innovations Caa

Secondary guarding systems

Given that there has been a string of secondary guarding systems to hit the market recently, we have dedicated this month's Innovation page to providing details on the latest entries.

A lot has been said about secondary guarding systems over the past three/ four years - particularly in the UK - however demand for the systems are beginning to spread farther afield. Certainly in Australia this is the case and even the USA is beginning to take notice, while awareness in other parts of Europe continues to rise, helped in part by manufacturers developing their own systems.

New systems on the market

Snorkel Guard

Launched at this year's The Rental Show, the Snorkel Guard features a spring-mounted rail positioned above the control panel which cuts function when pressed. Available worldwide later this year, the new system can be retrofitted to most existing Snorkel booms with platform heights above 12.1 metres. Once the system is activated, an override switch can be used to continue movements.



Launched at The Rental Show 2015, the Snorkel Guard will be available later this year

Alternatively the lift can be operated from the control panel at the base of the boom lift.

Palazzani sensor system

Palazzani has designed a new sensorbased secondary guarding system suitable for its full range of spider lifts with working heights from 17 to 52 metres. Working in a similar fashion to the reversing warning sensors on cars, four small sensors, measuring 80mm x 40mm, are mounted to the corners of the platform, just under the top rail. Optional on all new Palazzani spider lifts, the sensors can be programmed to detect surfaces from three to eight metres away. Once detected, the operator is alerted by a visual and audible warning signal. When the platform comes within three metres of the obstacle, all functions are stopped. To continue movements, an override button needs to be activated.



Palazzani's secondary guarding and anti-collision systems can be used in conjunction with each other

The company has also introduced an anti-collision system which uses ultrasonic sensors on the front of the basket to prevent it moving within a metre of any obstacle. Once triggered only reverse movements function. Both systems can be used in conjunction with each other, although currently neither system can be retrofitted.

ATN's boom lift system

ATN has developed a pressure bar secondary guarding system for its Zebra boom lifts. When the bar is activated, the system automatically reverses the last function for approximately one second, reducing pressure on the operator. An audible and visible alarm is also activated, notifying those

around the platform of a potential incident. The company claims that the pressure bar is located at a level which would be difficult to damage and in a position that would prevent inadvertent activation. The system has also been designed to be swapped between ATN boom lifts in under 30 minutes.



A new secondary guarding system from Dinolift comes standard on its new 66ft 220XSE self-propelled boom lift. Designed as part of the platform, the control panel is mounted on a central unit which is fixed on a pivot to the base of the platform. When a set pressure is applied on the control panel, springs mounted either side are compressed, triggering a limit switch, preventing further movements.

An overhead Lift Canopy

US engineering company Brockett has developed an adjustable overhead secondary guarding system - Lift Canopy - suitable for a wide range of aerial work platforms.

Mounted to the platform corners with universal clamps, the rubber-coated steel structure weighs 22.5kg, which is deducted from the overall platform capacity. As well as preventing entrapment incidents, the system also provides some protection against overhead electrical lines.

ATN's secondary guarding system has been developed for its range of Zebra boom lifts

Dinolift's secondary guarding system comes as standard on its new 2200XSE boom lift



The Canopy Lift can be fitted on all types of aerial work platforms to protect against entrapment and electrical incidents

A system from Hinowa?

Eagle-eyed visitors at Intermat, might have noticed that Hinowa's latest 26 metre Lightlift 26.14 spider lift has been pre-programmed for the addition of a secondary guarding system.

Although no details of a system have been released, if it resembles anything like the artistic impression in the Lightlift 26.14 brochure, the system will feature a sensor bar mounted on a bracket over the controls - similar in design to JLG's Skyguard system.



The artisitic impression of Hinowa's secondary guarding system found in the Lightlift 26.14 brochure

To contact any of these companies click on the 'Access & Lifting Directory' section of www.vertikal.net, where you will find direct links to the companies' web sites for up to 12 weeks after publication. To have your company's new product or service featured in this section, please send in all information along with images via e-mail to: editor@vertikal.net with 'Innovations' typed in the subject box.



SkySiren (BlueSky)

Retrofittable to most boom lifts, when the system's horizontal pressure switch bar is trigged the functions are all stopped and an audible and visual alarm is activated.



SiOPs (Niftylift)

One of the first systems on the market and standard on all HR models over 15 metres, Niftylift's SiOPs system is fully built into the control station and stops functions when the operator is pressed onto the spring loaded control console. It then requires its dead-man foot pedal to reset the device.



ACTIV'Shield (Haulotte)

Now standard on Haulotte's Pro models in Europe, the ACTIV'Shield features a 'Safety Gap', with the switch bar dropping forward when pressed not only stopping the function selected, but helping protect the operator from full entrapment. Once triggered visual and audible alarms are activated and only reverse/lowering movements are permitted.



Sanctuary Zone (AFI/AHS Approved by most manufacturers, two solid steel frames mounted on either end of the platform physically prevent overhead crushing injuries from occurring.



SkyGuard (JLG)

A switch bar fitted above the control panel, stops all functions when triggered and automatically reverses the last function used. In cases of extreme pressure, the sensor bar breaks away to provide additional space and free up the operator.



SG-E (Skyjack)

When the horizontal sensor bar is triggered, all functions are stopped and a siren and flashing beacon is initiated. Skyjack also has a second system (SG-M) in the form of a lightweight overhead protective steel structure that provides physical protection.



OPS (Genie)

Genie's tubular steel structure physically prevents overhead crushing injuries. It can also be used in conjunction with its electronic OPA system, which was based on BlueSky's SkySiren.



Safe Man (Manitou)

Standard on Manitou's diesel ATJ and TJ models, the Safe Man system prevents all platform movements when triggered. It also activates a flashing light and warning alarm. A rearmament button located on the control panel returns functions to the operator.

THE UNIQUE ITALIAN EVENT FOR THE LIFTING, INDUSTRIAL & PORT HANDLING AND SPECIALIZED TRANSPORT INDUSTRIES



GIS 2015 IS ORGANIZED WITH THE SUPPORT OF THE FOLLOWING KEY ITALIAN ASSOCIATIONS, WHOSE MEMBERS ARE REGULAR USERS OF CRANES, ACCESS PLATFORMS, INDUSTRIAL & PORT HANDLING EQUIPMENT AND SPECIALIZED TRANSPORT VEHICLES:



For further information and stand bookings please contact: info@gisexpo.it or phone: +39 010 5704948

www.gisexpo.it