



**Eclipse**  
Scientific

# ESPHOTOELASTIC

## *Ultrasonic Visualization System*

See sound like never before. Equipped with a custom strobe light, zoom-macro video lens and high resolution video camera, this system allows imaging of ultrasonic pulses in glass and other clear media. Make movies and still images showing interaction highlights for conventional, diffraction and phased array applications.

### Rationale

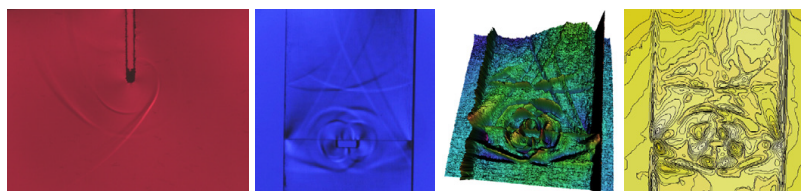
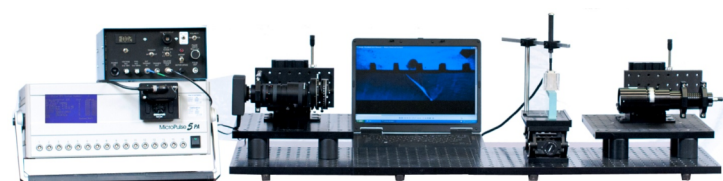
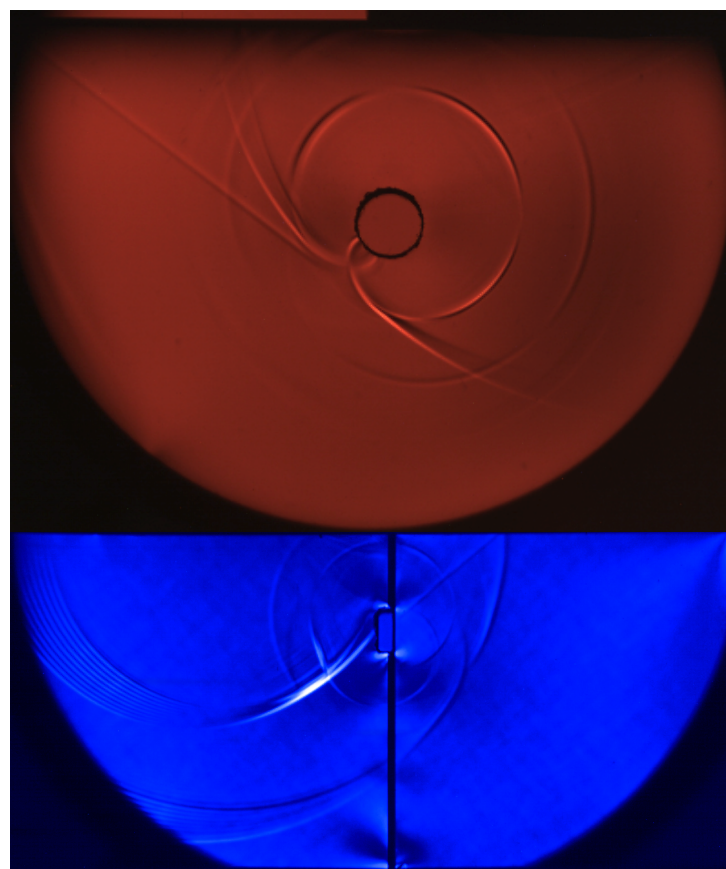
Understanding what happens to sound waves is essential in Ultrasonic NDT, and the best way to learn is to see it firsthand. In addition, wave patterns can be difficult to visualize when working with complex geometries.

### Benefits

The Photoelastic system allows you to not only see the sound waves but gives you the ability to record them on video etc. This is a perfect tool to use for training, white papers and client presentations. The system comes complete with all the necessary hardware and software and includes the program to perform beam analysis using image intensity mapping.

### Specifications

The Photoelastic system consists of five main components: a laptop, a controller, a light source and optics module, a specimen mounting module and a camera and optics module. The laptop comes preloaded with two software packages for image and video capturing. LuCam Capture is the software provided by the camera manufacturer, and which controls the camera functions and the image collection. The second software package is IIA, Image Intensity Analysis, which analyzes the photoelastic images. Analysis includes the ability to display intensity maps and to make beam dimension measurements. Eclipse has a variety of glass blocks or they can be custom-made to your specific needs.



- Research, techniques, training
- Visualize wave interaction
- Observe mode conversion



**Eclipse Scientific**  
97 Randall Drive, Unit 2,  
Waterloo, Ontario, Canada, N2V 1C5  
+1 (519) 886-6717  
[sales@eclipsescientific.com](mailto:sales@eclipsescientific.com)  
[www.eclipsescientific.com](http://www.eclipsescientific.com)

