

# Advanced SMT Laboratory

and Technology Excellence Center

# Advanced SMT Laboratory

## and Technology Excellence Center

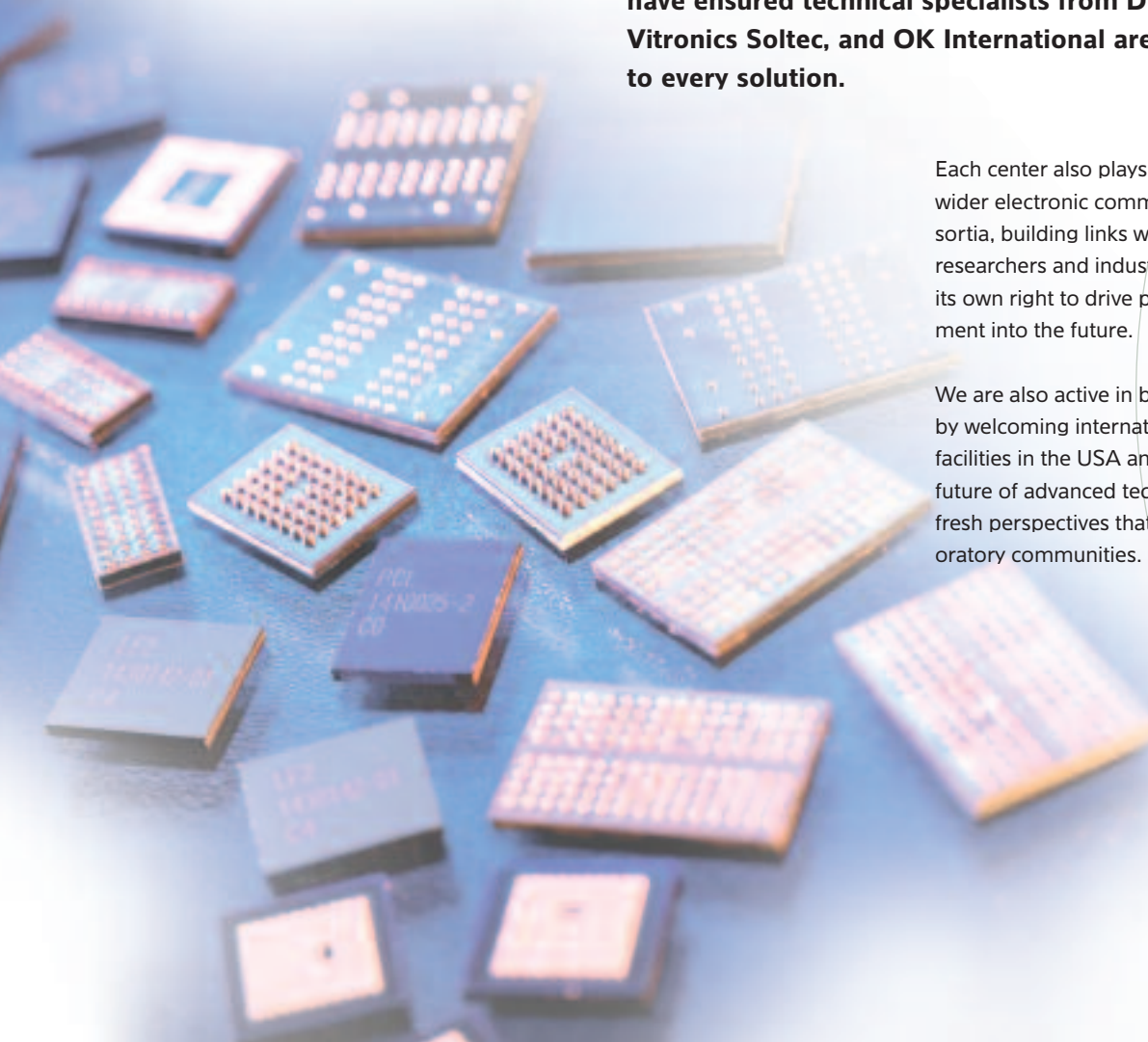
### Investing in science for serious returns

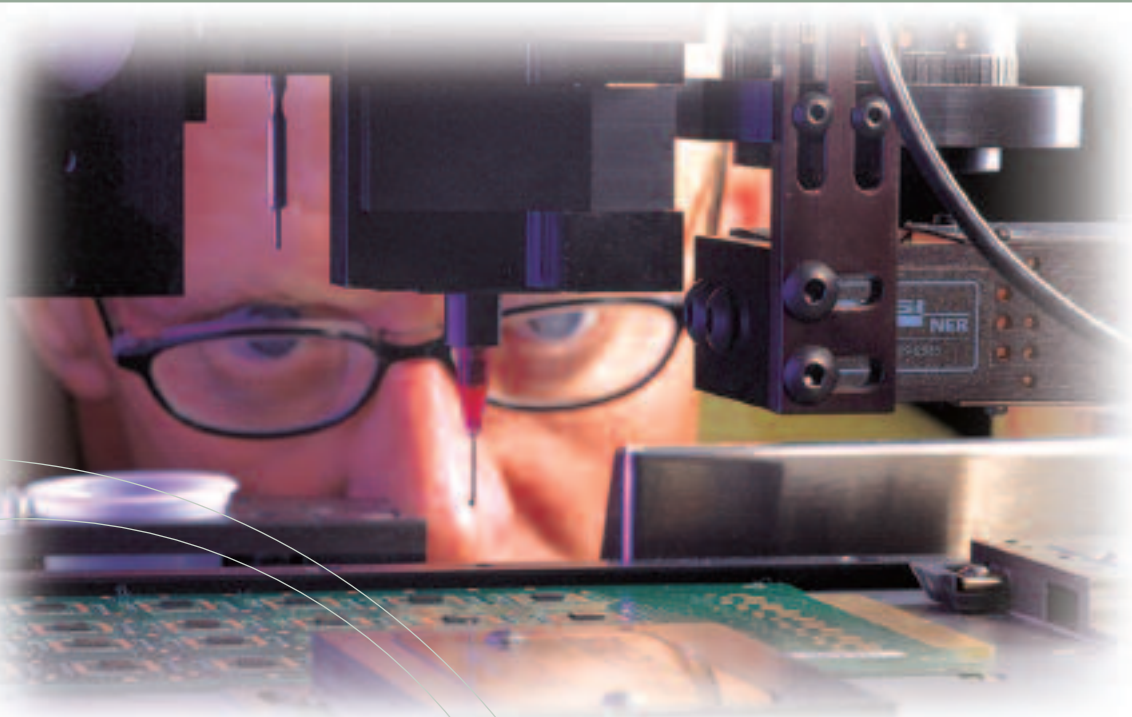
**In today's high-tech industries, knowledge makes the difference. Universal Instruments' Advanced SMT Laboratory at Binghamton, and the new Suzhou Technology Excellence Center in China, are perfectly positioned to deliver the knowledge our customers need to maximize competitive advantage.**

