy</td>
<td>±3μm</td>
</tr>
<tr>
<td>CCD Matching Accuracy</td>
<td>3μm</td>
</tr>
<tr>
<td>Configuration</td>
<td></td>
</tr>
<tr>
<td>Paraxial Visual Positioning System</td>
<td>B/W CCD</td>
</tr>
<tr>
<td>Auto Focusing System</td>
<td>Z-axis Auto Focusing</td>
</tr>
<tr>
<td>X-Y Working Platform Motion System</td>
<td>AC Servo Motor</td>
</tr>
<tr>
<td>Base Platform</td>
<td>High-precision Marble Platform</td>
</tr>
</tbody>
</table>
Bench Top Laser Marking Machine

LSF20 FIBER LASER MARKING MACHINE
Fiber laser marking machine is replacing the lamp-pumped solid-state laser marking machine for high reliability, long life, high energy conversion rate, beam quality. It is widely used in different fields like Electronics, Electrical products, Integrated Circuits, Hardware Tools, Automobile Parts, Plastic Products, Precision Equipment, etc.

**TECHNICAL SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Model</th>
<th>LSF20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laser Source</td>
<td>Fiber Laser</td>
</tr>
<tr>
<td>Wavelength</td>
<td>1070 nm</td>
</tr>
<tr>
<td>Output Power</td>
<td>20W</td>
</tr>
<tr>
<td>Focusing Lens</td>
<td>F=160 mm, marking scope 110mm x 110mm (Standard)</td>
</tr>
<tr>
<td>Cooling System</td>
<td>Air cooling</td>
</tr>
<tr>
<td>Power Supply</td>
<td>Single phase, 220V, 1.5KVA</td>
</tr>
<tr>
<td>Min Line Width</td>
<td>0.01mm</td>
</tr>
<tr>
<td>Min Character Height</td>
<td>0.2mm</td>
</tr>
</tbody>
</table>

**PORTABLE LASER MARKING MACHINE LSF-H**

<table>
<thead>
<tr>
<th>Model</th>
<th>LSF-H</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laser Source</td>
<td>Fiber</td>
</tr>
<tr>
<td>Laser Wavelength</td>
<td>1064 nm</td>
</tr>
<tr>
<td>Average Output Power</td>
<td>10W</td>
</tr>
<tr>
<td>Max Speed</td>
<td>7000mm/s</td>
</tr>
<tr>
<td>Marking Range</td>
<td>F=160mm, 110x110mm</td>
</tr>
<tr>
<td>Min Line Width</td>
<td>0.01mm</td>
</tr>
<tr>
<td>Min Character Height</td>
<td>0.2mm</td>
</tr>
</tbody>
</table>

**LSC30 CO2 LASER MARKING MACHINE**
CO2 Laser Marking Machine is integrated with advanced galvo laser marking technology and famous CO2 laser source. It has high performance, mainly applied in marking non-metal materials.

**TECHNICAL SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Model</th>
<th>LSC30</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laser Source</td>
<td>CO2 Laser</td>
</tr>
<tr>
<td>Wavelength</td>
<td>10640 nm</td>
</tr>
<tr>
<td>Output Power</td>
<td>30W</td>
</tr>
<tr>
<td>Focusing Lens</td>
<td>F=160 mm, marking scope 110mm x 110mm (Standard)</td>
</tr>
<tr>
<td>Cooling System</td>
<td>Air cooling</td>
</tr>
<tr>
<td>Power Supply</td>
<td>Single phase, 220V, 1.5KVA</td>
</tr>
<tr>
<td>Min Line Width</td>
<td>0.1mm</td>
</tr>
<tr>
<td>Min Character Height</td>
<td>0.4mm</td>
</tr>
</tbody>
</table>
YJLink in Korea since its establishment in the 2003, had undertaken sufficient Factory Automation in Korea to make itself outstanding and be seen by its competitors. The Company comprises of five main teams who are well equipped with knowledge and the technical expertise for their respective scope of responsibilities. All of team is to provide total satisfaction to its customers, therefore endlessly upgrading itself in human resources and goods to demands and requirement from the accounts and market.

**Board Handling and Automation System Equipment**

YJ Link offers the below products:
- Magazine Loader & Unloader Line (CE Type, Standard Type, Human Technology Type)
- Vacuum Loader
- PCB Cleaner
- Link Conveyor
- Work Table
- Gate & Shuttle Conveyor
- Sliding conveyor
- Inverter
- Turning Conveyor
- Buffer Stacker
- NG Stacker
- Buffer stacker,
- Line up Conveyor,
- Wave Soldering IN/Out Feeder,
- Soldering Robot machine,
- Manual Insertion line,
- PCB Cutting machine,
- Label machine,
- Heating Conveyor,
- Case Mounter machine/Srew assy machine,
- Boat Loader & Un-loader (Lead Frame, BGA Board) in semiconductor production

Visit www.yjlink.com
SPECTRAL DYNAMICS, INC. - USA

Spectral Dynamics, Inc., founded in 1961, headquartered in San Jose, is a worldwide leading supplier of complete VIBRATION AND SHOCK TEST equipment/solutions. Spectral Dynamics is a leading worldwide supplier of systems and software for vibration testing, structural dynamics (modal) and acoustic analysis.

