UNFOLDING

accurac

Nothing tops flexibility in tight spaces. Equipped with an articulated jib as standard, the electric-powered Snorkel A46JE self-propelled boom lift easily lifts two people with tools up and over to a maximum working height of 52 ft. 3 in. (16.0m), Its superb working envelope with zero tailswing, non-marking tires and maximum working outreach of 24 ft. 11 in. (7.35m) offer high maneuverability where needed most.





FOR MORE INFORMATION CALL

Snorkel™at +44 (0)845 1550 057 or visit www.snorkellifts.com



Onwards and upward

The truck mounted platform market has seen more than its fair share of development over the past few years, both in terms of new technology, but also the adoption of new materials, such as ultra-high strength steels as the manufacturers have been forced to make regular updates and redesigns as environmental and other regulatory demands have changed the chassis on which they are based.

As if that was not enough the end users and fleet owners have been changing their thinking on the chassis they prefer. The requirement to push the working envelopes on 3.5 and 7.5 tonne chassis has not gone away, but there is also a growing realisation that buying a smaller machine on a given chassis with some higher platform capacities, decent spare cargo payload and options such as 4x4 drive might be a better way to go. The result is a requirement for ever wider product ranges and constant engineering development.

In spite of the increasing market demands and complexity the truck mounted lift sector must be one of the most congested and competitive in the aerial work platform sector, with more than 30 manufacturers producing truck, van and pick-up mounted lifts. Once again Bauma saw a slew of new product launches, particularly on the 3.5 tonne chassis.

Many thought the battle to build

the highest platform on a 3.5 tonne truck had ended with Ruthmann's 28.6 metre TB290. However Ruthmann has cemented its early advantage with the 30 metre TB300, along with a redesigned 29 metre TB 290 pro and 27 metre TB 270 pro. Another manufacturer pushing the envelope is Multitel with its 27 metre MTE 270.

Electric and Hybrid

Elsewhere we have seen huge growth in the number of new electric and hybrid lifts coming onto the market, including several models from Klubb, including a number of all electric models and the all electric Ruthmann Ampero TB 250 E. While Palfinger's 37 metre P 370 KS E hybrid truck mount is beginning to prove poplar in some market sectors. Models with hybrid power packs are proving to be a very popular with certain types of users, such as utilities and those end users that do a lot of their work in urban areas. The batteries can be recharged from the mains but are also topped up or completely



recharged by an extra alternator/ generator powered by the truck engine while travelling between jobs. Once on site the machine works almost silently with zero emissions which, says those who use them, helps boost productivity, safety while eliminating any noise issues with local residents.

The following is a roundup of some of the new models launched over the past 12 months or so.

Full house from Ruthmann

Ruthmann has been one of the most active truck mounted manufacturers in terms of development and new product announcements, launching

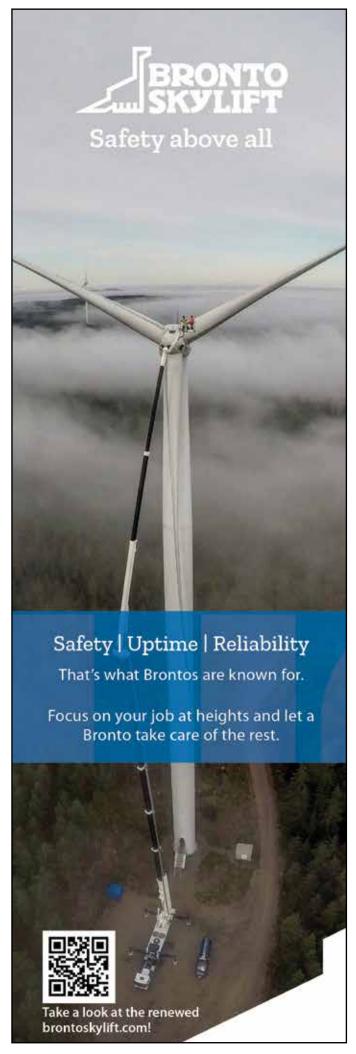
five new TB and TBR machines on 3.5 tonne chassis. These include three TB telescopics - the 30 metre TB 300, a redesign of the TB290 pro and the TB 270 pro - however Ruthmann says that its main focus is on 3.5 tonne 'bread and butter' machines, where it is looking at higher operating speeds, improved stability/platform rigidity and maximising platform capacity.

