December/January 2022 Vol.23 issue 8

Aluminium Craenes Annual rental rate survey Look back at 2021

Aviation access





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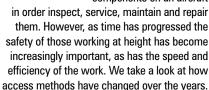
Every successful job starts with the journey there: With a minimal, significantly reduced turning circle and H-style outriggers with maximum flexibility, the two truck-mounted cranes can fulfill an extremely wide variety of needs even on short notice – whether traveling with a large counterweight or without the need for a permit, and with features ranging from an intelligent trailer solution to a storage compartment for roofing tile clamps. The Tridem air ride rear axles in the new HK family ensure ideal handling, absolute stability on the road, and powerful traction at the work site. The straightforward HK 4.050-1 meets the standard needs of the crane business just as reliably as the new HK 4.070-1 can tackle tough challenges – always with maximum versatility to tackle any job.

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Access in Aviation 39

Ever since the first powered aircraft flight in 1903 there has been a need to work at height to reach various components on an aircraft



Look back 49

The one positive we can take from 2021 is that it was a better year than 2020! Covid however still dominated the global news although COP26, the postponed Olympics, the invasion of the US Capitol, natural disasters and global shipping

and logistics issues also figured prominently. We take a look at both the industry and world highlights of another eventful year!



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Dingli unveils 99ft

tonne Liebherr AT,



3,000t ringer crane for BMS, 2,000t tele crawler from XCMG, 51ft electric RT boom from Zoomlion, New low top tower crane from Wolffkran,

Platform Basket unveils new 19m rail boom, JLG introduces Quad track option, CMC launches first fully insulated spider lift,

first Genie S-80 TraX, Dingli launches 26m/1,500kg self-propelled glass handler, electric conversion pack for JLG 660SJ, Bronto 104m



for Jalo, JLG sues Sany and former employee and financials round-up...

Aluminium truck cranes 17

A small number of German manufacturers have been

building high reaching, lightweight truck and trailer mounted cranes for many years. In the past decade their popularity has been growing across a wider geographic area, among both end users and rental

companies. Will North takes a look at what sets these cranes apart?

The Rental Rate Guide 25

As companies recover from the pandemic and face a massive jump in inflation,

are they managing to reflect these challenges in their rental rates or are they continuing with the old ways of rate cutting? Find out in this year's comprehensive survey of UK and Ireland crane, access and telehandler rental companies.

In the next C&A

On the cover:

A Böcker AHK 36 aluminium trailer crane replaces the wood floor of the 19.5 metre high viewing tower in Borgholzhausen, in the heart of the Teutoburg Forest in North Rhine-Westphalia, Germany.



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Access in Aviation



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Scheduled for early March, the next issue of Cranes & Access will include features on Van and Small Truck Mounted platforms, Alternative Lifting Equipment and Battery Developments as well as a sneak preview to Vertikal Days in May. If you have any contributions or suggestions to make or are interested in advertising in this issue, please contact our editorial or sales teams.

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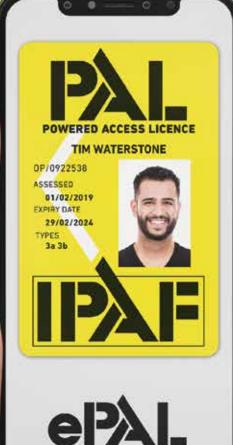






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For users & buyers of lifting equipment

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Groundhog Day...

January is traditionally a time to make new resolutions - to lose weight, give up alcohol, join a gym, get fit etc... yet most, if not all of us, quickly fail to live up to our lofty aims which soon fall by the wayside. This is a scenario that is repeated time and again, always with the same outcome.

comment

This issue includes our 21st Annual Rental Rate Guide. As with last year,

the pandemic has had an impact, compounded by labour shortages, transport delays, price increases and other supply issues. The construction market has seen massive material price increases - 30 percent or more for steel and timber as well as shortages in cement/concrete, plasterboard/dry wall and paint.

All of these increases and delays have inevitably been passed on to clients, who have had little choice but to accept higher prices and longer contract times. After all if McDonalds UK ran out of milkshakes because of supply chain woes then it must be real and affecting everybody!

As the global economy started to pick up post lockdown, the situation was exacerbated by a jump in new contracts, which combined with the shortages have led to further price increases and delays... except - it would seem - for the prices that UK contractors are prepared to pay to hire a crane, aerial lift or telehandler.

Now is the perfect opportunity to restore the returns on investment levels that have suffered from long term erosion over the past 10 to 20 years or more. Aside from that opportunity, rising costs make rate increases essential. And yet the comments submitted in our survey suggest that in some cases, rates may have even gone in the opposite direction.

Here is just one comment from a crane rental company executive:

"The low rates being charged in relation to the value of equipment provided is ludicrous when compared to other sectors. Couple this with the degree of technical ability required to run a crane fleet and the equipment required with the attendant risk makes the situation even worse. When you must invest in excess of £1m in equipment, man it, maintain it and provide all the necessary back up and you are unable to obtain the same rate as a mechanic in the average car main dealership, then surely it is time for things to change!"

Anecdotal evidence suggests that a few rental companies are now simply refusing to supply contractors at non-commercial rates - there is after all little point being a busy fool. With further cost increases on the horizon, now is surely time for rental companies to sort this issue. If not, then New Year 2023 will be here soon enough, and we can try and do it all over again - but next time there may well be fewer rental companies to survey.

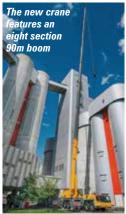
Mark Darwin Comment and feedback is most welcome via post, email, fax or phone stating if we may publish them or not: editor@vertikal.net





Liebherr's new 300 tonner The new crane atures an

Liebherr has launched a new 300 tonne six axle All Terrain, the LTM 1300-6.3 with a 90 metre main boom which can remain on board within 12 tonne axle loads. The new crane features the manufacturer's single engine concept together with ECOmode, ECOdrive, VarioBallast and new VarioBase Plus outrigger set-up system which features a wider more variable rear outrigger spread - up to 9.4 metres - as well as Auto-Ballast. The maximum counterweight is 88 tonnes configured to provide the maximum number of transport permutations. It can also



operate with eight tonnes less ballast than the LTM1300-6.2 without compromising capacities.

The current 300 tonne LTM 1300-6.2 - with its 78 metre boom which can also be used with a full luffing jib - will remain in the Liebherr All Terrain lineup, for the foreseeable future.

The new model has been designed for applications such as tower crane erection, antennae installation and wind turbine maintenance work. Its eight section 90 metre boom will not support a luffing jib, but in addition to a 20 metre bi-fold swingaway extension it offers a range of lattice extensions - some with hydraulic luffing capability - for a maximum tip height of 126 metres.

99ft Dingli scissor lift

Chinese manufacturer Dingli, has released two new heavy-duty narrow aisle scissor lifts - the 86ft JCPT2814DC and the 99ft JCPT3214DC. The new models use the proven technology from the company's 22 metre models which for the past two years have been exceptionally popular in many parts of Europe.

With working heights of 28 metres and 32 metres respectively, both have a 750kg maximum platform capacity or 600kg unrestricted. They also have an overall width of 1.39 metres, are 5.69 and 6.41 metres long respectively with an overall height of 3.17 metres when guardrails are folded. The extra height on the JCPT3214DC comes from longer scissor arms rather than an additional stack. Overall weight is 18,300kg for the JCPT2814 and 22,200kg for its larger brother, while platform lengths are 5.08 and 5.85 metres and 1.2 metres wide.

A 1.9 metre roll-out extension creates a 7.75 metre long work platform on the JCPT3214 and just under seven metres on the JCPT2814. Both can drive at full height and in spite of these being slab electric machines, four wheel drive and steer are standard. Power comes from an 80 volt/520Ah high-capacity

lithium battery pack feeding AC motors which are said to be good for three to four days of typical work. A 620Ah full traction battery option is also available.



The two new Dingli heavy-duty scissor lifts

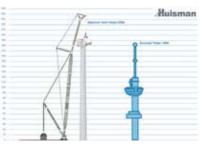


3,000t ringer for BMS

Danish crane and aerial lift rental group BMS has ordered a 3,000 tonne Huisman electric powered ringer crane for its Heavy Crane division, with an option for a second unit. The crane uses a modular ring system which can be used with a full 360 degree ring or guarter sections depending on site layout.

The crane set up has been optimised for work in the wind industry with the capacity to lift 1,200 tonne components to heights of up to 225 metres,

as well as manage loads of up to 3,000 tonnes. The crane has been designed for installing the next generation of wind turbines both onshore and offshore and on floating foundations. Delivery is scheduled for the second half of 2023.



The new crane can lift 1,200t to a height of 225m

JLG Quad Track

JLG has launched a new four track option for its 60ft 600S and 66ft 660SJ telescopic boom lifts, which is also retrofittable on some two wheel steer models. There are also plans to offer it on other models in the future.

Quad Track - which will initially only be available on **ANSI** machines - uses four low profile 457mm wide triangular rubber track systems, each of which is 834mm high and 1.37 metres long with four lower rollers. They bolt directly onto the standard machine's wheel hubs allowing easy conversion from wheels to tracks and back again.





travel over obstacles and slope transitions



2,000t tele crawler from XCMG

Late last year Chinese manufacturer XCMG announced two new highcapacity telescopic cranes for wind turbine installation - the 1,800 tonne, nine axle XCA1800 All Terrain and the 2,000 tonne XCC2000 telescopic crawler crane named the 'Windflex 3' and 'Windflex 4' respectively.

At least three units have already been delivered to wind farm construction sites in China, while at least one telescopic crawler has been delivered and already installed several 3.5MW turbines.

Specification details are scant but both cranes have similar seven section booms with a total length of around 100 metres or so. The boom on the All Terrain is convertible with the four inner sections removable to leave the crane with a shorter heavy duty 50 metre boom making it ideally suited for road travel. The crawler on the other hand has a simple seven section boom. The XCC2000 has a relatively narrow track chassis, equipped with large swing out two-stage telescopic outriggers, providing a large base as well as the ability to level on uneven ground.

On its first job the XCC2000 lifted a 132 tonne nacelle to a hub height

of 145 metres. The crane used the fully extended main boom plus around 60 metres of cable supported lattice extension for a maximum tip height of around 165 metres.



51ft Zoomlion electric RT boom

Zoomlion has unveiled its first all-electric Rough Terrain articulated boom lift - the 51ft ZA16JERT - which features a dual over centre sigma type riser topped by a two section telescopic boom and 1.53 metre articulating jib. This gives a working height of 17.8 metres with a maximum outreach of 9.7 metres at an up & over height of almost eight metres with its 250kg maximum platform capacity.

Power comes from a 48 volt 320A/h battery pack feeding AC electric drive and lift motors with four wheel drive and oscillating axle. The unit has an overall width of 2.3 metres, an overall length of 7.7 metres and a stowed height of 2.3 metres. Total weight is 7,300kg. The standard specification includes secondary guarding and a full on-board diagnostics package with 4.3 inch display.





The first three sections have four chords while the rest of the five metre jib sections have three chords



Wolffkran low top tower crane

Wolffkran has launched a new 800 tonne/metre low top tower crane, the Wolff 8076 Compact. The first Wolff saddle jib crane in this class, it has been designed to meet growing demand to lift heavier prefabricated building components and modules. It features jib lengths of up to 80 metres with a jib tip capacity of 8.4 tonnes.

Maximum capacity is 40 tonnes at a radius of up to 28.2 metres on just two falls. A new feature is the four chord jib which transitions to a three chord structure after the first three sections. The company claims that this concept increases capacities by up to 40 percent over a full three chord jib. The counter jib can be configured with a standard length of 30.3 metres for optimum performance, or 22.3 metres when space is an issue. Even with the shorter counter jib and 55 metre jib, the tip capacity is a healthy 16.6 tonnes.

The 8076 Compact is designed to be used with Wolff's 2.9x2.9 metre TV 29 tower system providing a free standing height of up to 100 metres. The crane is equipped with the company's 132kW HW 40132 FU hoist winch provides line speeds of up to 95 metres per minute, or 17 metres per minute with the 40 tonne maximum capacity.



