

# Stop slip sliding away

Palfinger Platforms has introduced a new patented composite outrigger mat which allows for the safe stacking when extra height is required for levelling and a non slip surface to help prevent slippage on sloping sites.



Storage slots for the mats are built into the chassis of each lift

The company has developed the new mats with jointly with its specialist supplier. Before getting into the detailed design, the two looked at all of the alternative materials and narrowing it down to wood or a recycled plastic composite. While wood performs well when new it is easily damaged and in one case the company found it had rotted from the inside out, only becoming evident then the jack punched through the material causing the lift to lose stability.



Palfinger's new mats feature a rubber type compound bonded onto the bottom and a recess machine into the top, in order to allow safe stacking

Plastic/nylon mats made from the same material as wear pads/slide blocks can be naturally slippery. Palfinger says that it is aware of incidents in which stabilisers have slipped off the mats.

The solution the company has devised came in two stages. First it created a stabiliser surface which allows three mats to be safely stacked on top of each other without the chance of slippage between mats. This has been made by milling the top side of the mat to create an indent which matches a

reverse shape on the bottom so the pads fit together using the same principles as Lego blocks.

The second step was to create a non-slip surface underneath. Numerous possible solutions were tested, but the one that performed the best features a hard 'rubber type' surface bonded onto the hard composite mat. With the amount of work the two companies put into the process they decided to apply for patent protection on the mat design, which has been granted.

# Permanent worn lug solution

When pivot bushes have been allowed to wear out, damage can be easily inflicted on the lugs or structure that supports the bushes. This usually equates to costly and often complex repairs, involving building up the host material and then line boring so the new pin will fit.

Swedish-based Expander System has a new version of an expander pin that not only saves time and cost, but also solves the problem long term, something that it is prepared to guarantee with a 10 year/10,000 hour warranty.



An Expander System replacement pin in place.

The Expander System pin and bush assembly can be inserted from either side, both ends of the pin are tapered and an expansion sleeves which fit into the lugs can be tightened from either side or both. As each end is tightened the sleeve expands into pivot lug until it is tight and locked in.

The standard sleeves expand up to two millimetres, standard oversize sleeves expand up to four millimetres. The company keeps a wide range of pins in stock, but will also produce pins to order. A very simple to use website form allows companies to input the details for a required expander pin - if it does not already exist - and the company will then send a quotation.



An Expander System pivot pin can be made for almost any application, if not already in stock.

# New LED indicator lamps

Grote has introduced six new LED side/indicator lamps suitable for multiple applications including side skirts, restricted spaces and locations where a separate mounting surface is not practical. The new lamps come in three styles, each with a choice of either male pin or hard shell connectors. The grommet-mount version is ideal for traditional applications and direct replacement of existing grommet-mount installations.

The integrated flange-mount version is low profile, easy to install and comes with a matching mounting pad to absorb stress due to flex from the

mounting surface or torque from fasteners. The compact surface-mount version has the smallest footprint, lowest profile and lightest weight.

Randy Staggs, Grote's business development manager for signal lighting said: "In designing our lamps, we factored in weight reduction, challenging mounting surfaces like aerodynamic side skirts, varying electrical connector styles and the driver's desire to see the lamp functioning from the cab."



The new Grote LED turn lamps (L-R) The Grommet mount, the integrated flange and the surface mount.

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