truck mounted lifts

The TB300 is an entirely new machine with up to 17.1 metres of outreach with the aim to take some of the work currently requiring a 7.5 tonne truck mounted platform. The new model is the







flagship of the company's Hi-light performance series incorporating its latest design and steel fabrication techniques. Other features include new hydraulics, a new the platform, internal telescopic cylinders, worm gear slew drive and platform rotation and outrigger controls on the chassis.

At the same time the TB290, unveiled two and a half years ago, has been replaced with the TB290 pro with 500mm more working height at a full 29 metres, 1.2 metres more outreach over the rear, and 1.3 metres over the side.

The TB270 pro offers up to 18.1 metres of outreach - 1.7 metres more than the previous model while 15 metres is possible over the side. All this on a chassis that has a 200mm shorter overall length. All new TB machines feature Ruthmann's Secondary Guarding System (SGS) and can be mounted on either Iveco or Mercedes chassis.

Ruthmann has also introduced two new TBR models - telescopics with iibs - the 26 metre TBR260 which offers 17 metres of outreach and 250kg platform capacity and the 23 metre TBR 230 - an upgrade of the TBR 220 - with 17.5 metres outreach and 250kg capacity. The TBR230 is available on Mercedes Sprinter and Iveco chassis while the TBR260 is currently limited to the Mercedes. A wider variety of chassis - including five and 10.5 tonne - will be available in the future.

100% electric Ampero

Ruthmann has also launched its first all electric truck mount - the Ampero TBR250 E. Based on the TBR 250 HV5 it is mounted on a Mercedes Sprinter chassis converted from diesel to battery electric by Orten





Electric Trucks of Wittlich, Germany and its partner EFA-S. The full traction truck battery also powers the platform functions resulting in just one charging device for the whole machine.



The Ruthmann TB270 pro offers up to 18.1 metres of outreach - 1.7 metres more than the previous model - while 15 metres is possible over the side.



The battery can be charged in less than four hours with a 380 volt/22kW charging station, although a standard 230 volt socket can also be used.

Battery capacity said to be sufficient for a full day's work day which Ruthmann counts as up to 100km of travel in urban traffic, plus around 30 platform work cycles - roughly four hours of continuous operation. The first unit has been purchased by German rental company Gerken.

Ruthmann has also unveiled a hybrid version of the 27 metre TB270 which uses a lithium battery system. The truck diesel automatically kicks in when battery power reaches the cut out threshold. To compensate for the additional weight of the battery pack, the TB 270 is installed on a 3.5 tonne Mercedes Sprinter chassis with GRP-RA suspension - leaf springs made of glass fibre

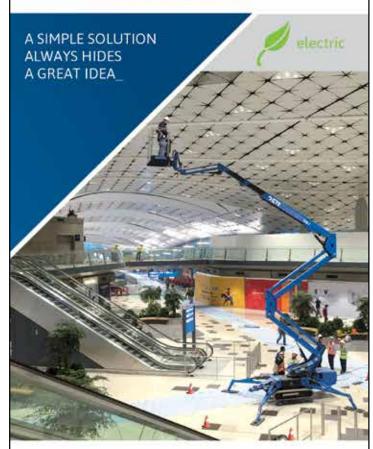
reinforced plastic - a 45 litre fuel tank and passenger seat removed. Alternatively it can be ordered on a five tonne Sprinter chassis. Charging times depend on the chassis and is either two hours on the 3.5 tonne or four hours on the 7.5 tonne. Battery capacity is one and a half hours on the smaller and three hours on the larger.

