



Winkelmann provides an industry-leading portfolio of instruments for non destructive testing & remote visual inspection. Our goal is to offer customers worldwide reliable, economical inspection and maintenance systems that enhance safety, security and productivity.





Overview

Winkelmann is a world-renowned leader in remote visual inspection technology with a comprehensive portfolio of industrial endoscopes that facilitate accurate inspections of small, enclosed spaces. These endoscopes can be used for a wide range of applications where it is useful to look inside engines, gas turbines, machinery, behind walls, inside pipes and tanks, or other places where access is limited.

Decades of experience has resulted in a versatile lineup of videoscopes, fiberscopes and rigid endoscopes.

Our industrial customers include companies involved in general engineering, petro-chemical, power generation, turbine blade and wave guide inspection, explosive and hazardous area inspection, research & development, aircraft and ship inspection and maintenance, UV curing and crack detection (NDT).

Videoscopes

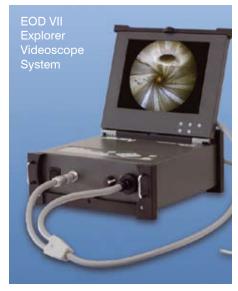
EOD VII Explorer Videoscope system features a high resolution CCD camera positioned at the objective end and matched to our precision lenses to deliver bright, colour-rich images. Advanced LED's and high-intensity lamps provide optimum brightness for the inspection area. A space-saving all-in-one-unit which fulfils the necessary criteria for inspections in

Quality Control and Production. The large 10" TFT display provides an excellent image reproduction and comfortable working conditions. The EOD VII is a sophisticated unit, which convinces by its modularity and mobility.

The EOD VI Wireless Videoscope provides cost-effective examination of internal structures without teardown, or for 'machine vision' applications. Maintenance and troubleshooting tasks can be performed with the minimum downtime, while maximizing safety, efficiency and operational time.

The EOD VI is also ideal for inspection of difficult to access areas such as wall cavities, ventilation ducts, pipes, between floorboards, car doors and many other inaccessible areas. The system is completely wireless meaning there are no connecting cables between the videoscope and the viewing screen.







Flexible Endoscopes (Fiberscopes)

EOD V Flexible Endoscope (Fiberscope) provides a cost-effective solution when a flexible instrument is required. An extensive variety of lengths and diameters is available from ultra-thin instruments at 2.5mm diameter to larger 8mm versions. Tip articulation allows complicated passages to be navigated, and a range of eyepiece connections facilitates image capture.

Rigid Endoscopes (Borescopes)

EOD IV Rigid Endoscope is ideal where straight-line access to the inspection area is possible, rigid endoscopes provide effective and cost-efficient solutions. Using precision optical lenses, rigid endoscopes deliver high quality images to the eyepiece, which can also be attached to a digital camera to record and document the inspection image.

Technology

Specialists in the production of lenses, objectives, high precision mechanics and opto-electronic parts complete the long lasting experience in OEM projects in the RVI field. High standards of aesthetics and ergonomics of the products are for us as important as keeping the products small and ruggedised.

Different resolution image bundles are used according to the particular diameter and length of the fiberscope supplied. Some fiberscopes employ quartz imaging fiber bundles with fiber size down to 3 microns which give superb resolution and brightness previously unobtainable with flexible instruments. Others employ high resolution glass fiber image bundles for maximum light transmission. Light is transmitted from a cold light source through optical fibers inside the instrument to the object being viewed.

Xey Applications

- Remote Visual Inspection, or RVI, is a technique that permits inspection of an area that has no direct visual access. A slim often flexible viewing device or "scope" is inserted into the area through a small opening, providing an image for the operator to examine.
- Cars, airplanes, power plants, whether it be for prevention or in the early production phase, mobile inspection systems are ideal for stable quality and to increase productivity.
- Defence industry, including gas turbine, diesel engine, thin videoscopes are inserted into special inspection holes, this allows for routine inspection of the combustion chamber.

 Providing cost-effective examination of internal structures without teardown, or for 'machine vision' applications.
- Power and steel plants to inspect heat exchanger pipes. Automobile industry inspection takes place in the early production phase where extremely sensitive parts receive 100% inspection. Here the videoscope is also the ideal solution to inspect parts, for example to check the hollow cavities of casted parts for cracks, residue, or burrs.
- Search and rescue operations looking for survivors in collapsed buildings following a natural disaster. Built by one of the leading companies in the field of Security, these are rugged and tough scopes which will aid in saving lives.



For further information contact

Winkelmann (UK) Limited Unit 63, Rowfant Business Centre Wallage Lane, Rowfant, Near Crawley West Sussex RH10 4NQ UK T: +44 (0) 1342 719024 F: +44 (0) 1342 719030 E: sales@winkelmann.co.uk www.winkelmann.co.uk