Fully insulated **CMC** spider lift

CMC has launched an all-new 23 metre insulated spider lift, the i23, which it says will be the first model in a new line of 'i' series insulated spider lifts. The lift is insulated to 46kV with fibre boom inserts along with a highly insulation fibreglass material for the one person platform/ bucket and special non-conductive oil in the hydraulic system.

The i23 offers a maximum working height of 22.8 metres, a maximum outreach of 10 metres at an up & over height of 12 metres with the 180kg unrestricted maximum platform capacity. While the bucket is 600mm square it still features 180 degrees of platform rotation. The unit has 400 degrees of slew - 200 degrees either side of centre front - while the overall weight is 3,930kg.

The new models are aimed at a variety of users for applications such as power line work, industrial maintenance and tree pruning where overhead power lines may be present.



100 Versalift VTL135F for AFI

UK rental group AFI has ordered 100 new 13.5 metre Versalift VTL135F 3.5 tonne van mounts for its Facelift van mounted fleet.

The Versalift VTL135F claims to offer one of the best outreaches on the market at 8.4 metres with 120kg in the basket, while the maximum platform capacity is 230kg available at an outreach of up to seven metres. The unit also features a jib with 140 degrees of articulation. All vans are equipped with an onboard ultra-violet disinfecting light.



Germany's first Sinoboom ML10EJ

Bonn-based rental company BHV Arbeitsbühnen has taken delivery of the first 10 metre Sinoboom ML10EJ mast boom in Germany.

The new lift is a classic 10 metre mast boom with a working height of 10.3 metres, an outreach of 3.3 metres at a height of around six metres with

a platform capacity of 200kg. Overall width is 990mm, overall height of 1.9 metres and an overall length of just under three metres. Overall weight is 2,678kg.



New 19m Platform Basket road/rail boom

Platform Basket has introduced an all-new road/rail mounted selfpropelled telescopic boom lift, the RR19/500, with a working height of 19 metres and a maximum platform capacity of 500kg.

The new boom features a three section boom with internal hoses and cables. topped by an articulating jib. It is a big brother to the 14 metre RR14/400 with similar features such as Euro V diesel power, auxiliary engine, independent hydrostatic transmission, four wheel drive for both road and rail wheels, four wheel steer, oscillating axles and automatic superstructure levelling to allow work on tracks with up to 200mm of cant. Slew is 360 degrees - 180 degrees either side - with a maximum travel speed of 19kph when stowed.



First Genie S-80 TraX

Dutch aerial lift rental company 1.2.3 Machineverhuur has taken delivery of the very first 80ft Genie S-80 J TraX telescopic boom lifts to be delivered worldwide. The company purchased the four tracked platforms from local distributor HDW and are the only booms of this size and format to be built by any manufacturer.

Using the same concept employed on the smaller Genie TraX boom lifts, the machines offer a working height of 26.4 metres and a maximum outreach of 16.7 metres with its 300kg unrestricted maximum platform capacity. Overall weight is just over 13 tonnes. Standard equipment on the new models

includes two work lights, a secondary guarding system and Stage V diesel power, while the four independently controllable tracks have a steering angle of 30 degrees.



The world's first Genie S-80 J Trax

Dingli's 26m glass handler

Chinese aerial lift manufacturer Dingli has launched a new 1,500kg vacuum glass lifting head and conversion for its 86ft/26 metre BT2615ERTGS all-electric boom. The vacuum head is made up of eight autonomous vacuum pads which do not require tubes from a central pump. The modular design is based on a product the company launched in 2020 which has been extended from 500kg to 1,200kg and now 1,500kg.



The new Dingli vacuum lifting head

The aerial work platform base is equipped with an 80 volt, 520Ah high-capacity lithium battery pack with quick charge capability of 1.5 hours. The boom's base remains the same with

capability of 1.5 hours. The boom four wheel drive and steer plus an oscillating axle. The machine will take up to 1,500kg to its maximum lifting height of just over 26 metres. The glass handling head can rotate 360 degrees, tilt forward 30 degrees and back 90 degrees and

articulate 160 degrees

for precise placement

remote controller.

of panels via a wireless



Electric conversion pack for JLG 660SJ

JLG has developed a retrofit 'Conversion Kit' to convert its diesel powered 66ft 660SJ telescopic booms to battery electric power. Customers of the JLG 660SJ can replace the engine with a lead acid or lithium-ion battery pack along with electric motors to drive the hydraulic pumps.



A converted JLG 660SJ - decals included

The pack is aimed at extending the working life of existing boom lifts as demand for emission free models increases. Covered by the JLG warranty programme, lead acid conversion kits are available now with the lithium version due in the spring.

Third 104m Bronto for Jalo & Jalo

Finnish rental company Jalo & Jalo has taken delivery of Bronto's redesigned 104 metre S104HLA truck mounted work platform. The new model is mounted on a six axle Volvo 12x4x8 chassis with a GVW of 63.5 tonnes and axle weights well below 12 tonnes. Unlike the older S104s, the chassis cab



is mounted in the standard truck configuration which dramatically improves the approach angle. The older units were also too heavy for the Norwegian road regulations.

The new machine offers up to 33 metres of outreach at an up & over height of 17 metres. Maximum up & over height is 64 metres with an outreach of 25 metres. The unit was ordered with the extendable cage option which hydraulically increases the platform width from 2.4 to 3.7 metres.

Maximum platform capacity is 600kg which is available for all but the last two metres of outreach on the working envelope. Other options ordered include hydraulic and water outlets in the platform, a material winch, generator and emergency back-up system.



SJ9664 RT BIGGER. BETTER. SKYJACK.

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Skyjack's new 5J9664 Full Size Rough Terrain has a working height of 21.51 m. With one of the largest work areas on the market, even more work can be done.

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MIGHTY MICRO MEANS BUSINESS

TIST

Skyjack's new SJ3014 micro DC scissor lift represents a significant new presence in the low level access arena.

Ideal for easy accessibility into tight spaces, It has a quiet and swift electric drive, and maintenance-free Gel batteries.

The micro combines low cost of ownership with Skyjack's renowned product support – all at a price that means business.



More Brontos for Boom

Australian crane and aerial lift rental company Boom Logistics has taken delivery of three new Bronto truck mounted work platforms - two 56 metre S56XRs and a 70 metre S70XR. A further five units - three S56XRs and two S70XRs - are due to be delivered over the next few months.

All eight platforms are mounted on Scania P 410 four axle 8x8 chassis and are loaded with optional equipment such as radio remote controls, hydraulically extendable 600kg work platforms, detachable platform mounted winches, a hydraulic



superstructure mounted generator and an emergency back-up system. The S70XR also features 440 degrees of platform rotation.

Monitor opens Waimea Australia

Australian spider lift specialist Monitor Lifts has established a new business - Waimea Australia - in a joint venture with the Waimea Group of New Zealand.

The Joyce family - which owns Monitor Lifts - holds a majority stake in the venture, while the Waimea Group, owned by the Thomas family, has a significant minority holding. Waimea Australia is dedicated to the sale and rental of truck mounted lifts, while Monitor will increase its focus on spider lifts and rail mounted platforms from Platform Basket and Omme Lift. Waimea Australia takes over the GSR distribution which Monitor has handled since 2009 and will also distribute insulated platforms from Versalift USA.



Snorkel Elwood's 10,000th S3219E

Snorkel has shipped the 10,000th 19ft S3219E slab electric scissor lift built at its facility in Elwood, Kansas.

Introduced in February 2015 the S3219E was the first model in a new line of Snorkel electric scissor lifts designed in Elwood. A further 6,000 units have been produced at Snorkel's plants in the UK, New Zealand and China.



JLG sues Sany and former employee

Oshkosh/JLG has filed lawsuits against ex-employee McKenzie Ditty and Sany America, alleging that its former senior project engineer may have provided the Chinese equipment manufacturer with confidential information on recently patented boom lift technology intended for a new line of boom lifts the manufacturer is working on.

The initial summons was filed in October with a slew or further documents and motions filed on December 14th. Oshkosh is seeking a court order to block Sany from "misappropriating or threatening to misappropriate JLG's trade secrets," as well as monetary damages.

50 Multitels for Maltech

Swiss rental company Maltech has purchased 50 Multitel MTE 270 EX 3.5 tonne telescopic truck mounted lifts. The MTE 270 EX has a working height of 27 metres, a maximum outreach of 17 metres with 80kg, or 12.8 metres with 230kg.

Features include Multitel's MUSA system which monitors outrigger positions, platform load and slew position to automatically calculate the working envelope. The machines, purchased through Multitel distributor Skyworker, will be delivered between now and 2025.



First MK73-3.1 in France

French crane and access rental company Altigrues has taken the country's first Liebherr MK73-3.1 three axle mobile self-erecting tower crane.

It has a maximum capacity of six tonnes at a 12 metre radius, while the maximum radius is 38.5 metres with a capacity of two tonnes at a height of 26.5 metres. Launched last summer, the MK73-3.1 is the company's first mobile self-erector and will be based in the Paris area.



Another 2,600t Huisman for Daewoo/Eneti

Korean shipbuilder Daewoo Shipbuilding & Marine Engineering has ordered a second 2,600 tonne Huisman leg encircling crane. As with the first order in July, it will be installed on a new jack up vessel it is building for Monaco-based offshore construction specialist Eneti.



The latest crane will feature a 155 metre boom for a lift height of 174 metres above deck and a hook height of 215 metres above sea level - ideal for handling the next generation of wind turbines up to 20MW capacity.

Easy Lift R300 for Titocci

Italy's Titocci has taken the very first 30 metre Easy Lift R300 telescopic spider lift. The new machine - supplied by Easy Lift dealer Skylift - has a five section boom topped by a

two element articulating jib, for a working height of 30.5 metres and a maximum outreach of 14.5 metres with 80kg.

The maximum platform capacity of 230kg can be taken out to 12.8 metres at a height of 25 metres. Overall width is 1.4 metres while an outrigger width of just 2.3 metres is available. Romebased Titocci specified self-levelling outriggers and custom paint.



Eight Tadanos for Mammoet

Dutch international crane and heavy transport group Mammoet has ordered eight new Tadano (Demag) cranes including two 650 tonne CC 38.650-1 (Demag CC3800-1) lattice boom crawler cranes.

The big crawler is rated at a 12 metre radius and comes with a 171 metres of main boom and a 193 metre maximum tip height. The rest of the order is made up of a 45 tonne AC 3.045-1 City crane with E-Pack electric power and five Tadano GR Rough Terrain cranes. The company also ordered a Boom Booster kit for its Demag/Tadano CC cranes.



The Tadano AC 3.045-1 City crane

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- 20% lower gross vehicle weight (GVW) on SJ45 AJ+ and SJ60 AJ+ models

With these changes, rental companies can quickly improve their return on investment.



Financials round-up

Canadian rental company Stephenson's Rental Services has acquired a controlling interest in Québec rental company Centre de

Location GM which operates from four branches in the Montreal region. The company runs a range of tools, aerial lifts and telehandlers. Stephenson's has a similar range of equipment from 45 locations across Ontario and Alberta.



Belgian rental company **TVH Equipment** - part of the **Mateco** group - has acquired aerial lift sales and rental company Rentalift from its owners Van den Dorpe Handling Equipment which intends to focus on its logistics and port businesses. Rentalift

was established in 2001 by the Deschrijvere - De Leersnyder family in Izegem, north of Kortrijk. It is the distributor for Multitel, Almac and Jekko and runs a rental fleet with work platforms, spider cranes and telehandlers.



US private equity firm Kinderhook Industries has acquired REIC (Rental Equipment Investment Corporation) in partnership with its founder and chief executive Kevin Fitzgerald. Chris Ragot - chairman of Utility One Source and co-founder of NorthOcean Capital Partners will represent Kinderhook on the REIC board. REIC was established in

2014 to acquire small to medium rental equipment companies across the USA. Last year it added Rent Me Rentals in Washington and operates from 32 locations under the Pro Rentals & Sales, C.H.I, ERS,



French rental group Kiloutou has acquired rental company AB Matériels based in the Vaucluse region of Southern France. Founded

in 1996 AB Matériels runs a fleet of aerial work platforms and telehandlers from three locations. Kiloutou will merge the business into its existing branch network.

Midway Rental and Hillside Rentals brands.