Dynamic Reach System

Last year Ruthmann unveiled its Dynamic Reach System (DRS) on the 90 metre T900 HF. The system monitors the actual outrigger set up and provides the optimum working envelope for the weight in the platform. The system is now available on the 75 metre T750 HF providing up to four metres more outreach, or up to 600 kg platform capacity compared to the standard 320kg, and can be retrofitted to the T 510 HF, T 570 HF and the T 650 HF. The DRS is programmable







PERFORMANCE: WORKING HEIGHT 23M OUTREACH 12M CAPACITY 200KG

MOST VERSATILE STABILISER CONFIGURATION: 4 DIFFERENT WORKING AREAS ALLOW THE SET-UP TO PERFORM

THE DESIRED OPERATIONS IN PERFECT ERGONOMICS.

Follow us on: (1) (2) (1)









CTE S.p.A.

Headquarters: Via Caproni, 7 38068 Rovereto (Trento) - Italy

Factory: Loc. Terramatta, 5 37010 Rivoli V.se (Verona) - Italy

Warehouse: via E. Fermi, 2 37010 Affi (VR) - Italy

Tel +39 0464 48.50.50 info@ctelift.com · www.ctelift.com



Cla

in three versions which prioritise either Wind speed, High capacity or Outrigger loadings. Opting for 'Wind' allows use in stormy weather, up to wind force 8 rather than wind force 6 adding to the number of work days per year.

The High capacity mode provides 600kg platform capacity for a more limited envelope, compared to 320kg when deactivated. The 'Support load' option allows the operator to select the maximum load on each outrigger before starting work, the machine is then restricted to a working envelope that keeps the outrigger loadings below that selected. Six levels are available ranging from 50 to 100 percent of maximum loadings, allowing the machine to be used safely on areas with restricted floor loadings.

New Multitel platforms

Market leading Italian manufacturer Multitel has also been busy, launching three new truck mounted lifts, including its largest model to date and its first hybrid machine. At the same time it has announced some interesting technological developments such as a lighter weight composite hydraulic cylinder.

Largest on a 3.5 tonne

The 27 metre MTE 270 straight telescopic truck mount is the latest Multitel on a 3.5 tonne chassis and its largest to date, extending its range from 25 to 27 metres. It has a 230kg maximum platform capacity and can be mounted on Mercedes, lveco or Isuzu chassis. Outriggers can either be deployed within the vehicle width or extended on one or

both sides. With inboard outriggers and 100kg in the platform the MTE 270 has 17 metres outreach over the rear and 8.6 metres over the side. Extending the outriggers increases the outreach over the side to 13.5 metres.

Designed and built in the Multitel facilities in Manta, Italy it uses advanced aluminium alloys resulting in a light and rigid structure. The boom is made in a single piece of aluminium without welded joints offering increased strength. It is the first product in a new range and claims best in class performance.

Fitted with the MUSA - Multitel-Self-Adapting outreach system - the platform automatically adjusts the working envelope depending on the actual outrigger positions selected, the slew point of the superstructure and the load in the platform.

Other features include an aluminium alloy sub-frame, and single button automatic outrigger set up and levelling, along with automatic return to transport position.

MZ250

While the new platform has a similar working height to the current MX 250 and employs a dual telescopic boom lift mechanism, the MZ 250 is entirely new with a two section lower boom, a two section upper boom and a fixed length articulating jib. It is mounted on a 3.5 tonne lveco Daily chassis with a three metre wheelbase giving an overall length of 6.3 metres. Maximum platform capacity is 250kg, with up to 10.35 metres of outreach while 14.4 metres is possible with 100kg in the platform,

The Multitel MZ 250 is entirely new with a two section lower boom, a two section upper boom and a fixed length articulating jib

and it can reach 2.5 metres below ground level. Like the MTE 270 it is fitted with the MUSA outreach system.

