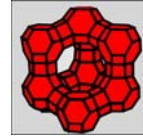
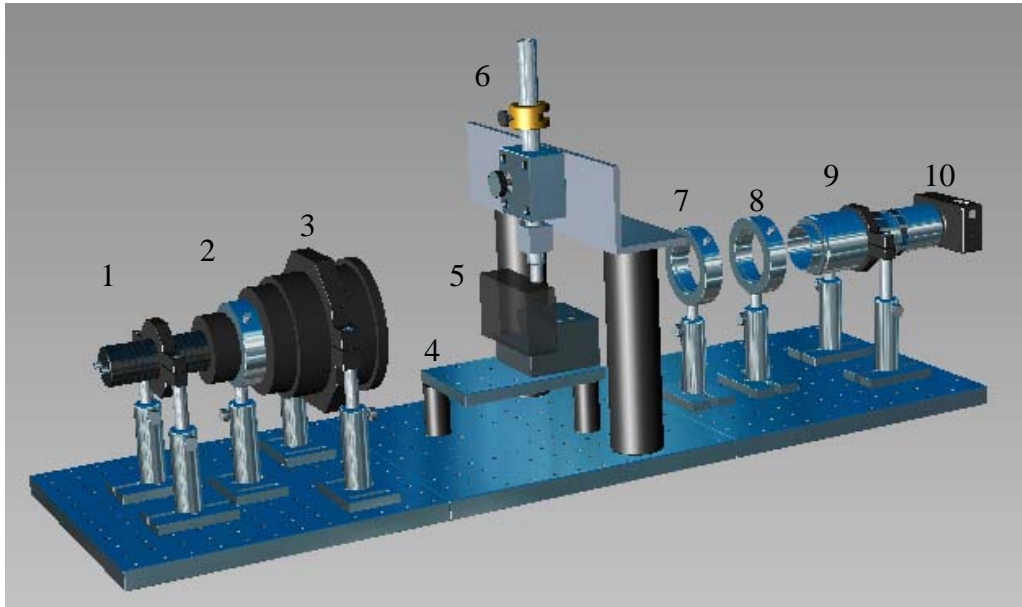


PES-900

Affordable Photoelastic visualisation of ultrasound



SEE SOUND



PES-900-Component Layout

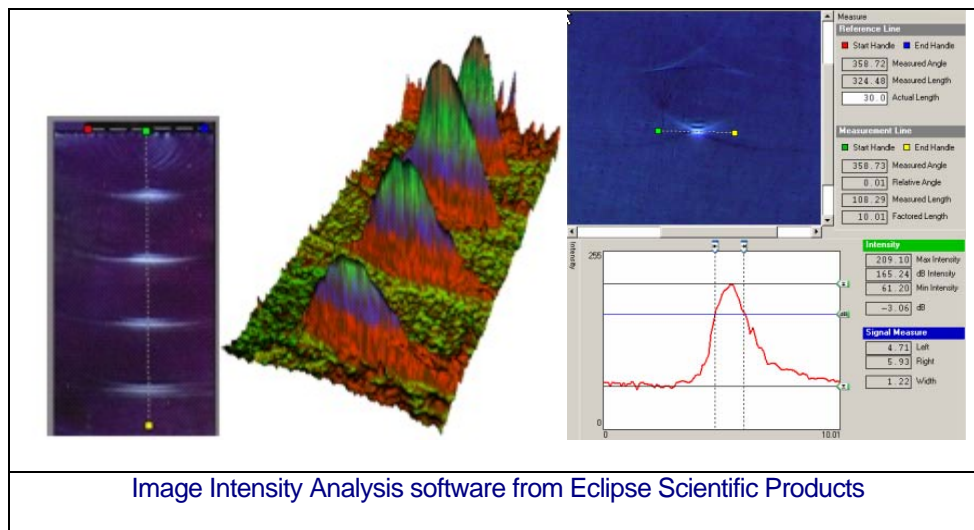
1. Light source, 2. Polariser, 3. Collimating lens, 4. Specimen mount, 5. Glass sample, 6. Probe holder tube with adjustable position and spring-loading, 7. Quarter-wave plate, 8. Analyser, 9. zoom-macro lens, 10. Camera

Miniature portable photoelastic visualisation system complete with

1. Laptop computer fully loaded with necessary software and hardware
2. Controller (pulser and delay circuitry with option for internal or external trigger),
3. High speed high intensity strobe-light source
4. High-resolution CMOS camera,
5. Zoom-macro lens
6. Imaging samples, (2 glass samples, one with targets one radiused)
7. 900mm Mounting Base with adjustable spring-loaded hold-down
8. All necessary lenses and lens holders and rotators (All optical components and base are fully removable and can be reconfigured for other light-path and specimen dimensions)
9. Ultrasonic probe and wedges (1 probe and 3 angle wedges are supplied)
10. Image capture software
11. Image analysis software for quantification of imaged pulses
12. Water-tight packing/shipping case

The specimen mounting area is located along the light path with a nominal 75mm diameter illumination area that can be imaged using a macro focusing lens mounted on the CMOS camera.

Software is provided for viewing and analysing the projected images on a supplied laptop computer. Capture and save both still and video images.



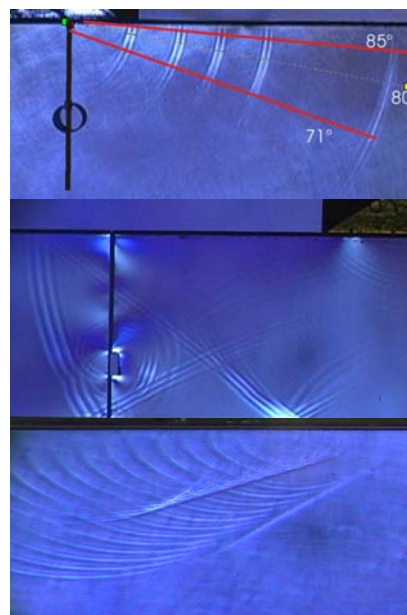
Ideal for training, research and technique development

Perform beam analysis for

- refracted angle
- near zone assessment
- focal distance
- focal spot size
- wavelength
- divergence

Demonstrate

- Reflection
- Refraction
- Frequency dispersion effects
- Flaw tip diffraction
- Mode conversion
- Phased array wavelets and motion



Base List Price (includes all items listed above) US\$41,250

Future extra features

- Immersion setup (with tank and search tube)
- Selection of glass-blocks including surface-notches, side drilled holes and TOFD-style sub-surface square notch targets

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