Canadian rental company Cooper Equipment Rentals has acquired Eze Rent-It Centre in British Columbia and Stayner Rental in Ontario. Eze was set up in 1986 and runs a wide range of equipment, including boom and scissor lifts, from three locations and is also a Genie dealer. Co-owner Russ Walsh will continue to work with the

company over the next few months. Stayner was established in 1989 by Paul and Edina Van Staveren and operates from one location in Stayner, Ontario, offering a range of tools, excavation and compaction equipment.



US sales and rental group Alta Equipment is to acquire the assets

of Ambrose Equipment of New Hampshire which specialises in the sale and rental of paving equipment The acquisition expands Alta's construction equipment sales and rental network to 39 locations in 10 states.



Dutch mini telehandler and compact wheel loader manufacturer Tobroco-Giant has signed an exclusive agreement to supply Doosan Infracore Europe with a range of models with **Doosan** branding for sale through its European dealer network.



Swedish investment group Axel Johnson International has acquired Lifting Gear UK, from the Turner family and Andrew Stafford. Established in 2007 Lifting Gear UK rents a wide range of lifting tackle from 12 locations and customer manufactures rigging gear. Revenues in 2020 were £8.4 million with a pre-tax profit of £1.38 million and total assets of £9.7 million. Axel Johnson owns 150 companies and generates revenues

of €1.14 billion from six divisions, including 'Lifting Solutions', which includes 22 companies offering wire rope, chains and overhead cranes, with a combined revenue of €330 million.



Palfinger and Sany have confirmed their agreement to return the shares in each other's companies, effectively ending the cross ownership

aspect of the joint ventures that the two companies signed in 2012. Palfinger say the cross ownership serves no practical purpose, but its 'operational cooperation' with Sany, including joint ventures in China and Russia/CIS states, will be expanded.



Klubb has acquired its Belgian distributor Mondia Wallonie. Based in Liège it distributes and rents self-erecting tower cranes, representing

Potain and Speed Crane. It has more recently added vehicle mounted platform sales and rental, representing Isoli and Klubb. Mondia's director Thierry Pirenne and his team will continue to manage the company.



Bravi, has reported a 70% increase in 2021 revenues, but has not disclosed numbers. Its year end order book was up 250% on last year. As a result, it plans to invest in additional production capacity. Growth came from

a 100% jump in sales of the Leonardo HD, plus a 26% increase in stock picker sales. It is forecasting a further 50% growth for this year.



JLG reported revenues for the guarter to the end of December of \$833.3 million, an increase of almost 48 percent, with aerial lift sales up 49% while

telehandler sales jumped 70%. Operating profit was 29% higher at \$32.3 million. The order book at the end of December was \$3.57 billion, compared to \$771.5 million last year.



Manitou has reported four guarter revenues up 9% to €473 million, taking annual sales to €1,875m, up 18%. It ended the year with an order book of €2.99 billion compared to €918 million last year. It 1111 is forecasting more than 20% growth for 2022. GROUP

Germany's Gerken is to acquire the aerial lift division of the Allgaier group in an asset based transaction, including its aerial lift and telehandler fleet, all related staff, customer base and the division's Neu Ulm depot.





1,000t crawler for Wasel

German crane rental company Wasel has taken delivery of a 1,000 tonne Liebherr LR 11000 lattice boom crawler crane complete with Liebherr's



SL10DF2BV wind power boom system. The 168 metre main boom and fixed offset jib of up to 24 metres provides

hook heights up to 192 metres with a capacity of 110 tonnes. Features include Liebherr's VarioTray and V-Frame ballast systems.

Liebherr LR 11000

The crane's first job was installing a wind turbine with a hub height of 170 metres in Coesfeld in North Rhine Westphalia. At the same time Wasel also took delivery of the first 700 tonne Liebherr LR 1700-1.0 crawler crane.



First Liebherr LR 1700-1.0 for Spain

Spanish crane company Eurogrúas 2000 has taken delivery of the first Liebherr 700 tonne LR 1700-1.0 lattice crawler crane for Spain. The new LR 1700 replaces a 600 tonne crawler crane in the Eurogrúas fleet which has been largely employed in the wind power market.

The LR1700 shipped directly from the Liebherr factory in Ehingen, Germany to a wind farm near Düsseldorf where it is assembling 20 wind turbines with a hub height of 161 metres and unit weights of up to 86 tonnes. It will then complete contracts at several other German wind farms before travelling to its base in Spain.

Klubb rescue platforms for Paris

Klubb has won a contract to supply its 33 metre EGI Meteor 330 aerial rescue platforms to fire departments in the Île-de-France region. The three year deal includes the supply, maintenance and repair of the platforms to the départements of Seine et Marne and Yvelines. Between them they operate from 110 fire stations and manage more than 200,000 operations a year in both dense urban and rural areas.

The Meteor 330 has a rescue height of 33 metres, an outreach of 25 metres and a basket capacity of 500kg and has been designed to rescue disabled or injured people including those on a stretcher. The platform is equipped with a cannon, rescue gangway, lighting and water curtain protection.





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Scissor Lifts: 5.9m - 32m



L Dingt

Vertical Lifts: 4.7m - 14m

- Ashtead owner of Sunbelt Rentals - has appointed Renata Ribeiro as a non-executive director.
- Austria's Kran Mitterhauser has taken Renata Ribeiro a 100t four axle Tadano ATF-100-4.1.
- Italian crane and aerial lift company F.Ili Zanoletti has taken a Liebherr MK 88-4.1.
- Germany's Gerken has taken four Snorkel SR626E all-electric telehandlers.
- Liugong Europe has appointed Phil Graysmark as business development director.

as MD of its USA operations.

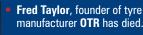
- Liebherr has appointed Tim Gerhardt Phi Graysmark
- Hammer Head Builders has taken first Tadano GR-900EX-4 RT in the Philippines.
- Crane manufacturer Jekko has appointed Jorge Menocal as sales manager, South America.
- Crane and Access industry veteran Mark Thurston is retiring.
- Hermann Paus founder of crane. hoist & aerial lift manufacturer Paus has died.

of Genie as a director.

- IPAF has appointed Jacco de Kluijver Herman Paus

n-Louis

- Canary Islands-based Maguinas Opein has taken three 12m Easy Lift R130 spider lifts.
- Ireland's Crane Hire Limited has added a 700t Liebherr LTM 1650-8.1 to its fleet
- UK's BPH Equipment has taken its third 100t Kobelco CKE900G-3 crawler crane
- Italy's Tirrena Noleggi has taken two 12m Easy Lift R130 spider lifts.
- Frank Hasenfratz, founder/chairman of Skyjack owner Linamar has died.
- Link-Belt has appointed Richard Shultz as VP manufacturing.
- Jean-Louis Olivier, founder & former CEO of French tower crane anticollision manufacturer SMIE has died
- Certex UK part of Axel Johnson has opened a new office in Taiwan.
- ean-Lou Olivier India's Rentease has taken its first two 50ft Nifty HR17NE battery electric boom lifts.
- Liebherr GB has appointed Lyle Sibbald as sales manager Scotland & Northern England
- Germany's Staplerwelt Süd has changed its name to ATG.
- Noatum has taken four Liebherr harbour mobile cranes for its Spanish terminals.
- UK's Staffordshire Crane Hire has taken a new Böcker AK 46/6000 truck crane.
- JLG parent Oshkosh has appointed Jay lyengar as chief technology officer.
- Australia's Verton has appointed Hanho International as its distributor for S. Korea.



- US tower crane company P&J Arcomet has changed its name to **Uperio USA**
- JLG has appointed Nacelle Assistance et Services as its exclusive after-sales partner in France.
- UK access training veteran Geoff Marshall has died.
- Point of Rental has expanded its South African team with two new executives -Nhlanhla Nkomo and Leon Du Plessis.
- Swiss exhibitions - Baumag 2022 and Swissbau - have been postponed.
- Germany's Luibl Rental & Sales has ordered 80 Manitou telehandlers and boom lifts.
- Tadano has appointed of Dean Barley as chief operating officer of Tadano America.
- Rick Robinson, a former Grove cranes employee has died.
- Spierings has appointed Bernd Merkle as sales engineer for Southern Germany, Austria and Hungary.
- Germany's I & H Kran Transport Montageservice has taken two Tadano AT cranes - a 100t and a 220 tonner.
- ANK Cranes is the new Grove crane distributor for Norway and Sweden.
- LGMG North America has promoted Eric Liner to chief executive replacing Craig Paylor
- Israeli rental company Avi Cranes has taken 55 Haulotte platforms
- France's Boulet Bâtiment has taken its first 62ft Genie Z-62/40 TraX boom lift.
- Austria's Felbermayr is to expand its German access business and has recruited Stephan Kulawik to head it.
- Spanish rental group **GAM** has taken Stepnan Kulawik the first JCB 525-60E telehandler in Iheria
- JLG has launched a four track option for its 60 and 66ft telescopic boom lifts.
- Dutch contractor Ballast Nedam has added two Potain MDT 319 tower cranes to its fleet.

Gene Martin as VP engineering and Jaime Hernández as international district manager South America.



- UK's Coussens Crane Hire has taken a 230t Liebherr LTM 1230-5.1 AT.
- Dutch rental company Holland Huurt has taken a new 66ft Holland Lift HL-220 E25 4\WD/P/N
- Platform Basket has launched a new road/ rail self-propelled telescopic boom lift, the RR19/500.
- Marcel Riemslag of Hovago is retiring after 35 years in the crane business.
- Canadian aerial lift company CanLift **Equipment** has entered the earthmoving market with XCMG.
- Riwal UK has promoted Steven Craven to head of sales.
- Klubb has won an order for EGI Meteor 330s for two fire brigades in the Paris region.
- UK's RJC Plant Hire has taken two JCB 525-60E all-electric telehandlers.
- **IPAF** has published the nominations for its 2022 IAPA awards.
- Brazil's Mills Estruturas has appointed Sebastián Villa as non-executive director following the resignation of Diego Stark.
- German crane company Schuch has ordered 15 new Liebherr cranes.
- Finland's Jalo & Jalo has taken a 104m Bronto S104HLA truck mounted lift
- David Sargent, former CEO of aerial lift manufacturer UpRight, has died.
- Australia's Monitor Lifts has formed a truck mounted JV with Waimea of NZ.
- Liebherr has launched a new 300t LTM 1300-6.3 with 90m main boom.
- Zoomlion has unveiled the all-electric RT articulated boom lift, the 51ft ZA16JERT
 - XCMG Europe has recruited Hans Aarse and Edwin van der Laar to lead its access sales.



- Korea's Daewoo Shipbuilding has ordered a second 2,600t Huisman leg encircling crane.
- Californian rental company American Rentals has acquired Cole Equipment.
- Germanys Gerken has taken four new Snorkel SR626E all-electric telehandlers.
- MyCrane, the crane selection platform, has appointed Erik Altena as head of strategic

development, Alan Faulds as managing director for the UAE and Oman Igor Dobrovolskiy as managing director for MyCrane in Russia and Alexander Kouklev as business development director for the Russian Far East and Asia Pacific region.









Stevei Cravei

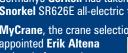








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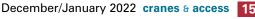








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High lights

A small number of German manufacturers have been building high reaching, lightweight truck and trailer mounted cranes for many years. In the past decade their popularity has been growing across a wider geographic area, among both end users and rental companies. What sets these cranes apart? Will North reports.

These cranes are often referred to as aluminium cranes, due to their all-aluminium booms, but this is becoming something of a misnomer as ultra-strong lightweight steels allow a rethink. Böcker, for example, is increasingly making use of these high strength steels in its booms although the other major manufacturer Klaas, has maintained its all-aluminium concept and makes use of an uncommon boom welding technique.

Can this breed of cranes be characterised by its carrier? Or are they simply another form of truck mounted crane? It is similar in some ways to the situation in North America where larger boom trucks are now virtually indistinguishable from truck cranes. In both cases a distinguishing factor is their long reach for their nominal capacity, combined with a standard commercial chassis which offers high road speeds and easier and less costly maintenance and repair.