MT204

Following the launch of the 160 Alu Hybrid and MT162 Hybrid, Multitel has extended its 'Green' range with the new 20.4 metre MT204. Based on the MT162H the chassis retains its diesel power, while the platform is normally powered by an on board battery pack. Maximum outreach is 12 metres with 200kg capacity and 9.9 metres with 300kg. Mounted on a Mercedes Sprinter or Iveco Daily Multitel says that it is less than 3,500kg with full tank and driver. The battery pack is recharged via a second alternator when travelling between jobs.

Outriggers can be deployed either with the diesel/PTO or silently with the battery pack. The batteries power a variable speed electric motor matched to a second hydraulic pump. The lift can work a full day on a single charge. Overnight charging of the batteries will be the norm, and they can be charged from empty to full in less than eight hours.

Multitel says it is planning to add further 'Green line generation' models to its Eco Hybrid range using conventional batteries and lithium technology.

Composite hydraulic cylinders

The ongoing need to reduce weight and yet offer improved performance has resulted in Multitel developing and testing a range of composite material components, the most significant being a carbon fibre hydraulic cylinder. Features include



Multitel is working on a composite carbon fibre hydraulic cylinder that offers greater working pressure and is 35 percent lighter.







DESIGNED FOR RENTAL

SKYRISER™ ensures that the riser and main pivot point connecting the fly boom to the riser travel in a straight vertical line. Moving in a true vertical manner, without drifting forward or back, reducing the amount of repositioning the operator needs to do in order to stay close to a building facade, and improving productivity.

www.skyjack.com





The Palfinger P 280 CK is mounted on a 7.5 tonne chassis with a maximum outreach of 18.8 metres and 300kg platform capacity.

higher strength to weight ratio, low thermal expansion, corrosion resistance and superior damping performance, and most significantly it is 35 percent lighter and capable of higher pressures - i.e. 300 bar rather than 250. The unit can be used for all cylinders except outriggers. The cylinder is currently going through a test programme.

According to Multitel the truck mount market is currently good with France and Germany its main markets. Last year it produced 1,216 units. This year it has been building 32 units a week and this summer it installed a third welding robot in order to increase production to 36 machines a month. It is also working on a 77.5 metre machine which may be seen by the end of the year.

Palfinger Platforms

Palfinger Platforms launched two new models in its Light and one model in its Smart class. The company's first hybrid electric platform, the 37 metre P 370 KS E is now in full production, while at Bauma it launched the insulated ETC49 IH and Palfinger Connected - its fleet and operator telematics

The company's first hybrid platform the P 370 KS E was seen in September last year. A key feature is its intelligent energy management system which controls the electric motor and hydraulic pump along with the integrated battery charging system in order to optimise the machine's performance.

P 220 BK and P 280 CK

The two new models in the Light NX

class - with telescopic booms and articulating jibs - are the 22 metre P 220 BK mounted on a 3.5 tonne chassis and the 28 metre P 280 CK on a 7.5 tonne chassis. Both models feature an aluminium platform with reinforced mid/knee rail for additional protection.

The P 220 BK has an outreach of 17 metres and a maximum platform capacity of 300kg, complete with platform rotation. Standard features include automatic outrigger monitoring and working envelope selection, end mounted platform and return to stowed position memory. The P 220 BK can also be mounted on a 7.5 tonne chassis for additional payload.

The P 280 CK is mounted on a 7.5 tonne chassis with a maximum outreach of 18.8 metres and 300kg platform capacity, it features a five section boom plus jib and can set up with outrigger jacks inboard or



extended to 2.5 metres, overall height is 3.3 metres. Overall height is 3.30 metres.

In the Italian-built Smart class the new 19.7 metre P 200 AXE articulated platform has a high standard specification and 250kg platform capacity. With a total weight of 3.5 tonnes, it has an overall width of 2.1 metres, a length of just 5.39 metres and is under 2.9 metres high. Combined with fixed inboard rear jacks and telescopic front outriggers which can be used either inboard or extended, make it a well suited machine for tight spaces. Maximum outreach 8.5 metres.

