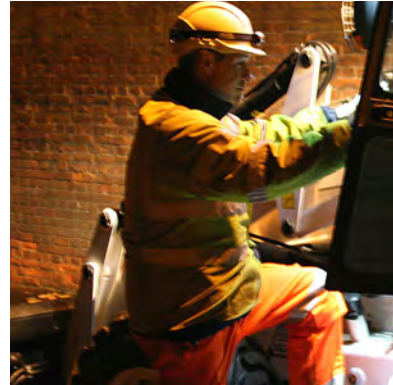


VISION
DETECTION
RESTRAINT
WARNING
CONTROL
SERVICE



SPILLARD
safety systems

FOR SIGHT AND SAFETY



Vision aids and safety systems for quarrying and construction plant operators

In today's safety oriented environment anybody from site designers to plant and quarry managers are coming under increasing pressure to reduce the annual number of fatalities and injuries caused by vehicle blind spots.



- Extensive experience and unrivalled knowledge
- Products developed with industry and HSE consultation
- Durable systems that are built to withstand harsh and hostile environments
- High quality components for minimum levels of maintenance
- Modular solutions to match every requirement
- CE, E I I and EU accredited

Spillard – You're in safe hands

By improving a machine's field of vision, operators should be able to see anyone who may be put at risk when any control is operated. ALL ROUND VISION designs and develops systems that achieve exactly this – improve driver awareness by providing more information about their surroundings, this 'all round vision' can dramatically reduce incidents in the work place.

In 1994 Spillard Safety Systems launched 'ALL ROUND VISION' a product group of indirect vision aids specifically designed to meet the demands of the quarrying and construction industries. Working closely with the Health & Safety Executive ALL ROUND VISION developed systems that are recognised as 'best in class' and are fully CE, E I I and EU accredited.

All Round Vision focus area:

CONVEX MIRRORS – cab mounted systems that naturally enhance the drivers visibility – even in varying light conditions.

REARVIEW CCTV – modular Optronics® colour CCTV and control systems providing superb visibility even in extreme lighting conditions.

OBJECT DETECTION – VCAS™ systems that detect moving and static objects, alerting operators to immediate dangers.

'As an operator of earthmoving equipment, as defined by BS EN474-1, legislation dictates that visibility from the operating position should be such that it can be controlled in complete safety to themselves and exposed personnel. Where an operators direct field of vision is inadequate, devices should be provided, so far as reasonably practicable'

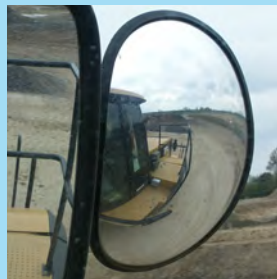
Installing convex mirrors and other indirect vision aids no longer becomes a voluntary commitment but a legal necessity. ALL ROUND VISION products are uniquely placed to help you meet these challenges and enable you and your organisation to pro-actively address these safety issues.



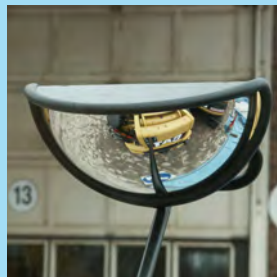


Traditional flat glass mirrors are simply too limiting to show the operator the full extent of their working environment so ALL ROUND VISION has developed key 'fit and forget' solutions to eliminate the problem of blind spots by naturally enhancing the operators visibility. Installing couldn't be simpler as they have a huge margin of error.

See beyond the limits



NC100



BB052



SC010

Manufactured from aluminiumised vacuum coated shatterproof acrylic, with an abrasion resistant coating. Utilising a non-uniform radius profile that maximises the field of view and minimises distortion.

NC100 – CONVEX MIRROR

An oval elliptical mirror, which extends the driver's field of view, from low down close to the vehicle, right out to the wider areas not normally visible with conventional flat mirrors.

SC010 – CONVEX HALF WING MIRROR

Quadra-spherical blind spot mirror for either use as a forward facing or wing type mirror, exposing areas that normally remain hidden. The quadra-spherical lens design focuses on the most important quadrants of an oval sphere, omitting the unnecessary top portion that normally introduces overhead distractions and glare.

BB052 – High Definition CONVEX MIRROR

Quadra-spherical convex mirror providing 180deg vision, for forward or rearward vision. Aluminiumised vacuum coated acrylic lens.

The convex and half-convex wing mirrors are also available with integrated heaters and are supplied with sufficient cabling to connect to the auxiliary circuit breaker in a machines fuse box.

Supplied with mounting brackets and hardware, which are produced in-house and are usually included free of charge. This in-house facility also allows us to fabricate custom brackets for bespoke fittings.

In most instances SPILLARD SAFETY SYSTEMS will undertake a full visibility assessment of each machine type to be fitted prior to installation.



