



# Kraemer Sonic Industries V8

# SCANNING Acoustic Microscope

# Generations Ahead

### German Made. Easy to Use. Highly Affordable.

Toho Technology is proud to be the first to offer the KSIV8 to the American market. The V8 offers German engineered quality and unmatched resolution all at a low price. This unique combination of quality and affordability creates a rare harmony between your research and business needs.

### **Experts in Acoustic Imaging Technology**

Dr. Klaus Kraemer founded KSI in 1994 after developing the technology at Leica Microsystems. For the past 20 years KSI has established itself as a leader in acoustic imaging technology . Today KSI systems are used by industry, academic, and research leaders worldwide.

# Five Times the Accuracy, Twice as Fast

Scan speeds of up to 2 m/s guarantees the highest throughput available while retaining accuracy of  $\pm$ 1 µm and repeatability of  $\pm$ 2 n. 1 µm.

# **Unmatched Gigapixel Resolution**

A maximum image resolution of  $32,000 \times 32,000$  ensures that no faults go undetected.

# 24 Month Full Service Warranty

Full performance is guaranteed. Remote software support available via SAM internet connection. Dedicated customer service based in Chicago.



# Exclusive Transducer Design

The secret to the V8's high performance is its patented transducer design. A more hydrodynamic construction allows for high-speed throughput without creating scan-obscuring disturbances in the water. This allows the system to outperform the competition in terms of speed and throughput.



# **Applications**

The V8 provides internal imaging of complex samples. With the V8, you can non-destructively evaluate samples across multiple applications including:

- Ball Grid Arrays
- Molded Underfill Inspection
- Counterfeit Detection
- Sample Analysis
- Flip Chip Inspection
- Stacked Die Imaging
- Packaging, Seal Testing
- Welding, Joint Analysis
- Wafer Fault Detection
- TSV Circuits

#### Toho Technology Inc.

4809 N Ravenswood Ave, Suite 113 Chicago, Illinois 60640 Tel: 773.583.7183 www.tohotechnology.com





# **Kraemer Sonic Industries V8**

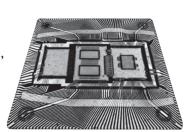
# scanning Acoustic Microscope

# Intuitive KSI Vision™ Software Suite

The V8 comes complete with KSI Vision $^{TM}$ , a robust software package that compliments the V8's versatility.

# With KSI Vision™, Easily Perform:

- 3D Sample Reconstruction
- FFT Bandpass, Chebyshev, Moving Average, Rectifier, and Calculus Signal Processing
- Digital Defect Colorization
- Impedance Measurements
- C-Scans, B-Scans, X-Scans, and More



# **Specifications**

# **Performance**

Maximum Image Resolution 32,000 x 32,000

 $\begin{array}{lll} Scanner \: Speed & 2 \: m/s \\ Scanner \: Acceleration & 30 \: m/s^2 \\ X \: / \: Y \: Axis \: Repeatability & +/- \: 0.1 \: \mu m \\ Z \: Axis \: Repeatability & +/- \: 0.25 \: \mu m \end{array}$ 

#### **Measurement Range**

Minimum Scanfield  $200 \times 200 \mu m$  Maximum Scanfield  $400 \times 400 mm$  Z-Axis Movement 100 mm Maximum Sample Size  $500 \times 750 mm$  Frequency Range 5-400 MHz

#### **Hardware Configuration**

# **Added Options**

A fully equipped V8 can still be more affordable than competitive systems.

# Through Scan Kit

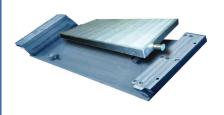
Go deeper with Through Scanning. Over/Under transducers allow even more of the sample to be analyzed.

# **KSI 4D Analysis**

The 4D software upgrade generates a fully rendered and interactive 3D model of the internal structure of the sample.

### **Customized Stages**

KSI provides custom stages for samples of all shapes.



# Toho Technology Inc.

4809 N Ravenswood Ave, Suite 113 Chicago, Illinois 60640 Tel: 773.583.7183 www.tohotechnology.com