Insulated ETC 40 IH

Another first from Palfinger is the 13.7 metre insulated ETC 40 IH. ETC with hydraulic controls and class C, 46kV insulation. Aimed at the American utility market, it has 8.8 metres of outreach, 181kg platform capacity, 360 degree slew and operates free on wheels without outriggers.

One issue with Palfinger has been the apparent lack of integration between the German built products its Italian affiliate. But earlier this month it appointed Paolo Balugani of Palfinger Platforms Italy as its global product line leader for aerial work platforms which currently includes truck mounts up to 103 metres and spider lifts. While overseeing the company's full product line, he will continue in his current role as managing director of the Italian platform business.

Oil&Steel

Oil&Steel has struggled in recent years as part of the Manitex group since 2014, however this year it has begun to show signs of a revival. And with Steve Filipov now in charge at Manitex its prospects are looking even brighter as he focuses on the Italian operations - PM, Oil&Steel and Valla. The company unveiled several new models at Bauma, including the new Scorpion 2013 Hybrid and Snake 2111J Plus truck mounts. It is understood that it has further new truck mounts and spider lifts on the drawing board.

The 21 metre dual riser articulated Snake 2111 J Plus with jib offers up to 11 metres of outreach, while maximum platform capacity is







250kg. The 20 metre Scorpion 2013 Hybrid has up to 12.3 metres of outreach and 250kg platform capacity. It features a lithium ion battery pack to power the platform, while the truck's diesel engine takes care of road travel but can also drive the superstructure via the regular PTO hydraulic pump. A fully charged battery is said to last a full working day, while it is also possible to operate the machine while recharging the battery. The battery management system features advanced cell balancing/control functions (tested in conditions of overcharging, short circuit, mechanical shock/vibration and deep discharge), fault detection and charge optimisation even after long periods of inactivity. Information on the battery status (percentage of charge, fault indication, etc.) can be monitored on a display on the battery compartment, or the platform control unit and on the remote control display.

A Start & Stop system and automatic management of the electric motor based on the power actually required for the job is also included. All safety devices including load limiter, inclination sensor and hydraulic pressure sensor are integrated into the control system.

The company claims that the additional costs over a standard machine will normally be recovered within the first two years of use due to a combination of fuel savings and better utilisation.



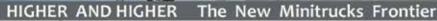
Klubb

In the four years since it was established, French vehicle mounted platform manufacturer Klubb has expanded its product range to include van mounted and truck mounted platforms to 25.5 metres and has gained a particularly strong foothold in the emerging battery powered vehicle mounted lift market. Its acquisition of specialist French access manufacturer EGI last August has also taken it(into the fire fighting and insulated platform market with models up to 55 metres and the possibility of a 65 metre machine on the horizon. It also plans to introduce a 70,000kV insulated

platform mounted on a 3.5 tonne chassis

Its latest introduction is the 20.6 metre Klubb KT20 truck mounted platform. Mounted on a 3.5 tonne Iveco chassis, the KT20 provides an outreach of 12.5 metres and 300kg platform capacity. The new machine is the first and largest in a range of platforms from 17 to 20.6 metres that will be available with the company's battery powered Green Pack option, which allows the platform to be operated on the battery pack, avoiding the need to keep the vehicle's engine running. Outriggers can be inline or extended.





- 16 m Working Height and 7,5 m lateral outreach, LEADER IN ITS MARKET SEGMENT
- Slim and compact product, used in the narrowest historical center and alleys
- Configuration with double pantograph and flyboom, without rear overhang
- Turret rotation 360° continuos and basket rotation 90° + 90°
- Possibility to mount it on "MINI" trucks (Nissan, Mitsubishi, Piaggio Porter)
- Optional 220V electric engine for working indoor (only 170 cm wide in driving conditions)
- To be used in many situations instead of a tracked aerial platform, without transport costs







www.officinecomet.com



31m on 3.5 tonne

First seen last summer but still worth a mention is the 31 metre truck mount on a 3.5 tonne chassis from Comet and Hoogweker Centrum/PowerLift. The Comet Compact 3117 Jib can be driven on a regular B(E) driving licence (3.5 tonne truck and up to 3.5 tonne trailer) The reason is that the platform is technically mounted on a trailer behind a 3.5 tonne truck chassis. The concept was first seen in 2010 when Oil&Steel launched the 27 metre Snake 2714 Compact.