Air and Water Cooled Shakers

- 5 KgF to 30,000 KgF ED Shakers available
- Large diameter, lightweight armature
- Double Field Coils (Upper and Lower) design
- Ultra-Compact energy efficiency amplifier
- Available combined with slip table
- Sine, Random, and Transient Testing
- Standard cooling blower silencer
- Standard Vertical and Horizontal Operation

JAGUAR and PUMA Sine/Random/Shock/SOR/ROR Control System

- 4 to 32 input channels with ICP
- Analysis to 40 kHz with 12,800 lines
- Scalable Hardware and Software architecture
- Powerful Multiple DSP architecture
- Comprehensive vibration test capabilities
- Extensive laboratory integration and test automation features

Seismic Simulation Table
Actuator with Table
Dynamic Actuators
Test and Measurement Equipments

FEASA ENTERPRISES, established in 1982 is an ISO 9001 approved, Ireland based company. In 2002 Feasa began the development of a range of Analysers for testing the performance of LEDs for Color and Intensity (Brightness). Feasa Enterprise offers LED test products like Feasa LED Analysers and Feasa LED Spectrometer.

Feasa LED Analyser:

The Feasa Analyser is an innovative solution for testing multiple LEDs simultaneously for Color and Brightness. These Analysers are available in 3, 5, 10 and 20 Channel configurations.

Feasa have different LED Analyser models depending on applications, like to test high brightness LEDs for automotive Headlight testing and low brightness LEDs for automotive backlight, switches and panels.

FEASA LED Analyser Software

The Test Software provides an easy to use interface for multiple LED Analyser modules. It is a complete turnkey LED test system when used with a low cost test fixture and power supply. Key features of this Software include:

- Automatically generated test limits.
- Logging of all test results.
- Csv file output which can be used to generate graphs in Excel
- Ability to connect to multiple LED Analysers. (Daisy Chain)
- Pass/Fail and yield calculations.
- Test RGB, Hue, Saturation, xy Chromaticity and Intensity automatically

Feasa Optical Heads

Feasa Optical Heads are special receptacles that improve the stability when testing the intensity of LEDs. The robust and compact design delivers consistent and repeatable readings with a <10% intensity change over a 1mm placement of the LED.

The Optical Head addresses the following issues:
- Compensation for LED Placement
- Repeatable Intensity Readings
Test and Measurement Equipments

MICROTEST CORPORATION founded in 1993 is an ISO-9001 certified company and holds more than 12 patents. They are well organized by a team of talented technical and managerial professionals. The goal of the company is to promote customers' high precision, automatic testing and measuring instruments and equipment in this rapidly growing electronics, information and communication industry.

LCR Meters

Specification:
- Test Frequency: 20 Hz to 20 KHz, 200 KHz, 1 MHZ upto 30 MHz
- Accuracy: 0.1%, GPIB/ RS-232 Interface
- Comprehensive Measurement Functions: Impedance (Z), Admittance (Y), Phase Angle (θ), Reactance (X), Conductance (G), Susceptance (B), Inductance (L), Capacitance (C), Quality Factor (Q)

3-in-1 Transformer Test System

Flexible Combination possible between Hi-pot Tester + Transformer Analyzer + Impulse/Surge Analyzer

Specification:
- ±0.1% Basic accuracy,
- Test frequency up to 1MHz
- Fast test speed, up to 30 Test item/sec,
- Open/Short & Correction function
- Full functions completed test
- RS-232 Interface & Easy to link with PC
- Ramp time settable, Programming sequence test
- Built-in PLC remote interface

Hi-Pot Tester

Specification:
- AC Hi-Pot: 100V~5000V AC, 50/60Hz, 0.01~10mA
- DC Hi-Pot: 100V~6000V, 0.01~10mA
- Insulation: DC 100V~1000V, 10~9.999GΩ
- Arcing: 1~10mA
- 21 Channels Scan

Auto-discrimination

7640 Series Hi-Pot/Insulation Tester are high performance, fully automatic test system which integrates a precision hi-pot analyzer with a switch matrix. The system is able to discriminate the defective products even though connected to multiple samples.

Also Deals in:
Motor Stator Tester, Motor Armature Tester, LIPS, Inverter ATE, Power ATE, Accessories and Fixtures for all above instruments and equipments
A complete range of Soldering, Desoldering, SMT Rework, IR and Conventional Pre Heaters

More than 80 years of experience have placed JBC at the technological forefront of tools for soldering and rework operations in electronics. Innovation, efficiency and reliability are the key features of a wide range of products which have been designed to satisfy the most demanding requirements of professionals. All JBC products comply with EC regulations and ESD recommendations.