Both companies also offer trailer mounted cranes alongside their truck mounted versions and, in the case of Böcker, cranes on tracks. A third German producer, Paus, offers a smaller product range largely mounted on trailers, although it is more than capable of mounting them on a truck chassis. One thing all three manufacturers have in common is that they started out and continue to offer inclined material and furniture lifts, mostly trailer mounted. A competitor in this arena on the global stage, is South Korea's Horyong which offers a wide range of truck mounted inclined hoists as well as cranes, however the cranes are more telescopic loader cranes and an entirely different beast.

Defining characteristics

So, what are the defining characteristic of these cranes? Could it be their lightweight boom systems with integrated telescopic jib/top boom - a characteristic shaped by their intended use of lifting relatively light loads to considerable heights and radii? Or is it the fact that their relatively light weight allows them to be mounted on a standard two or three axle truck chassis? A feature that makes them considerably less expensive and easier to run and deploy than a traditional All Terrain. They may not have the same nominal capacity, but as with mobile self-erecting tower cranes they tend to outperform at height and reach when lifting lighter loads. Given the number of loads of 1,000kg or less makes them a compelling option for both rental fleets and end users with a specific application in mind.





The uptake of this type of crane has been steadily spreading out from its German speaking home market with France beginning to see the benefits while the UK has become a substantial market for the two big suppliers. This has involved a substantial change of attitude among British crane rental companies which have tended to prefer cranes with as high a nominal capacity as possible for their size, and a machine that on paper at least, can be all things to all people.

Part of the fleet

In the UK, Keith Morgan is one of those fleet owners who has found a space for these cranes in a general crane and access rental fleet. He has one Böcker and three Klaas cranes. But his company, Crane Hire Solutions, also offers All Terrain and spider cranes, as well as other lifting and access devices to end users across the English Midlands.

aluminium cranes

One of the key advantages he sees in these cranes is their boom systems. "The jib is unstowed hydraulically within the width of the crane and luffs at will, which gives a lot more reach over tall obstacles such as buildings compared to a conventional stick boom," he says. "This has numerous advantages and means that we do not have to rig fly jibs or extensions, reducing the risk of working at height and avoiding the need to find room on site to install them. This also reduces time on the job."

"They are a lot lighter than an All Terrain crane and this makes them easier to get from job to job. It also reduces disruption to the site when setting up. Also they can be operated via remote controller and

December/January 2022 cranes & access 17

aluminium cranes

 Keith Morgan's Crane Hire Solutions uses a Klass for a typical job, Liting roof trusses

you can actually stand alongside the load you're lifting and placing precisely into position."

Morgan offers his cranes on contract lifts. On most jobs, they are sent out with an operator accompanied by a slinger or a lift supervisor. "We don't get a lot of long-term hires for them," he said. "They're more like a taxi crane where you might have a couple of lifts when you get to site and then you move on to the next one. They are lightweight, manoeuvrable and quick to move between sites."

The benefits of them being mounted on standard commercial trucks keeps ownership costs down. Damaged or worn out tyres for example can be sourced from or replaced by any tyre company that serves the transport sector, for perhaps a third of the cost of an AT. The carrier can be also maintained or repaired by a regular commercial vehicle dealer or service company. They can also safely achieve and maintain the same road speeds as regular delivery trucks. For users in the UK, this means they can be driven under normal road regulations, rather than following STGO regulations that allow heavier vehicles to travel on public roads, but at limited speeds and sometimes requiring permits.

On arrival on site, the lower gross vehicle weight means they can be set up in a wider range of locations, although Morgan routinely checks ground bearing capacity before sending his cranes out. "With these cranes," he says, "you're not asking for the same capacity out of the ground to set the weight of the crane."

Capacity where it matters

At first glance, where these cranes fall behind small All Terrains is nominal capacity. In standard configurations, none of these cranes lift more than three tonnes, although they can be configured to lift as much



as 12 tonnes. Compare that to an All Terrain crane where capacities typically start at 30 or even 50 tonnes.

However when it comes to reach, they often outperform two and three axle All Terrain cranes. They are also designed to work without any additional counterweight with typical axle loads of 10 tonnes and never exceeding 12 tonnes.

The longest boom on a Klaas is on the K1100, which offers maximum tip height of 60 metres and a maximum radius of 55 metres. At a radius of 46 metres and a height of 34 metres, it will lift 350kg. Alternatively, it can handle 500kg at a similar radius but a height of 26 metres.

Liebherr's smallest AT crane with a 60 metre boom is the 90 tonne four axle LTM 1090-4.2, which can carry 8.8 tonnes of counterweight and no extensions within the 12 tonne axle loads. In this taxi crane configuration, it has a maximum radius of 36 metres at a height of 46 metres and a capacity of 900kg. Install all 22 tonnes of counterweight and it's a totally different story of course. You can also achieve 60 metres or more on the 60 tonne three axle LTM 1060-3.1, but only after rigging the bi-fold swingaway. The point of the aluminium cranes is that they are fully self-contained and ready to go a few minutes after arriving on the job - without installing extra counterweight or faffing about with extensions - while being light enough to work from surfaces such as a private driveway or car park without extra large outrigger mats.

The biggest Böcker is the AK52. As the name suggests, this has a 52 metre main boom in standard configuration. At a 40 metre radius and a height of 25 metres it can handle 500kg. Tadano's smallest All Terrain, the three axle 55 tonne AC 3.055-1, has a 50 metre main boom and can carry six tonnes of



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Mobile and crawler cranes

aluminium cranes

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a crane busy handling lighter loads

at reach for months or years at

a time, then owning your own aluminium crane can be an ideal

That was the situation Mark

Bishop of ME Bishop found

himself in. His main business is

carpentry for the housebuilding

sector, working with major UK

and Redrow. Increasingly, these

companies use Modern Methods

of Construction (MMoC), a range

of techniques that aim to reduce

build times. A major component

modules, but also 'big blocks'

rather than individual bricks.

of the MMoC approach is working

with larger elements, prefabricated

developers like Persimmon, Barratt,

the service.

way to cut costs while improving

counterweight within 12 tonne axle loads. Maximum radius is 38 metres where it can lift 800kg at a height of 22 metres.

For a mixed fleet, like Morgan's, the question is what proportion of the work coming in can be handled with the aluminium crane's limited nominal capacity. If, as is often the case, there is plenty of demand to lift lighter loads to greater heights or reach, then there is a compelling argument to run some of these truck cranes in the fleet. Their ability to easily handle multiple jobs in a single day over a wide range of height and outreach typically provides an excellent return.

In addition to the rental market, for some specialist contractors running long-term projects which will keep





Barratt used this approach on the Deer's Rise project in Cannock - the housebuilder choosing to use H+H's Celcon Elements modules. The system uses single storey lightweight Aircrete concrete panels to form the external and internal walls. Once the foundation is laid the ground floor can be completed in a week, with the entire structure of a two storey home weatherproof by the end of the following week. An approach like this is entirely reliant on the use of a suitable crane. These big panel blocks are way too heavy to be lifted by hand and must be lifted over the facade scaffolding that forms part of the technique, surrounding the building's footprint.

Bishop says that his first investment was in people: "We got a few guys trained up to manage the lifts, perform risk assessments and work as slinger signallers. Initially they worked with rental cranes, however, we had no control over the price we were getting charged, or availability," he says, "so we thought if we are hiring that many cranes we may as well buy one of our own."

ME Bishop started off with a Böcker truck mounted crane and soon added a second. When they are not busy he will hire them out to other contractors. When Barratt came asking about a way to perform the Deer's Rise job, it felt that using a truck mounted crane throughout would be too expensive.

"Böcker has a tracked crane (the RK 36), that has to be cheaper to buy and

cheaper to run," recalls Bishop. "That meant we could save them a little money, not so much, but a couple of hundred guid a week, which they thought was good." The RK36 offers specialist contractors like ME Bishop further advantages. Delivered to site on a trailer, the crane can move around site on its tracks and with low ground bearing pressures it can easily handle rough or sloping ground. With MMoC jobs working more like a factory production line than a standard construction site, one of these cranes can lift the

big blocks for the walls, while a

second lifts roof trusses into place. But purchases like this are still a gamble for a smaller specialist contractor like Me Bishop. "We were wondering if they were ever going to do another site like this," he says. "But now the client has committed to use the technique for a 350 home project in Stafford." A job like that will keep Me Bishop's tracked cranes busy for a long time. And with his investment in people and equipment, he's positioned his company to take a leading role in closing the UK's housing supply gap.

Structural differences

These two manufacturers take very different approaches on how they make the key structural components of their cranes. Klaas uses aluminium throughout its range and has a dedicated in-



house aluminium welding system which it uses to join the four pieces of each boom section. Böcker uses a mix of aluminium and the latest high strength steels, forming rectangular booms with curved corners out of two boom shells.

Aluminium requires different approaches to welding when compared to materials like steel. Unusually, the oxide that forms on the surface of aluminium melts at a higher temperature than the metal itself. Klaas's booms have two side sections, with top and bottom sections that are pierced by oval holes, reducing the overall weight of the boom. The side sections are folded at 90 degrees on each edge, creating a flange that is used to attach these to the flat, pierced, top and bottom sections. These are joined using a friction stir welding (FSW) system developed by ESAB.

ESAB explains in a presentation on the system that FSW was first



developed in the UK in the 90s, by Wayne Thomas of The Welding Institute - the Cambridge-based association for welding and joining specialists. Initially thought of as a laboratory curiosity, it was soon picked up by industry which saw that it could be used to join materials previously thought of as unweldable.

Unlike other welding techniques, FSW uses friction to generate heat. The ESAB welding machine used by Klaas - one of just a handful in Europe - clamps together the top and side sections of the boom. A specially formed, wear resistant spinning head is moved along the join. This heats the material without fully melting it. As the head moves forward, the metal cools and bonds together.

Böcker uses a different set of innovations in its booms. The latest cranes from the company use high strength steels, developed around the turn of the millennium, which are formed into U-shaped shell pieces, and joined to create a rectangle with rounded corners. The company also uses one-piece aluminium profiles, manufactured using a production process developed for large cross section tubes with one or two longitudinal welds.

Andreas Sparrer, head of international sales for Böcker, says: "Around 2008 we became aware of special high tensile steel alloys with weight characteristics and properties similar to aluminium.



The aluminium was required in order to make lightweight and high performing booms, which gave the possibility of a high reach. But today, there are steel alloys that have the same, and even better, characteristics in terms of weight lifting and reach performance. So that is why with certain models, we have made a transition to steel booms."

Product lines and features

Both companies offer an extensive range of truck mounted cranes. Each model is categorised by gross vehicle weight, load capacity and reach. But they also offer a selection of different lifting, access and material handling products. As we have seen with the cranes we have looked at, they are all characterised by their high reach and light weight. Klaas's truck mounted crane range comprises seven models. The smallest - the K700 - is mounted on a two axle 7.5 tonne truck and lifts up to 1.6 tonnes in standard configuration with a maximum tip

A Wiesbauer Klaas trailer crane demonstrates its compact dimensions

height of 34.5 metres. At the other end of the Klaas range is the K1100. This is mounted on a 26 tonne, three axle chassis and can lift a maximum of three tonnes in its standard configuration and has a 60 metre boom/jib.

All Klaas cranes use a variable positioning outrigger system which calculates the stability of the crane and carrier based on outrigger pressure. Andy Crane, distributor Kranlyft, explains: "Once you have the outriggers out to 300mm they are fully variable. You can set the outriggers wherever you want them, it doesn't have to be in any fixed positions."

Böcker uses a PL- based system for measuring the stability of its cranes, much like that on modern All Terrains. This takes measurements from sensors across the crane and carrier to calculate the optimum capacity for the actual configuration.

The Böcker range comprises five models, ranging from the 7.5 tonne two axle AK 37/4000, which lifts up to two tonnes in standard configuration and reaches 35 metres, up to the 26 or 32 tonne GVW AK 52, which lifts up to three tonnes in standard configuration with a boom extending to 52 metres.

An alternative to the truck cranes are trailer mounted cranes. These are more popular in Germany and surrounding areas, where contractors and rental companies are used to towing heavier equipment to site, but less popular in some countries due to challenging road rules for towable trailers.

aluminium cranes



are joined in this by Korean

recently signed a European

manufacturer Horyong which

distribution deal with Italy's CEM.