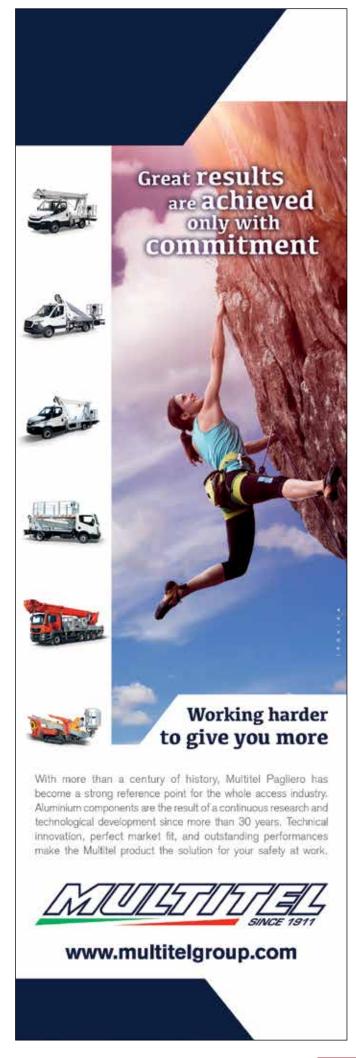
The trailer frame/chassis runs along the top of the normal two axle truck chassis to the third axle, so that the platform is truly mounted on a trailer - albeit a slightly unconventional one, which can be removed in around 10 minutes. The platform's all up weight is 6,850kg, the boom configuration - a dual sigma type riser, three section telescopic boom and jib - offers 17 metres of outreach with a 250kg platform capacity through 360 degrees with continuous slew.

It also offers a bi-energy Electric/ Diesel power pack, beam and H-type outriggers, 180 degrees platform rotation and is mounted on a 3.5 tonne Iveco chassis.

In recent years Comet has significantly expanded is range of truck mounted platforms, particularly models mounted on 3.5 tonne chassis, while its largest machine is the 45 metre Eurosky T45 mounted on a three axle 26 tonne truck with 20 metres outreach and 250kg platform capacity. 40 metre on 7.5 tonnes

Bauma saw the launch of what Cela claims is the highest platform on a 7.5 tonne chassis - the 40 metre DT40. The company has a range of truck mounted platforms from 21 to 72 metres, but the DT range is unusual in that they are rear mounted and feature multi-section telescopic lower and upper booms. The original 20 metre DT21 was launched in 2010 on a 3.5 tonne chassis, offering a low stowed height, greater up & over and below ground reach. The 40 metre version uses a four section lower boom or tower, topped by a three section upper boom and articulating jib. Mounted on a 7.5 tonne chassis, it has an unmatched 19 metres of up & over reach, with 19.5 metres outreach with 120kg in the platform. 16 metres is possible with 230kg and 14 metres with the maximum platform capacity of 300kg. The









lower section must be fully raised to the vertical before the upper boom can be elevated.

Overall length is 7.34 metres if the basket is removed and overall height is just 3.1 metres. The lift is also capable of reaching 9.5 metres below ground level. The fully automatic set up outriggers have a maximum spread of 4.9 metres, can be set up within the chassis width, and can cope with slopes of up to seven degrees.

Versalift

While known more for its van mounted lifts in Europe Versalift produces the 24.2 metre, 12.5 metre outreach VTX-240 mounted on a 3.5 tonne chassis and has just introduced the 13 metre insulated SST37EiH mounted on a 7.5 tonne Isuzu N75 - the first to have a fully galvanised body. The company has also introduced several new van mounted lifts, including the 16.6 metre VDTL-165-F, the first with this working height and envelope on a 3.5 tonne van. But that's for another time.

