

MONITORING AND ANALYZING FAST PROCESSES

The basic equipment for recording, monitoring and analyzing very fast processes are Olympus i-SPEED high-speed cameras (i-SPEED 3 and i-SPEED FS models) with a resolution of 1280x1024 and a recording speed of up to 1 million frames/sec.

The extensive technical equipment enables the implementation of a number of special applications, both in laboratory conditions and in the production process directly at the customer.

EXAMPLES OF APPLICATIONS

- Analysis of material deformation (shock and drop tests, crash tests)
- Fault diagnostics of production facilities
- Ballistic tests
- Industrial endoscopy
- High-speed microscopy
- Flow visualization
- Synchronized shooting with two cameras (E.g. simultaneous monitoring of 2 different points of a machine mechanism, scanning an object from different angles)
- Special measurements (the high-speed camera can be synchronized with a multichannel measurement of electrical and physical quantities)

TECHNICAL EQUIPMENT

- i-SPEED 3 high-speed camera (colour, up to 150,000 frames/sec)
- i-SPEED FS high-speed camera (Monochromatic, up to 1,000,000 frames/sec)
- A kit of lenses, telephoto objective
- Cavitar laser light
- Light sources (daylight), halogen lighting
- A set of bore-scopes, fiberscope
- Software control with analyzing records (tracking trajectories of up to 64 points in the image)
- Communication with LabVIEW



VISION UNLIMITED