These devices are in many ways

the precursors of the cranes we

launched its first aluminium lift

have looked at. Klaas, for example,

back in 1947, while its first crane

came along in 1993. Böcker has

than 50 years.

offered products like this for more

Inclined lifts aim to solve the same

as their crane counterparts - to get

problem for roofers and builders

a relatively light load where it is

needed. The lightest versions are

essentially a container attached to a ladder, powered by a winch.

Klaas has four models, with tip heights ranging from 25.5 to 34.3 metres. Böcker has three models ranging from 30 to 34 metres extension, as well as the tracked model, the RK 36/2400, which reaches a height of 34 metres in standard configuration. Paus offers two trailer cranes, the 1.6 tonne, 31 metre PTK 31, and the one tonne, 27 metre PTK 27. Like the Klaas and Böcker cranes, this has a folding telescoping jib, offering reach up and over obstacles.

Roof tiles and removals

As we have said, all three European manufacturers also offer inclined material and furniture lifts. They

How they stack up

Manufacturer	Model	Vehicle class	Max Hook height	Capacity standard/option
Klaas	K27-32 TSR	7.5t	32.0m	1.5t
Klaas	K700	7.5t	34.5m	1.6t
Böcker	AK 37/4000	7.5t	34.3m	2.0/4.0t
Böcker	AK 36/4000	12.0t	35.3m	2.0/4.0t
Klaas	K750 RS	7.5t	36.4m	2.0/4.0t
Klaas	K850 RS	13.5t	36.9m	3.0t/5.0t
Klaas	K900 RSX	16.0t	38.4m	3.0/5.0t
Böcker	AK 42/4000	16/18t	41.3m	2.0/4.0t
Klaas	K950 RSX	16.0t	43.5m	3.0/5.0t
Böcker	AK 46/6000	18/26t	43.4/45.3m	3.0/6.0t
Böcker	AK 52	26/32t	51.3/54.3m	3.0/6.0/12.0t
Klaas	K1003 RSX	22.0t	52.7m	3.0/6.0t
Klaas	K1100 RSX	26.0t	60.0m	3.0/6.0t
Manufacturer	Model	Carrier class	Max Hook height	Capacity standard/option
Klaas	K17-24 TSR	Trailer	24.0m	0.8/-t
Klaas	K280	Trailer	25.5m	0.8/-t
Paus	PTK 27	Trailer	26.3m	1.0t
Klaas	K21-30 RS	Trailer	29.8m	1.5/-t
Böcker	AHK 30	Trailer	29.3m	1.5t
Böcker	AHK 30 KS	Trailer	29.3m	1.5/-t
Paus	PTK 31	Trailer	30.3m	1.6t
Klaas	K23-33 RS City	/ Trailer	32.8m	1.5/-t
Böcker	AHK 36	Trailer	33.3/35.3m	1.5/2.4t
Böcker Böcker	AHK 36 RK 36/2400*	Trailer Tracks	33.3/35.3m 33.3/35.3m	1.5/2.4t 1.5/2.4t

*Tracked version weighs 4.5 tonnes - all other trailer cranes less than 3.5 tonnes



Böcker's smallest model, the Top Lift, takes this approach. It comes in three versions (Basic, Standard, and High Speed) able to reach heights of 20.3 metres, differentiated by capacity - the Basic lifts 150kg, the Standard 250kg and the High Speed 230kg - and, as the name of the last version suggests, hoisting speed. Böcker now offers a specialised platform for lifting solar panels.



Both of Klaas's models - the Toplight 21 Construction and HV 26/6 KA are trailer-based, as are Böcker's Simply, Junior, Avario and Junior G units. These can lift a little more and a little higher: the Avario, for example, lifts 270kg and reaches 27 metres. Material lifts like these are a common sight in many cities in mainland Europe.

Furniture lifts are very similar but feature a larger and higher capacity platform. Klaas's vanbased Bigmover, for example, can raise a 400kg load to a height of 16 storeys. In the UK Kranlyft's Andy Crane says that these are proving increasing popular with specialist movers. "They're very lightweight, very easy to tow and also very cheap, compared to using a crane." Jake McCaugherty, MD of Böcker

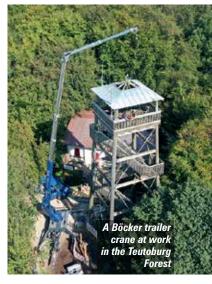
UK, added that so far sales in the UK have been clustered around London and the south east, with owner-operators such as specialist furniture movers and furniture retailers.

Green future

The lightweight truck cranes are also playing a growing role in the



environmental market, given they are ideal for jobs such as installing rooftop solar panels, while on the other hand they increasingly feature from low or zero emissions power sources.



Böcker offers an electric drive system that can be installed alongside the Power Take Off auxiliary drive on its truck mounted cranes. This plugs into 400kV three phase site power outlet and is sufficient to operate multiple crane operations simultaneously. For customers who do not have electric power now but might in future as more restrictive regulations come into force, they can order their crane with the e-Ready Kit, which allows for future retrofits.

On its larger models (the K950, K1003 and K1100) Klaas supplies two drives as standard. In addition to a diesel engine, a 400 volt electric motor is installed, so the operator can choose the type of drive depending on the site and operating conditions. As the diesel engine operates separately and independently, the truck engine is protected, and its value is significantly maintained due to shorter operating times.

On smaller models, an electric motor is supplied as an optional extra and is not fitted to the crane permanently in order stay within vehicle weight limits, but can be easily installed on site when needed.



NEW 2021 Telescopic Platform

TC**13**S

TeleCrawler135

- UNRESTRICTED CAPACITY 230KG
- FULL ELECTRIC DRIVE UNDERCARRIAGE
- Compact Stabilization area
 270x305cm
- AUTOMATIC STRAIGHT FLUSH TELESCOPIC
 BOOM EXTENSION CONTROL



OUTRIGGER PADS HOLDER AND LED FRONT AND REAR WORKING LIGHTS





Tr13

NEW DSE DUAL SIDE ENTRY BASKET WITH MESH FLOOR



LITHIUM-ION BATTERY ELECTRIC DRIVE TRACKS

> LITHIUM-ION System 52V / 80AH

WORKING HEIGHT 13M HORIZONTAL OUTREACH 6,4M UNDERCARRIAGE WIDTH OPEN/CLOSE 75 /110 cm

Hinowa S.p.A. Via Fontana • 37054 Nogara (VR) Tel. +39 0442 539100 info@hinowa.com • www.hinowa.com





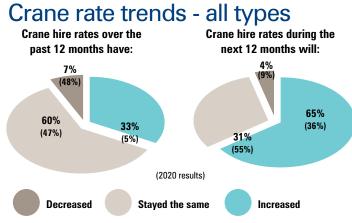


A rental rate crisis?

While not as strange as last year's survey, the effects of the pandemic can still be felt. The good news is that most companies are busy although finding qualified staff and improving rates is proving a serious problem for most companies.

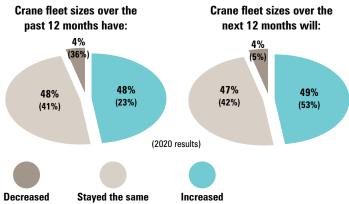
Despite the general consensus that the sector is buoyant, the comments received from cranes, access and telehandler rental companies highlight the major concern that rates have to be increased - even if it is just to cover the increasing costs of the machines, materials and labour - although this is something the industry has struggled with for many decades.

Crane rates



This year has been more positive than last with a third stating that hire rates had increased compared to just five percent in 2020. However, the majority of respondents reported that rates had remained static, while only a very few saw rates fall. It is good to see that last year's rate predictions were pretty much bang on! But this needs to be seen in the face of rapidly rising costs. Looking forward two thirds of respondents think that rates will rise this year. This may actually happen given the mood seen in the comments.

Crane fleet size



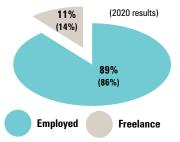
Perhaps surprisingly - given that on an inflation adjusted basis rates have fallen - almost half of companies claim to have expanded their fleets in 2021, although the vast majority simply maintained current fleet levels. It is encouraging to see that there is optimism though, with a similar number - 49 percent - are planning to expand this year.

Cra 2021 rental rate survey





What percentage of your operators are?



39%

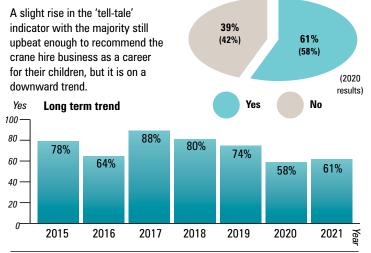
(29%)

61%

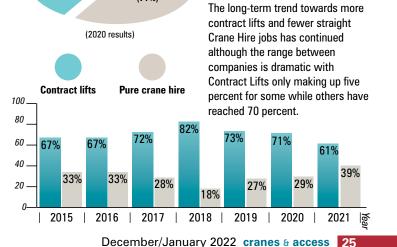
(71%)

It looks as though the earlier trend towards employing more operators on a freelance basis has continued to reverse, reaching a three year low. This may be a symptom of the pandemic as freelance operators look for more security, while companies are keen to have committed staff.

Would you recommend the crane hire industry to your children?



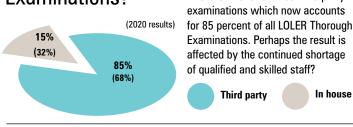
What percentage of your jobs are contract lifts?

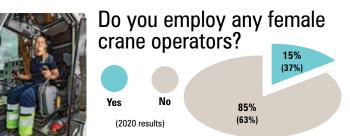






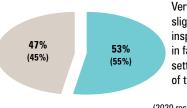
Who does your Loler Thorough **Examinations**? A further move towards third party





Not encouraging with just 15 percent of crane companies employing female crane operators. While the trend is down it merely reflects the very small numbers of female operators in the industry.

Should cranes be subject to MOT's?



Very similar to last year with a slight move away from formal MOT inspections. It peaked at 72 percent in favour in 2015 but seems to have settled down given the introduction of the CPA voluntary programme.

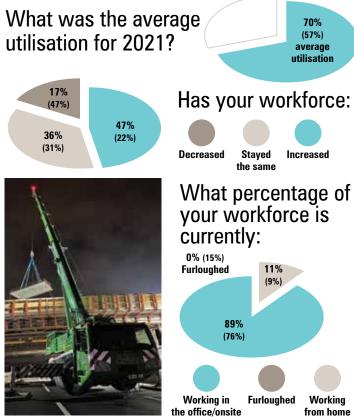
Yes

No

(2020 results)

Covid questions

The overall easing of the regulations and buoyant market is reflected in the figures - utilisation up, an increasing work force and more people on site and in the office - the UK Government furlough scheme ended 30th September 2021.