CTE MP 32.19

The 32 metre MP 32.19 is the second model in the company's Multipurpose range and is unusual in that the slew ring is mounted between the two telescopic booms, the lower two section boom being fixed to a rear mounted pivot point, while the three section top boom can rotate 180 degrees either side of centre on its elevated slew ring. Finally a two section articulated

jib with almost 180 degrees of articulation adds to the working height and outreach.

Up & over reach is just over 12 metres, at which the MP32.19 offers up to 19 metres outreach with 120kg, maximum capacity of 300kg is available at just over 14 metres. The unit is mounted on a 7.5 tonne truck, outriggers can be set inboard or fully extended to 3.5 metres they are monitored by the company's S3 Smart system, with set up info used to calculate the working envelope.

Bronto

Finland's Bronto Skylift has been owned by Japanese fire and rescue equipment manufacturer Morita since 2016, and so far it does not appear to have had a great deal of impact. Although this year there have been signs of a new more confident attitude as the company halted its long retreat from the smaller end of the market. A year ago it launched the all new 35 metre S35EM targeted at the upper end of the self drive rental market, while offering the features, build quality and performance features of its larger truck mounts.

The new compact machine has a five section telescopic boom topped by an articulated jib. Maximum outreach is 29 metres and maximum platform capacity is 500kg with the standard 2.04 metre wide platform or 450kg with the optional 2.4 metre basket, while an extendable 3.4 metre platform is also available with a 350kg capacity.





The platform stows to the rear, with a landing stage and pull-out step to make access to and loading of the platform safe and easier, although it can also be lowered to the ground. The platform control panel - complete with all of the safety equipment - is attached to the guardrails and can be moved to provide maximum space for a particular job. The control system is the latest Bronto 5+, with touch screen, easy navigation and modifiable main menu, as well as integrated quick manuals and situation related help texts. A secondary quarding device is standard.

Mounted on a two axle chassis, overall length on the road is 9.5 metres with an overall height on the Volvo FL launch chassis

of 3.7 metres. Outrigger set up is completely variable with built-in sensors and integration with the platform's overload system. Optional equipment includes hydraulic and electrical power to the platform, hydraulic material winch and ultrasonic collision quard.







ALIMATS®

THE MOST PRACTICAL AND COST EFFECTIVE METHOD OF SPREADING OUTRIGGER STABILIZER LOADS

UNIQUE, PURPOSE DESIGNED, MODULAR INTERLOCKING OUTRIGGER LOAD SPREAD SYSTEM









FOR USE UNDER MOBILE/SELF ERECT CRANES • ACCESS PLATFORMS • LORRY LOADERS • CONCRETE PUMPS











- Interlocking modular load spread system
- · Each standard 1m2 panel only weighs 38kg
- Comprehensive safety documentation and load spread analysis available
 - · Easy to set up and manhandle around site
- Compressive Strength 530 tonnes / m2
- No additional plant required to set up
- Many configurations to create a range of load spread areas
 - . No short rigging duties required
 - Nationwide coverage



Two sizes of mat available

STANDARD MODULE 1.0m² (38kg) – 1740 x 580 x 60mm 1,34m² Rig 3 No SHORT MODULES 1160 x 1160 x 120mm

2.0m ² Rig 2 No. STANDARD MODULES 2 No. SHORT MODULES 1740 x 1160 x 120mm 3.0m² Rig – 5 No STANDARD MODULE 1740 X 1740 X 120mm



SHORT MODULE .67m² (25kg) -1160 x 580 x 60mm

ALIMATS®

New House Farm, Belper Rd, Bradley, Ashbourne,
Derbyshire DE6 1LP Tel: +44 (0) 1335 345111
email: info@bfl.uk.com www.bfl.uk.com
SEE OUR NEW ALIMAT VIDEO AT vimeo.com/158642500

