

Applications for Specialist Visual Search Products



Key Applications

- Contraband Search
- Technical Surveillance Countermeasures (TSCM)
- Improvised Explosive Device (IED) Search
- Search and Rescue
- Tactical Search, Special Task Forces
- Industrial Remote Visual Inspection
- VIP Search, Physical Security and Inspection



Our aim is to offer customers worldwide a range of quality, cost effective systems that are designed for specific applications.

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Winkelmann provides the government, military and security markets an innovative and pioneering portfolio of remote visual inspection products. Our videoscopes and endoscopes are used on a daily basis in challenging environments including conflict zones around the world.

Our aim is to offer customers worldwide a range of quality, cost effective systems that are designed for specific applications. We offer highly portable, robust, intelligent remote imaging solutions featuring a host of advanced, intuitive features making them the ideal choice for remote visual inspection.

Endoscopes allow an operator to illuminate and view inside a cavity by drilling a small hole or accessing a cavity through an existing opening. This speeds up the search process and greatly reduces damage and repair costs that would result from the normal destructive opening of the cavity.

Flexible endoscopes (fiberscopes) are adopted by most search teams as they allow easy introduction into a cavity, have tip articulation and can travel along bending ducting, such as cable conduit. Given the tactile articulation control, the distal end tip can easily, quickly and accurately be manoeuvred into any position.

The EOD IV Multi Swing Prism Rigid Endoscope (Borescope) offers a low cost solution for some applications where direct access is possible. The multi swing prism allows prograde (forward) or retrograde (backward) view during the inspection without the need for changing the scope.

The EOD V Flexible Endoscope (Fiberscope) is a product that allows an operator to view down an eyepiece whereas the EOD VII Explorer Videoscope and EOD VIII Tactical Videoscope use a micro camera and an image is displayed on a screen which provides less strain on the user and allows more than one person to view the area under inspection at the same time.

Images can be recorded on all systems using an optional digital camera on the borescope/fiberscope or frame grabber on the videoscope.

There are many different areas where these products can be used in search operations including buildings, vehicles, aircraft, trains, containers and freight.



EOD IV

Applications

- High resolution images for viewing directly by eye
- Low cost solution where straight access possible
- Basic search
- Research & development
- Industrial remote visual inspection (RVI)



Multi Swing Prism Rigid Endoscope (Borescope)

Flexible Endoscope (Fiberscope) Search Kit



Applications

- Traditional flexible instrument for viewing directly by eye
- High resolution images with 2-way tip articulation
- Very compact and flexible
- Suitable for all security applications
- Research and development
- Industrial remote visual inspection (RVI)

EOD V

EOD VII

Applications

- High spec videoscope with screen viewing
- Port security (inside the compartments of metal walls of 20ft & 40ft containers)
- General search requiring longer lengths
- Turbine blade and wave guide inspection
- UV curing and crack detection (NDT)
- Aircraft and ship inspection & maintenance
- Search and rescue
- Research and development
- Industrial remote visual inspection (RVI)



Explorer Videoscope System

Tactical Videoscope System



Applications

- Portable and compact videoscope with screen viewing
- Reduces operator fatigue
- Allows more than one operator to view
- Suitable for all security applications
- Tactical search, special task forces
- Industrial remote visual inspection (RVI)

EOD VIII

EOD IX

Applications

- Specially designed for Tactical attack groups
- High resolution images with 4-way tip articulation
- General search
- Covert search
- Covert surveillance
- Includes rigidiser tube and under door viewer



Tactical Search Kit



Contraband Search

Customs and Police use specialist visual search products for searching any location for drugs and contraband. Endoscopes & Videoscope systems save precious time and allow operators to inspect cavities previously inaccessible to view.

Examples: the internal inspection of car door panels, searching inside the metal wall compartments of 20ft and 40ft containers, viewing inside locked garages for stolen property or vehicles etc. Any of our EOD range can be used for these applications in helping customs, border agencies and police.

Technical Surveillance Countermeasures (TSCM)

To maintain the security of Government or Corporate buildings and vehicles, it is necessary for special teams to search for listening devices or covert CCTV systems.

After the detection of an electronic bug using the Raptor RXi (spectrum analyser) or Hawk (non-linear junction detector), an endoscope can be used to view in the suspected cavity containing the device with minimal damage. This can be in any area such as ceiling voids, cabling ducts, under floor areas, ornaments, artefacts and furniture. The EOD IV multi swing prism rigid endoscope, EOD V flexible endoscope search kit and EOD VIII tactical videoscope system are ideal products for this application due to their portability and flexibility.



Improved Explosive Device (IED) Search

During military operations, VIP visits, heads of states summits and major conferences, security forces need to search venues and transport for possible terrorist bombs.

This task is carried out by military engineers, bomb technicians and police search teams. Endoscopes are an indispensable tool used to assist operators in searching cavities and other inaccessible areas or suspect packages for improvised explosive devices (IED's).

The EOD IV multi swing prism rigid endoscope or EOD V flexible endoscope search kit are ideal products for this application due to their portability and flexibility.

Applications for Specialist Visual Search Products



Search & Rescue

During the tragic times of disasters, especially earthquakes and landslides, the use of longer videoscope equipment provides rescue forces with the ability to view into cavities of fallen buildings and collapsed tunnels in the search for trapped people.

The EOD VII explorer videoscope system with working length up to 7.5m is ideal for this application. The integrated 24W powerful light source provides bright razor sharp images even in deep cavities.

Tactical Search, Special Task Forces

Both videoscopes and fiberscopes can be used without the illumination function for covert observation in rooms.

Winkelmann offer the specialist EOD IX tactical search kit which incorporates a lightweight portable videoscope and rigidizer that converts the videoscope into a pole camera, also included in the kit is an underdoor viewer which connects to the videoscope monitor. Providing there is some ambient light in the room the sensitive CCTV cameras will allow views to be obtained. This is a powerful kit which provides operators with an inspection system in a single compact case for their search and covert surveillance operations.



Industrial Remote Visual Inspection

Applications include inspection of gas turbines, aircraft, weapon barrel inspection and research/development applications.

All industries use remote visual inspection products including aerospace, petro chemical, power generation and automotive. RVI is an established and valuable technique for quality control, maintenance and troubleshooting applications. The EOD range can be applied to these applications with the exception of the special EOD IX tactical search kit.

VIP Search, Physical Security & Inspection

There is a wide range of applications in the use of remote visual inspection equipment for VIP security.

For further information contact

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