Ca 2021 rental rate survey



In house



up

Crane rental rates Daily rates for mobile cranes

From last year rates have gone ND down same no data

Crane size	Average (f)	Lowest	Highoot	Ideal
Gralle Size	Average (£)	Lowest	Highest	lueal
Up to 30 tonnes	£486 🔻	£400 🔺	£560 🔻	£597 🔺
30-45 tonnes	£507 🔺	£420 🔻	£635 🔻	£644 🔻
50-65 tonnes	£641 🔻	£570 🔺	£768 🔺	£782 🔻
70-90 tonnes	£888 🔻	£780 🔺	£1,023 🔺	£1,215 🔺
100-120 tonnes	£1,153 🔺	£950 🔻	£1,525 🔺	£1,386 🔺
130-160 tonnes	£1,675 🔺	£1,300 🔺	£2,500 🔺	£2,009 🔺
160-200 tonnes	£2,483 🔺	£1,600 🔺	£3,500 🔺	£2,917 🛕
210-250 tonnes	£2,633 🔺	£1,750 🔺	£5,310 🔺	£3,627 🛕
260 -350 tonnes	£4,529 🔺	£3,200 🔺	£6,345 🔺	£5,586 🔺
360-490 tonnes	£6,902 🔺	£4,000 🔻	£10,000 🔺	£8,522 🛕
500-600 tonnes	£8,164 🔺	£4,500 🔻	£13,000 🔺	£9,826 🔺
610 - 750 tonnes	£10,833 ND	£6,000 <i>ND</i>	£18,200 ND	£14,341 ND
Self-Erecting Tower	£1,239 🔺	£984 🔺	£1,300 🔺	£2,200 🔺
(4-5 axles)				
Self-Erecting Tower	£1,899 🔺	£1,650 🔻	£2,250 🔺	£2,432 🔺
(6-7 axles)				

Weekly rates for crawler cranes

Crane size - operated	Average (£)	Lowest	Highest	ldeal
Up to 50 tonnes	£1,367 🔻	£1,000 🔻	£2,000 🔻	£3,052 🔺
50-60 tonnes	£1,988 🔻	£1,500 🔻	£2,000 🔻	£2,369 🔻
70-80 tonnes	£2,473 🔻	£650 🔻	£3,500 🔻	£3,140 🔻
90-100 tonnes	£3,122 🔺	£2,650 🔺	£3,500 🔺	£4,252 🔺
120 -150 tonnes	£3,806 🔺	£2,950 🔺	£4,250 🔺	£5,240 🔺
180-250 tonnes	£4,086 🔺	£3,800 🔺	£4,600 🔺	£6,976 🔺
Over 250 tonnes	ND	ND	ND	ND

Weekly rates for tower cranes

Flat tops and saddle jibs	Average (£)	Lowest	Highest	Ideal
Up to 70 tonnes/metres	£705 🔺	£600 🔺	£900 🔺	£902 🔺
120 tonnes/metres	£973 🔺	£900 —	£1,100 🔺	£1,221 🔺
200 tonnes/metres	£1,191 🔻	£875 🔻	£1,550 🔺	£1,554 🔺
300 tonnes/metres	£1,498 🔻	£1,300 🔻	£1,800 —	£1,774 🔻
Luffers	Average (£)	Lowest	Highest	ldeal
Less than 70 tonnes/metres	£1,252 🔺	£950 🔺	£2,000 🔺	£1,783 🔺
100 tonnes/metres	£1,773 🔺	£1,700 🔺	£1,900 🔻	£2,091 🔺
180 tonnes/metres	£1,777 🔻	£850 🔻	£2,000 🔻	£1,977 🔻
300 tonnes/metres	£1,865 🔻	£1,450 🔻	£2,400 🔻	£2,452 🔻
Self Erectors	Average (£)	Lowest	Highest	Ideal
Self Erectors	£1,250 🔺	£800 🔺	£2,000 🔺	£1,346 🔺

2021 rental rate survey

Weekly rates of other cranes

Crane size	Average (£)	Lowest	Highest	Ideal
Pick & Carry < 2.5 tonnes	£692 🔺	£550 🔺	£800 🔺	£783 🔺
Pick & Carry 3-5 tonnes	£731 🔺	£500 🔻	£850 🔺	£735 🔺
Pick & Carry 5.5-10 tonnes	£974 🔻	£725 —	£1,350 🔺	£1,000 🔺
Pick & Carry > 10 tonnes	£1,050 🔻	£850 🔺	£1,250 🔺	£1,222 🔻
Mini crawlers < 12 tonnes	£1,297 🔻	£750 🔺	£1,845 🔻	£1,966 🔺
Spider cranes < 1 tonne	£788 🔺	£600 🔺	£1,200 🔺	£1,493 🔺
Spider cranes 2-5 tonnes	£963 🔺	£650 🔺	£1,500 🔺	£1,363 🔺
Spider cranes > 5 tonnes	£1,169 🔻	£1,050 🔺	£1,800 🔺	£1,817 🔺

Average fleet age	Average	Lowest	Highest
in years	5.7 (5.5)	2.5 (1.5)	10 (8)





Caa









Utilisation and percentage of initial cost

Mobile cranes

		Utilisation		Trend
Crane size	Average	Lowest	Highest	
Up to 30 tonnes	82%	65%	95%	
30-45 tonnes	83%	60%	90%	
50-65 tonnes	82%	50%	95%	
70-90 tonnes	72%	40%	90%	
100-120 tonnes	72%	35%	90%	
130-160 tonnes	76%	65%	90%	
160-200 tonnes	66%	40%	90%	
210-250 tonnes	63%	50%	90%	
260 -350 tonnes	52%	40%	65%	
360-490 tonnes	55%	40%	60-%	
500-600 tonnes	57%	55%	65%	
Over 600 tonnes	48%	30%	65%	ND
Self-erecting twr (4-5 axles)	66%	55%	75%	
Self-erecting twr (6-7 axles)	74%	73%	85%	

Crawler cranes

		Trend		
Crane size	Average	Lowest	Highest	
Up to 50 tonnes	51%	45%	65%	
50-60 tonnes	47%	40%	55%	
70-80 tonnes	48%	25%	55%	
90-100 tonnes	47%	40%	55%	
120 -150 tonnes	54%	35%	75%	—
180-250 tonnes	75%	60%	90%	
Over 250 tonnes	ND	ND	ND	ND

Tower cranes

		Trend		
Flat tops and saddle jibs	Average	Lowest	Highest	
Up to 70 tonnes/metres	70%	65%	75%	
120 tonnes/metres	73%	65%	80%	
200 tonnes/metres	72%	70%	75%	
300 tonnes/metres	74%	70%	80%	—
	Utilisation			Trend
Luffers	Average	Lowest	Highest	
Less than 70 tonnes/metres	68%	60%	80%	
100 tonnes/metres	80%	70%	90%	
180 tonnes/metres	74%	70%	80%	
300 tonnes/metres	85%	80%	90%	
	Utilisation			Trend
Self Erectors	Average	Lowest	Highest	
Self Erectors	66%	50%	75%	

Other cranes

		Trend		
Crane type	Average	Lowest	Highest	
Pick & Carry < 2.5 tonnes	66%	60%	70%	
Pick & Carry 3-5 tonnes	65%	60%	70%	
Pick & Carry 5.5-10 tonnes	61%	50%	70%	
Pick & Carry > 10 tonnes	62%	55%	70%	
Mini crawlers < 12 tonnes	57%	45%	70%	
Spider cranes < 1 tonne	58%	40%	75%	
Spider cranes 2-5 tonnes	67%	60%	80%	
Spider cranes > 5 tonnes	74%	60%	85%	

Crane respondent's comments

While companies were reticent to provide raw data, they were certainly forthcoming when it came to comments. Here are just a few of them:

"It is time the Crane Industry stopped shooting itself in the foot and began to charge a realistic rate for its services. The low rates being charged in relation to the value of equipment provided is ludicrous when compared to other sectors - couple this with the degree of technical ability required to run a crane fleet and the equipment required with the attendant risk, makes the situation even worse. When you have to invest in excess of £1m in equipment, man it, maintain it and provide all the necessary back up and you are unable to obtain the same rate as a mechanic in the average car main dealership, then surely it is time for things to change!"

"Rates in general are incredibly poor especially in the lower 40 to 50 tonne range. With increasing costs for fuel, wages and crane purchasing all companies must work harder to recoup these costs."

"The rental rates are far too low against the cost of buying new or nearly new cranes."

"Crane hire rates need to be increased dramatically because of large increases in the capital cost of replacements. From the 1st of April 2022 there needs to be a further massive increase to absorb the switch from red to white diesel." "Rates are far too low for the level of investment required. With HS2 etc requiring the newest equipment the rates need to reflect this. Too many rental companies are working too cheaply, and this is driving the rates down."

"People need to realise ALL our base costs are increasing from equipment, labour, fuel etc, so for us as an industry to remain sustainable we need to increase our rates in line with these cost increases. It's basic economics!"

"As previously stated despite manufacturer's prices rising year on year it seems that the Crane Hire companies cannot take note of this, and they keep dropping their Hire Rates just to get their equipment out on Hire. Today we are finding Rental Companies putting cranes out on Hire at less than a 1/4% of the purchase price INCLUDING OPERATORS !!!!" "Good to see that the demand for 'green' equipment is being driven by government policy."

"I have decided that I would rather have all our cranes sitting in the yard than accept some of the stupid rates that we are told others have quoted. Especially with the driver shortage and cost of fuel. I have had enough of being a busy idiot. How can we all be so stupid?"

"Rental rates have not got much worse but have not improved either. It will be interesting to see if rates can be increased in the next 12 months to match the large cost increases being experienced across the economy."



Cta 2021 rental rate survey



"We feel like the market is very buoyant at present and we foresee a positive 2022 with rental rates increasing slightly over the year."

"Too many small companies without any overheads such as correct maintenance, safety and other factors are substantially undercutting the rates to keep the crane rates at levels seen in the 1980s - this also includes various contract lifting companies."

"We're having success with our spider cranes, the return is far greater than for a mobile, especially when it comes to the daily rate we can earn on a contract lift."

"Surprisingly maintained the same despite Covid."

"New equipment increased in price last year some by as much as 20% however rates remain the same due to competitive pricing in the market. Should this continue its going to be increasingly difficult to maintain a fleet renewal policy."

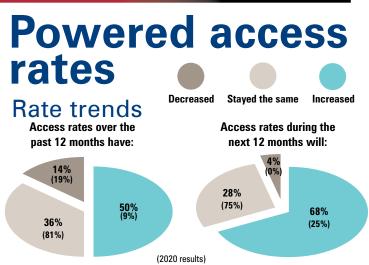
"Labour rates increased."

"The tower crane market is trending towards taller free-standing saddles and luffers, and shorter out of service radii on luffers, and therefore cranes that have these characteristics carry a premium. Also, there are a lot of older luffers in the UK market and increasing numbers of clients wanting newer cranes, so this is also a significant pricing factor. With the arrival of red diesel cranes with inverter drives and hydraulic luffers that need much less power than conventional ones will also be favoured and be likely to gain a price premium over rope operated ones."

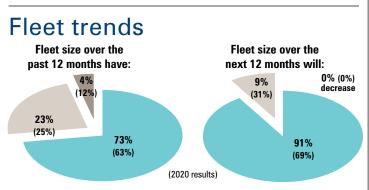
"Rates should be at least doubled to get in line with the rest of Europe." "Rates are too low - the crane industry should be run like the haulage industry, more discipline!"

"This industry is its own worst enemy. It fights between itself which keeps the rates low. If this industry worked together rates would improve. There are too many companies that don't have any safety, training or real substance to them and if you went beyond the crane on site, you would see how badly they are run. A company sends cranes all over the UK and undercuts the local companies in that area driving down the rates!! Crazy and this must change going forward as its hard enough without stupid companies doing stupid actions which helps no-one."

2021 rental rate survey Cfa



The good news is that half of all respondents experienced an increase in rental rates and of those that didn't, the vast majority reported that they were static. This was far better than most predicted this time last year, when only a quarter thought rates would rise, interestingly no one anticipated a fall in rates for 2021 yet 14 percent say that is what happened. The optimism continues for 2022, with most companies expecting rates will rise again.

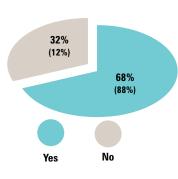


With rates improving along with demand, the majority of companies did exactly what they planned and increased their fleet size during 2021. This looks set to continue in 2022.

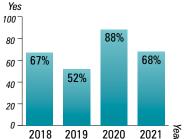
Do you offer IPAF training?

The percentage of correspondents offering IPAF training has fallen significantly this year. This has more to do with the fact that last year was something of an anomaly, this year's survey is more of a return to normal. We also saw a wider range of rental companies than usual. It does show that opportunities still exists to encourage more UK companies to offer formal training services.





Four year trend





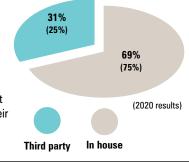


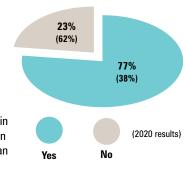
Who does your LOLER Thorough Examinations?

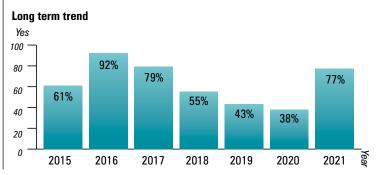
There has been a slight move towards third party inspections, but the vast majority continue to do their Loler inspections in-house.

Would you recommend the access industry to your children?