Soldering Desoldering SMT Rework Stations with JBC Net Software for a centralized control using internet

RMSE Rework Station:
Designed for Rework and Repair of Through hole and SMT boards

Nano Station:
NANO Station for Reworking of very small components like 0204, 01005 components

TOP Reasons to buy JBC

- Soldering at lower temperature
- Reed and Feed
- Fast Temperature Recovery of 2 sec.
- Tip life 5 times more than competitors
- Easy Cartridge extraction to save time
- 6 different types of tools
- Ergonomic tools
- Easy to use menu
- 400 different cartridge shapes
- Constant product innovation
- Communication with PC
- Sleep and Hibernation mode
Humidity Management Solutions (Dry Cabinets)

Ace Dragon Corporation Established in 1991 in Taiwan. Ace Dragon Corporation Headquartered in Hsinchu Science Park, Taiwan with R&D and manufacturing center. Ace dragon Corporation under the brand name Dr-Storage provides Total Humidity Control System.

Features:
- <1%RH Dry Cabinet
- 5%RH Dry Cabinet
- 1 - 50%RH Dry cabinet
- Baking 60°C Dry cabinet
- Sensor Look Centralized Monitoring System.
- Digital Nitrogen Controller, Alarm Hygrometer
- Data Logger & Reader
- Automatic Light which will be on when door is opened
- Camera Monitoring System
- Smart nitrogen cabinets

![](https://example.com/dry-cabinets)

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Sliding doors with racks

Dry Cabinet for feeder
Quality Vision International

Quality Vision International (QVI®) is the world’s largest vision metrology company. The company designs and builds a complete line of dimension measuring machines that combine optical, laser and contact sensors into easy to use systems. QVI systems are used by manufacturers in over 75 countries around the world to measure and inspect their products for quality and process control. QVI India was founded in 2008, with its head office located in Bangalore and branch office in Pune. QVI systems provides solutions to diverse spectrum of industries including medical, automotive, plastics, electronics, aerospace and defence.

OCTO™ Systems

OCTO systems from QVI are our versatile range of video measuring systems. They are available in both Manual & CNC versions. OCTO systems are uniquely positioned giving quality performance at affordable cost.

SNAP™ Systems

SNAP systems measure complex parts instantly without programming. Simply place the part on the stage and press the GO button. It has higher field of view (FOV) which can help measuring many small parts at one go.

Smartscope® 3D Multisensor Systems

Smartscope multisensor measurement systems combine optical, laser and tactile sensors, letting you measure parts more completely, with lower uncertainty and in less time with a single system. This added versatility translates into lower capital expense and lower operating costs.

VIEW Systems

The VIEW range of systems delivers unmatched accuracy & throughput. State-of-the-art linear motion control technology provides the fastest, most reliable platform available for high volume, high capacity operations in production environments ranging from clean rooms to factory floors.
Self Clinching fasteners

Leading the way in thin sheet fastening

PEM provides a complete range of self clinching fastener solutions for your thin sheet applications. They are the brand leaders and founder of this technology. We offer product ranges from nuts, standoffs, studs, panel fasteners, inserts, toolings & presses to install the fasteners.

WHY PEM?
- Better threading strength in sheet materials,
- Eliminate loose hardware
- Reduced installation time
- Eliminates spot welding operations
- Flush & cosmetic finish
- Eliminate Rework

Series 2000
- Fully Automatic or Manual Press
- 400 – 16,000 lb of Ram Force
- 24” Throat Depth
- Touch Screen Control
- Light Stream™ Safety Feature
- Dual Language Available
- Wide Variety of Auto Tooling Options

PEMSERTER presses are designed where applications requiring accuracy and reliability are key. From simple hand-held press equipment, to fully automated motion control presses, PEMSERTER presses continue to set the standard for performance and cost saving.

Series 4 Press
- Pneumatic power for speed, consistency and simple operation
- Ram Force: 1.8 to 53.4 kN / 400 to 12000 lbs
- Pressure System Type: Pneumatic/ Lever
- Air Requirement: 6-7 Bar / 90-100 psi
- Throat Depth: 45.7 cm / 18 inches

APPLICATIONS
- ATM's • Agriculture equipment • Air bags • Alarm systems • Appliances • Arcade games • Automotive • Avionics • Black boxes • Computers • Control panels • Copiers • Consumer electronics • Fabricated metal • Facsimile • Food processing • Gaming machines • Gas pumps • Hospital beds • Laser equipment • Medical equipment • Microwave equipment • Modems • Office furniture • Power supplies • Stereo equipment • Telecom • Telephone systems • Televisions • Test equipment • Truck roll-up doors • Vending machines • VCRs • Sheet-metal boxes • enclosures.
Please send your enquiries to india.sales@inetest.co.in