**By co-operating with our best-in-class partners at each center, we have ensured technical specialists from DEK Printing Machines, Vitronics Soltec, and OK International are available to contribute to every solution.**

Each center also plays a leading role as part of the wider electronic community, organizing research consortia, building links with scientists, academic researchers and industry experts, and working hard in its own right to drive processes, materials and equipment into the future.

We are also active in bringing on new scientific talent: by welcoming international research students to our facilities in the USA and China, we are investing in the future of advanced technology. And we gain from the fresh perspectives that each student brings into our laboratory communities.





## Binghamton: Advanced SMT Laboratory

Universal Instruments founded the Advanced SMT Laboratory in 1987. Throughout its lifetime, it has earned global respect as a source of knowledge, helping customers world-wide to drive up yield, achieve continuous process improvements, and optimize product reliability and lifecycle.

Looking ahead, the Advanced SMT Laboratory also works to identify and develop new and emerging technologies – those that will take electronic assembly far into the future.

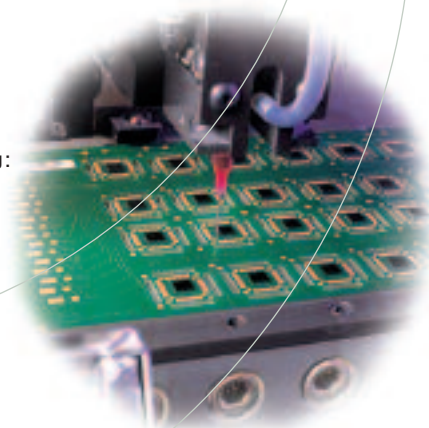
### Services

- Research
- Development
- Knowledge Transfer and Training
- Process Audits and Support
- Root Cause Failure Analysis
- Prototyping

### Capabilities

State of the art production equipment, including:

- Screen printing
- Component placement
- Underfill dispense
- Reflow
- Rework including...
  - BGA and CSP
  - Laser measurement
- Complete analytical laboratory



## Suzhou: Technology Excellence Center

The Universal Technology Excellence Center (TEC) in Suzhou, China. It is ideally located to service the needs of Universal's Asian customers, as well international customers requiring specialist skills.

The Suzhou TEC works seamlessly with our Advanced SMT Laboratory. Through its links with leading commercial organizations and local research institutes, Suzhou TEC will become the source of many solutions to current and future challenges.

### Services

- Process support
- Prototyping
- Mini-BGA/CSP, pin-in-paste, flip chip, SMT expertise
- Inspection and failure analysis

### Capabilities

Fully automated assembly facilities:

- Screen printing
- High speed placement
- Pick and place including:
  - CSP, dispensing, reflow
  - BGA, CSP rework
  - Under-array-package optical inspection





## Supporting your processes

Process development, training, and ongoing support are essential to successful modern products; from the earliest design phases and throughout the product lifecycle. Working with our experienced laboratory services staff, Universal customers successfully optimize new product designs, shorten development, prototyping and NPI, and manage processes through volume production and product maturity, to maximize returns at every stage.

### **Pre-production**

- Design for Manufacturability
- Prototyping and custom process development
- Implementation assistance including turnkey solutions

### **Volume production**

- Process optimization for yield, and quality
- Troubleshooting support
- Equipment, systems, materials, components, packaging
- Process audits and improvement
- Quality and reliability testing
- Root cause failure analysis

## Into the future

Laboratory services teams at Binghamton and Suzhou are committed to take charge of tomorrow's processes and technologies.

Our research mission is to identify the technologies that will enable your next generation of products, and to master the processes they will embody. And through our links with leading research agencies world-wide, we play a leading role in making those technologies happen.

[www.uic.com](http://www.uic.com)

email: [universal@uic.com](mailto:universal@uic.com)

**AMERICAS**

Tel. 1-800-432-2607 or

Tel. +1-607-779-7522

**ASIA**

Tel. +65-6281-0991

**CHINA**

Tel. +86-755-2686-0160

**EUROPE**

Tel. +36-23-445500

©2004 Universal Instruments Corporation. All rights reserved.  
All specifications are subject to change.

MC-3872 05/04

A  COMPANY