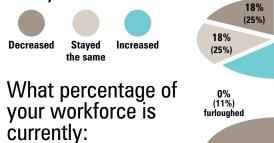
This is a huge and surprising swing back to the positive levels last seen in 2017, which is interesting. More than three quarters of respondents gave an emphatic Yes to the question, which is very good to see.







Covid questions Has your workforce:



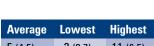
8% (25%) 92% (64%)

64%

(50%)

the office/onsite from home Average fleet age in years

Furloughed



No great change here.

Working in

5 (4.5) 2 (2.7) 11 (6.5)

Do you offer any other equipment?

Working



Weekly rental rates by general category



i usii alounu ints				
Working Height	Average (£)	Lowest	Highest	ldeal
Push Arnd Lifts (PopUps etc)	£55 🔻	£45 —	£70 🔺	£77 🔺
Portable Push Arnd (AWP/UL) £131 🔺	£65 🔺	£200 🔺	£182 🔻

Trailer lifts

Push around lifts

Working Height	Average (£)	Lowest	Highest	ldeal
12-13 metres (30-43ft)	£221 🔻	£170 🔻	£250 🔺	£272 🔺
17 metres (50ft)	£250 🔺	£200 —	£325 —	£366 🔺
Over 20 metres (65ft)	£309 🔻	£230 🔺	£375 🔻	£512 🔺

Mast booms

Working Height	Average (£)	Lowest	Highest	ldeal
8 metres	£144 🔺	£125 —	£200 🔺	£251 🔺
10 metres	£215 🔺	£175 🔺	£280 —	£332 🔺
12 metres	£281 🔻	£220 🔻	£360 —	£401 🔺



2021 rental rate survey **C**a





Spider lifts

Working Height	Average (£)	Lowest	Highest	Ideal
Up to 15 metres	£462 🔺	£380 🔻	£565 🔺	£750 🔺
16-20 metres	£607 🔻	£600 🔺	£825 🔻	£1,225 🔺
20-26 metres	£822 🔻	£800 —	£950 🔻	£1,624 🔺
28-30 metres	£1,269 🔻	£1,225 🔺	£1,400 🔻	£1,802 🔺
30-35 metres	£1,610 🔻	£1,200 🔻	£1,750 🔻	£2,200 🔺
Over 35 metres	£1,618 🔺	£1,375 🔻	£2,250 🔺	£2,721 🔺

Van mounts - Weekly rates

Working Height	Average (£)	Lowest	Highest	ldeal
Up to 13 metres	£330 🔻	£290 —	£350 🔻	£382 🔺
13-15 metres	£326 🔻	£285 🔻	£391 🔺	£543 🔺
Over 15 metres	£550 🔻	£440 🔻	£610 🔺	£759 🔺

Truck mounts - Daily rates

Working Height	Average (£)	Lowest	Highest	Ideal
Up to 25 metres (3.5 tonne) no operator	£192 🛕	£140 🔻	£235 🔺	£247 🔺
22-35 metres (7.5 tonne) with operator	£444 🔻	£425 🔻	£550 🔻	£602 🔺
36-45 metres with operator	£583 🔻	£530 🔻	£760 🔻	£866 🔻
46-60 metres with operator	£1,011 🔻	£935 🔻	£1,250 —	£1,473 🔺
61-70 metres with operator	£1,363 🔻	£1,300 🔻	£1,450 🔻	£1,591 🔺
Over 70 metres with operato	r £1,926 🔻	£1,750 🔻	£3,000 🔻	£2,938 🔻

Electric self-propelled scissor lifts

Platform Height	Average (£)	Lowest	Highest	Ideal
Up to 5 metres	£68 🔺	£60 🔺	£75 🔻	£95 🔺
6 metres (19/20ft)	£89 🔺	£65 🔺	£100 🔻	£110 🔺
8 metres (26ft)	£104 🔺	£70 🔺	£120 —	£133 🔺
9-10 metres (30-33ft)	£128 🔺	£125 🔺	£130 🔻	£150 🔺
11-12 metres (36-39ft)	£166 🔺	£120 🔺	£185 🔻	£205 🔺
13-17 metres (42-55ft)	£288 🔺	£200 🔺	£350 —	£388 🔺
18-22 metres (60-72ft)	£475 🔻	£325 🔻	£610 🔺	£600 🔺
23-25 metres (75-82ft)	£664 🔺	£425 🔻	£675 —	£1,000 —
Over 26 metres (85ft)	No Data			



The Original Multi Equipment Pocket Guide



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Featuring updated product listings throughout the range



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Diesel/bi-energy scissor lifts

Platform Height	Average (£)	Lowest	Highest	ldeal
8 metres (26ft)	£158 🔻	£120 🔻	£247 —	£188 🔻
9-10 metres (30-33ft)	£163 🔺	£125 —	£185 🔺	£190 🔺
11-12 metres (36-39ft)	£195 🔺	£150 —	£225 🔺	£250 🔺
13-17 metres (42-55ft)	£230 🔺	£150 🔻	£300 🔺	£273 🔺
18-22 metres (60-72ft)	£613 🔻	£495 🔺	£700 🔺	£700 🔺
Over 22 metres (72ft)	£812 🔺	£630 🔻	£990 🔺	£1,100 🔺

Electric self-propelled booms

Platform Height	Average (£)	Lowest	Highest	ldeal
Up to 11 metres (industrial)£207 🔺	£160 🔺	£220 🔻	£312 🔺
10-12 metres (32-40ft) (Nifty/AB38)	£215 🔺	£175 🔺	£275 🔻	£273 🔻
14-15 metres (46-49ft)	£262 🔺	£160 🔺	£295 🔻	£325 🔺

Rough Terrain articulated booms

lieugh forfull a founded boome				
Platform Height	Average (£)	Lowest	Highest	Ideal
12-14 metres (39-45ft)	£228 🔺	£200 🔺	£255 🔻	£279 🔺
15-16 metres (49-52ft)	£245 🔺	£225 🔺	£270 🔻	£321 🔺
17-19 metres (56-62ft)	£288 🔺	£210 —	£380 🔺	£336 🔻
20-23 metres (65-70ft)	£361 🔺	£320 🔺	£400 —	£458 🔺
24-26 metres (80-86ft)	£567 🔻	£550 🔺	£600 🔻	£648 🔻
Over 27 metres	£989 🔺	£590 🔻	£1,200 —	£1,620 🔺



(A)ASHBROOK





Straight telescopic booms

Platform Height	Average (£)	Lowest	Highest	ldeal
Up to 17 metres (26ft)	£225 🔺	£180 —	£275 🔻	£397 🔺
20-23 metres (60-70ft)	£343 🔻	£300 🔺	£380 🔺	£450 🔺
24-26 metres (80-86ft)	£517 🔺	£440 🔺	£550 🔺	£525 🔺
27-30 metres (88-100ft)	£1,433 🔺	£950 —	£1,825 🔺	£2,567 🔻
Over 30 metres	£1,875 <i>ND</i>	£1,750 <i>ND</i>	£2,000 <i>ND</i>	£3,500 <i>ND</i>

Utilisation and percentage of initial cost

Push around scissor lifts

	Utilisation		
Platform Height	2021	trend	
Push Around Lifts (Pop Ups etc)	69%	\mathbf{V}	
Portable Push Around (AWP/UL)	67%		

Trailer lifts

	Utilisation		
Platform Height	2021	trend	
12-13 metres (30-43ft)	61%		
17 metres (50ft)	64%		
Over 20 metres (65ft)	65%		

Mast booms

	Utilis	Utilisation		
Platform Height	2021	trend		
8 metres	63%			
10 metres	65%			
12 metres	85%			

Spider lifts

	Utilisation	
Platform Height	2021	trend
Up to 15 metres	67%	
16-20 metres	65%	
20-26 metres	53%	
28-30 metres	54%	
30-35 metres	60%	
Over 35 metres	70%	

Vehicle mounted lifts

	Utilisation	
Platform Height	2021	trend
Up to 13 metres	79%	_
13-15 metres	76%	
Over 15 metres	60%	

Truck mounted lifts

	Utilisation	
Platform Height	2021	trend
Up to 25 metres (3.5 tonne) no operator	72%	
22-35 metres (7.5 tonne) with operator	60%	—
36-45 metres with operator	90%	
46-60 metres with operator	88%	
61-70 metres with operator	50%	
Over 70 metres with operator	70%	

Diesel bi-energy scissor lifts

	Utilisation	
Platform Height	2021	trend
8 metres (26ft)	68%	
9-10 metres (30-33ft)	70%	
11-12 metres (36-39ft)	65%	
13-17 metres (42-55ft)	60%	
18-22 metres (60-72ft)	72%	
Over 22 metres (72ft)	70%	



Caa 2021 rental rate survey









2021 rental rate survey Ca

Electric self-propelled scissor lifts

	Utilisation	
Platform Height	2021	trend
Up to 5 metres	68%	
6 metres (19/20ft)	80%	
8 metres (26ft)	70%	
9-10 metres (30-33ft)	69%	
11-12 metres (36-39ft)	73%	
13-17 metres (42-55ft)	63%	
18-22 metres (60-72ft)	66%	
23-25 metres (75-82ft)	71%	
Over 26 metres (85ft)		

Electric self-propelled booms

	Utilisation	
Platform Height	2021	trend
Up to 11m (industrial)	75%	
10-12m (32-40ft) (Nifty/AB38)	70%	
14-15m (46-49ft)	61%	

RT articulated booms

	Utilisation	
Platform Height	2021	trend
12-14 metres (39-45ft)	78%	
15-16 metres (49-52ft)	75%	
17-19 metres (56-62ft)	68%	—
20-23 metres (65-70ft)	67%	
24-26 metres (80-86ft)	80%	
Over 27 metres	65%	

Straight telescopic booms

	Utilisation	
Platform Height	2021	trend
Up to 17 metres (26ft)	55%	
20-23 metres (60-70ft)	52%	
24-26 metres (80-86ft)	42%	
27-30 metres (88-100ft)	70%	
Over 30 metres	69%	



Access respondent's comments

As with cranes we received plenty of comments from access rental companies this year. The main themes concern the need to increase rates and the seeming inability of many companies to do so, including apparently, the major players which ought to be showing leadership.

"Some companies are still trashing rates while their costs climb by the week." "They have to go up - a Z45 diesel boom cost 30k in 2019, the same machine is 41k today!"

"Rental rates in Ireland will remain the same or go down due to big companies and new entrants i.e. Briggs, Baloo hire, HSS, Laois, Aerial acquisitions and will put machines out at any price to gain market share and justify the takeover. This will change as there will always be a rental market for the small personal operator and the cycle will begin again."

"For more than 15 years interest rates have been very low allowing companies to take on more risk/debt. Now they are bound to rise, and with inflation maybe faster than many might expect? If they do there is trouble ahead."

"Rates have remained consistent for a number of years, but given current inflationary pressures, an element of asset cost increase has had to be passed onto customers. This will likely continue in 2022/23. We continue to invest to provide a modern, well maintained fleet."







"With demand high it's a great opportunity to increase hire rates but sadly there are still hire companies that cut rates unnecessarily."

"Too many people racing to the bottom. Brokers are driving down margins with little or no overheads."

"Ruined by National companies charging too little in an effort to grab land at all costs. Same equipment in Germany goes out at almost double the rate." "Far too low given the rising costs. The biggest risk to the industry is increased transport costs. The market needs to be realistic on the costs of transport and all move forward together."

"The market remains buoyant, and I believe this is the best opportunity in my career to see the rates increase within the market."

"It seems that some hire companies are offering equipment to 'Middlemen' at well below their own agreed rates, allowing them to be undercut by their own machines!"



"Bonkers! Very little sign of leadership from the big players in all aspects of plant & tool hire in raising rates. Welfare & accommodation are the only sector we see raising rates. Only caveat to that is the rates when cross hiring are quoted much higher to us now."

Fuel, wages, spare parts, office equipment, electricity, heating oil and consumables are all getting more expensive by the week. Contractors are facing price increases for materials of 30 to 50 percent and paying it! Yet we in the hire game can't make a 10% price increase stick!

"The market has never been so busy. The Access link raised its hire rates between 9% to 14% dependant on machines."

"Chose the right kit like all-electric RT scissors or booms, or specialist machines that the bottom feeders do not have and don't be afraid - demand an economic rate. Contractors want and need the better machines."