- Robust designs suitable for all environments
- Vacuum coated for added durability
- Non-uniform radius to minimise distortion and maximise view
- Shatterproof acrylic with abrasion resistant coating
- Brackets and mountings to fit most machines
- Limited fitting of multiple mirrors eliminates all blind spots

Optronics® mobile CCTV systems are designed, manufactured and installed exclusively by Spillard Safety Systems and are available in a range of options to meet your varied requirements and have been supplied as part of the All Round Vision package since 1994.

- Modular design for tailored solutions
- Legacy proof for easy upgrading
- Optional security & safety features
- Multiple camera and monitor options
- Day/Night digital cameras working in zero light conditions
- TFT LCD pop-up and quick-release monitors
- Virtually maintenance free
- Effective even in poor weather conditions and in both high and low light environments

Visibly better, clearly safer

Optronics systems are legacy proof which means our original units are fully compatible with current models today, making upgrading easy and cost efficient. Constructed to exacting requirements the range is fully 'CE' certified. In-cab monitors can feature either pop-up designs or removable flat screen technology for added security.

The Optronics industrialised range was purposely designed for use within the quarrying, construction and demolition industries, the improved field of vision to the operator makes reversing and manoeuvring far safer and dramatically reduces workplace accidents and vehicle damage.

The unique features, specifically designed into the Optronics system include; auto ignition power-up, therefore no delays in waiting for a reverse signal. Permanently reversed image, the monitor cannot be accidentally corrected also rendering it worthless if stolen and hopefully stops repeat late night visits. Tamperproof keypad to stop the temptation of idle fingers.

All component parts, including cable and control units are fully tested to ISO and British Standards, past development for NATO and extensive use within the construction and quarrying industries has made the Optronics® range synonymous with durability and reliability. The reassurance this durability provides is further enhanced by the fact that maintenance levels are significantly reduced – keeping costs to a minimum.



OPT5600



OPT5250

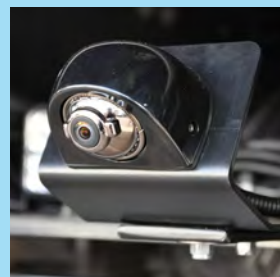
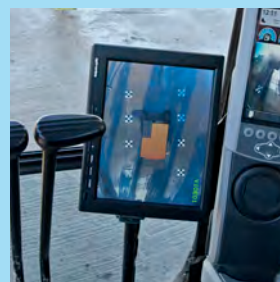


OPT700



Optronic[®] 360 taking All Round Vision to the next level, utilising 4 ultra wide digital camera, Optronic 360[®] provides operators with the ultimate surround view, increasing their all round awareness and potentially reducing risk and saving lives.

Kill the Blind Spots



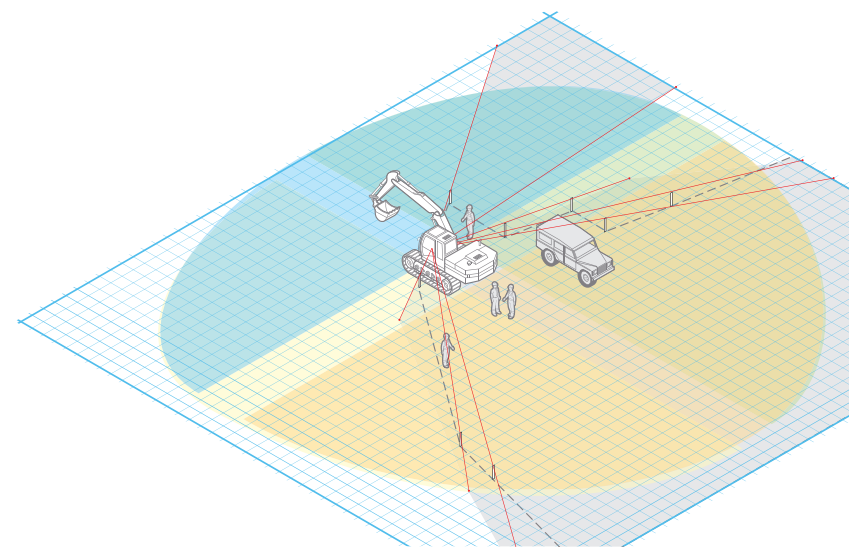
Optronic 360 a high performance surround view camera system, creating a 360° quadraspheric bird's eye image of your vehicle and it's surroundings on a single display.

Utilising high powered image processors the system is capable of producing bespoke image designs to suit vehicle and it's environment, whether that be a small excavator working on a tight construction site or a large haul truck working in a open surface mine.

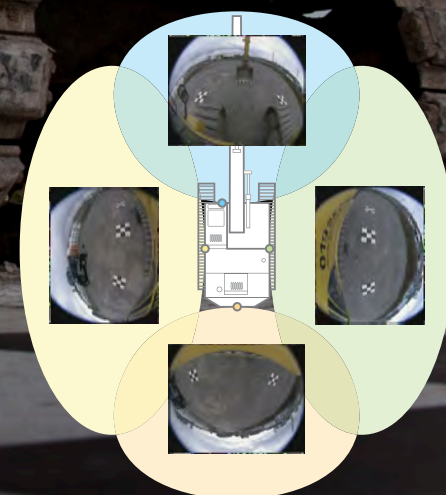
Our method of digitally stitching image regions allows us to place the stitching in less critical areas to ensure maximum 360° vision is achieved at all heights, all the time – another critical aid to optimising visibility and avoiding accidents.

Already proven in the high end passenger car market on the BMW 5 series and the Land Rover, Range Rover models, all the advantages of this highly sophisticated system are now available for use on mining, quarrying and construction machines and commercial vehicles.

No compromise. No cutting corners. And no limitations on all round visibility when people's lives and safety are at stake.



- Scalable field of view
- Programmable image regions – even, off-set front back or left right.
- Picture in picture – image regions can be place on top of surround view to provide additional image data, for example rear view image when reversing.



VCAS An industrialised object detection system with over 4000 sensors installed worldwide, providing the assurance of safety when a vehicles operation commences as the system cannot be turned off or ignored by operators unfamiliar with its features.



Robust, Reliable, Recommended

VCAS - Vehicle Collision Avoidance System utilising state of the art industrialised ultrasonic technology to detect hazards and objects in a rugged off road environment.

Originally designed as an automated braking system for hydrostatic rollers, VCAS has evolved into an industry proven, ultra reliable object detection system. Due to it's bespoke design the system can be used on anything from site dumpers to excavators or fork lift trucks to wheel loaders.

Powerful non-contact sensors are mounted in predetermined locations to the front, side or rear of a vehicle, upon object or hazard detection an alert is relayed to the operator through a visual and spoken warning, thus increasing his all round awareness, allowing him to make an informed decision and manoeuvring in complete safety.

No switches or controls, with all systems designed as 'always on' operation, regardless of direction of travel, eliminating the need for operator intervention and with no moving parts increasing it's reliability, reducing maintenance and vehicle downtimes.

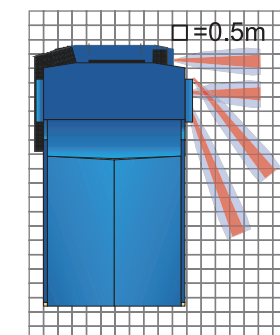
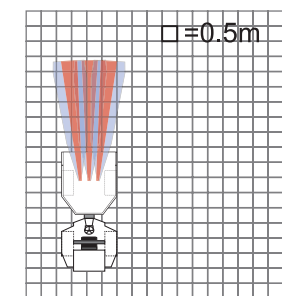
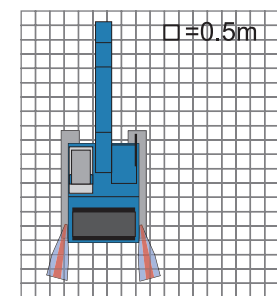


VCD201



VMS600

- 'Always on' transparent operation, eliminates operator interaction
- Industrialised ultrasonic technology
- Visual and audible warnings if objects are detected within pre-configured primary sensing zone
- Low maintenance - insensitive to dust, humidity and air turbulence





Providing mobile safety solutions that reduce incidents and increase awareness to the construction, aggregate, extraction, demolition and waste industries for nearly 20 years.

Spillard – Experience you can depend on

At SPILLARD SAFETY SYSTEMS we are committed to providing our customers with the highest levels of service. Uniquely we offer complimentary visibility studies that allow quarry, plant and safety management to determine, on a machine-by-machine basis, exactly what the best configurations are for their fleet. This commitment and attention to detail, along with our continuous improvement policy, has earned ALL ROUND VISION products acknowledgement by the HSE as well as numerous awards and commendations from industry.

Our teams of trained fitters and engineers cover the whole country, speeding up the installation process and avoiding the need for factory visits. In fact our thorough approach makes selecting and fitting any ALL ROUND VISION products a fast and simple process, leaving you free to deal with running your business.

On-going programme management and after-sales support come as standard and we believe in building lasting relationships with our clients where customer care and training are as important as finding the right solutions and providing the best equipment.

If you would like to know more about ALL ROUND VISION products, or simply want to clarify safety requirements that may apply to your machines, please contact our dedicated team at our head office. In addition you can always visit our web site at www.spillard.com

Visibility is only a small part of site safety, incidents can be prevented if a safe system of work is in place.



- National team of trained fitters and engineers
- On-site assessments and installation
- HSE Acknowledged
- Award winning solutions
- Commitment to customer service