Caa 2021 rental rate survey

HGV drivers are getting pay rises of 11% or more because there is a shortage, demand for access equipment is strong, certain machines are hard to get hold of, yet prices have hardly budged. Are all these whizzo business owners and their sales people incompetent? Perhaps we should train them as HGV drivers and put some of these drivers into the sales team?

"I have decided now if we don't get a commercial rate it stays in the yard, and I don't give a damn. Looking out of the window today, there is not much sitting there. We do not actually appear to be losing much, if anything. Be proud to ask for a fair and economically viable rate."

"There are too many 75 and 90 metre truck mounted platforms in the UK for the amount of demand. Rates are dropping and there are too many poor sales people that sell tenners for fivers! The rest of the access market is doing well and looks busy."





It takes two to Tango

A successful business acquisition always takes two. A willing buyer and a willing seller and that takes real knowledge and understanding of the industry, the people and what each side wants.

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So, if you are thinking of selling or acquiring, talk to the specialists and let's Tango.

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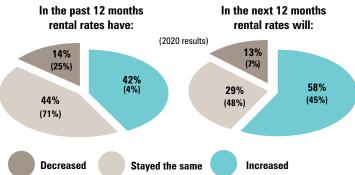
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2021 rental rate survey Cta

Telescopic handler rental rates

Rate trends

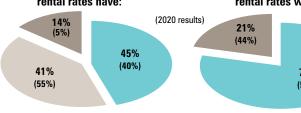


In the past 12 months **Rental Rates have:**

The overall impression of doom and gloom in the telehandler sector - as can be seen from the respondent's comments - is not guite borne out by the actual figures. Last year just less than half predicted that rates would increase and almost half that they would stay the same. According to this year's figures, this has indeed happened however perhaps the level of increase is causing concern when compared to costs increases?

Fleet size

In the past 12 months rental rates have:



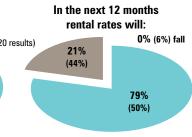
In the past 12 months **Rental Rates have:**

As in last year's survey, respondents were roughly split down the middle, between those that say they have expanded their fleets in 2021 and those that simply maintained them - all largely in line with last year's predictions.



In the next 12 months rates will:

This may well be the case as the vast majority - 58 percent - predict a further rise in rates this year, although worryingly 13 percent think rates will fall which could result in some companies dropping them from their product lines, given the strong resale values. As with the crane and aerial lift markets, rates clearly need to improve, even if only to keep up with price increases on equipment, labour and materials.



In the next 12 months rates will:

Astonishingly, given the comments on page 37, almost 80 percent of respondents claim that they are planning significant capital investment in fleet expansion this year. Possibly by getting in early with their orders and banking on others having to wait, while the long promised building and infrastructure spending boom takes off. If it does not work out, they are still likely to have a valuable asset on their hands.





Who does your LOLER Thorough **Examinations?**



The progressive trend towards Third Party

Thorough Examinations was reversed last year as the 2020 Covid Lockdowns took effect and companies brought it back in-house. With the market returning to some form of normality last year, it reverted to the longer term trend, with almost two thirds reporting that they used external inspection companies.

Would you recommend the access industry 22% to your children? (20%)



Oddly the number of respondents saying Yes has declined slightly. On reflection perhaps last year's results were the odd ones out? However, they give a definite thumbs up for the industry, reflecting confidence in the sector and perhaps a realisation that it does have a great deal to offer.

Average fleet age in years

Average	Lowest	Highest
2 (2.9)	1.2 (2)	3.1 (4.4)

same

Interestingly most fleet owners reported a reduction in the average age of their fleets. Possibly due to the high prices obtainable for three to four year old machines last year. While long lead times on replacement machines may have led to deliveries later in the year?

From last year rates have gone Percentage of units going out with work platform attachments: down

Туре	Average	Lowest	Highest
Fixed frame	2% 🔻	0% 🔻	10% —
360 degree	3% 🔻	0% —	15% 🔻

This result rarely changes by much, and always surprises us, given how many people still use telehandlers as a makeshift access platform.





What other products do you provide?

Cranes	Access	General equipment	Tools	Vehicle hire
6% (9%)	49% (65%)	59% (65%)	29% (40%)	24% (20%)

(2020 results)

This result is more reflective of who responds each year rather than anything significant. It has actually bounced back towards the 2019 results which may have some significance.

Weekly rental rates for telehandlers



Lift height	Average (£)	Lowest	Highest	Ideal
Up to 5 metres	282 🔺	200 🔻	350 🔺	327 🔺
5-7 metres	298 🛕	200 —	410 🔺	299 🔻
8-10 metres	333 🔺	220 🔺	500 🔺	352 🔻
11-13 metres	374 🔺	250 🔺	480 🔺	371 🔺
14-15 metres	426 🔺	400 🔺	480 🔺	494 🔺
16-18 metres	531 🔺	360 🔺	595 🔺	516 🔺
Over 18 metres	668 🔺	625 🔺	687 🔺	803 🔺

360 degree

Lift height	Average (£)	Lowest	Highest	Ideal
Up to 20 metres	980 🔻	920 🔺	1,120 🔺	1,383 🔺
20-25 metres	1,400 🔺	1,080 🔻	1,500 🔺	1,810 🔺
Over 25 metres	1,495 🔻	1,200 🔻	1,800 🔻	2,330 🔺

Heavy Duty

Lift height	Average (£)	Lowest	Highest	Ideal
6-7 tonne	666 🔻	600 🔺	770 🔻	844 🔺
8-9 tonne	775 🔻	630 🔻	900 🔻	1,221 🔺

Respondent's comments

"Rates have picked up this year and we are busier, that's a fact, but when you look at the cost increases we are faced with that we cannot avoid, they have actually gone down! Combine that with the cost of new machines and..... We have similar issues with other kit, the problem is that unlike the material suppliers we have competitors out there with new machines who are putting them out for silly money some of them even publish their silly rates on their website!"

"Good second-hand prices on three year old machines has really made a difference and almost makes it an attractive proposition, but then you realise that you need to have replacement machines on order well before the disposal date, then there is the price, but finance rates from the manufacturers makes it all work." "The key requirement with telehandlers is to keep them out with good customers who do not abuse them but will keep them onsite for extended periods. If utilisation exceeds 85% and the customer is fair all is OK - not great but OK. Poor utilisation and customer abuse is the road to bankruptcy. We have barred some companies from hiring our telehandlers based on previous experience. Oh and they also seem to be the worst payers!"

Cha 2021 rental rate survey









Utilisation and percentage on initial cost Fixed frame

		Utilisation			
Lift height	Average	Lowest	Highest		
Up to 5 metres	74%	60%	75%		
5-7 metres	76%	65%	95%		
8-10 metres	72%	65%	80%		
11-13 metres	63%	55%	75%		
14-15 metres	69%	65%	75%		
16-18 metres	73%	65%	80%		
Over 18 metres	82%	70%	90%		

360 degree

	Utilisation		
Lift height	Average	Lowest	Highest
Up to 20 metres	64%	60%	70%
20-25 metres	66%	60%	75%
Over 25 metres	77%	70%	85%

Heavy Duty

		Utilisation	
Lift height	Average	Lowest	Highest
6-7 tonne	74%	60%	85%
8-9 tonne	69%	60%	75%





"Telehandlers are the worst return on investment. Rates do not seem to be improving, but the cost of equipment increases year on year."

"Rates are still very competitive in the telehandler market, this reduces 'return on investment'. The resale values are helping supplement the products overall full life profitability, but if these resale values fall then the hire rates can only go up otherwise the product will become unsustainable."

"We appear to be offering telehandlers as a service to our customer base rather than to generate a profit!"

"Many years ago, we decided to focus on more specialist equipment and leave the 13 and 17 metre market to the big guys. That has paid dividends and we are closer to our customers now with high capacity models, some rotos, the sub-compacts and now the electric models that are coming out. We also find that having a range of attachments helps too."



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aviation

C<mark>6</mark>a Flying through servicing and maintenance

Ever since the first powered aircraft flight by Wilber and Orville Wright in 1903 there has been a need to gain access to various components on an aircraft in order inspect, service, maintain and repair. In the early days it would have been steps and ladders with little concern for falls from height. However, as time progressed, the safety of those working at height has become increasingly important, as has the speed and efficiency of the work.

The advent of larger aircraft carrving more and more passengers has increased the impact of a serious or fatal incident. As a result, the focus on doing anything and everything possible to avoid such incidents and keep passengers safe has grown exponentially, to the point where aviation is probably the most demanding and safety orientated of all industries.

The sector was regulated quite early on in its history, initially introduced during the mid to late 1920s - a period which saw more than 90 fatal commercial airline crashes in just three years. 1929 is the worst year on record with an accident rate of one death for every million miles flown. Based on the current numbers flying this would equate to about 7,000 fatal incidents a year!

It was the USA and most notably the Air Commerce Act of 1926 - under the Aeronautics Branch of the United States Department of Commerce - which required pilots and aircraft to be examined and licensed, for accidents to be properly investigated and the establishment of safety rules and navigation aids.

Hand in hand with the regulations came increasingly stringent safety requirements along with service and maintenance schedules which helped reduce the number of incidents dramatically. More than 100 years after the first flight - between 2002 and 2011 - the number of fatal accidents had fallen to 0.6 per one million flights globally or 0.4 per million hours flown.

From the early days, passenger numbers grew steadily. Between 1930 and 1938 the number of people using airplanes for travel jumped from 6,000 to 1.3 million. By 1970 the total was 310 million, however this figure had rocketed to 4.5 billion in 2019 and is expected to more than double to about 10 billion by 2040! (Climate/covid restrictions allowing).

Commercial aviation is big business and keeping aircraft fully operational



is absolutely critical for airlines to maximise revenues. In 2019 it is estimated that revenues totalled about \$841 billion generating profits of around \$45 billion. Keeping aircraft in the air has meant the ability to satisfy safety and maintenance

as possible,

which in turn

has led to the

development

of improved

methods of

working at

speed and

safety both

for the highly

height. These

engineers but also protecting the aircraft fuselages and engines from damage. As a result, access equipment specifically designed for the sector has expanded and grown to incorporate the latest technologies.





In the late 1920s there were more than 90 fatal commercial airline crashes

aviation

Access all areas

Until the introduction of aerial work platforms, the access methods used to service and maintain aircraft had remained pretty much the same for more than three quarters of a century - in fact many of the principles remain much the same today for the larger maintenance/ service tasks!

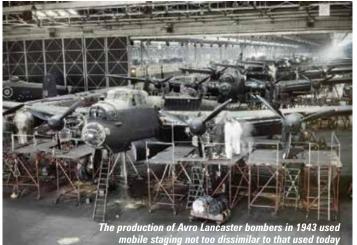
If you walk into any hanger today - security permitting - you will see a mixture of aerial work platforms including fairly standard scissor and boom lifts, as well as steps and purpose-built staging, often designed for a specific aircraft type.

Pictures from the 1920s and 1940s show a range of ladders, towers and staging in use, even on the largest planes. For smaller aircraft today these methods remain relatively



unchanged. However, the increase in the size of long haul commercial aircraft mean that the larger jets have tail sections around 20 metres above ground level making ladders impractical. This is an area where aerial work platforms have transformed the work at height, particularly for the smaller service, maintenance and

This was not always the case. At one time most work platforms were equipped with what was referred to as 'on/off' or 'bang bang' controllers. While these were accepted on construction sites and for general tasks, the fact that they could be difficult to operate smoothly and control the function speed, made them unpopular or even impractical for working close to an aircraft, given that all but the gentlest contact can cost a fortune to





repair when the full cost of repairs, retesting and most importantly downtime are taken into account. Simple padding and buffers helped but were not an ideal solution. Over the years however, aerial lift manufacturers have developed and improved their hydraulic systems and controls and today supersmooth proportional control drive and lift functions are prerequisite, making them ideal for the fine



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manoeuvring required to place a platform close up to and alongside an aircraft.

Many, if not most, manufacturers now also offer optional aviation packages.

For example, Genie offers the Aviation Scissor Lift - the Genie GS-2646 AV - which includes a Padded Aircraft Protection Rail, front entry gate and powered 1.52 metre powered roll out extension deck. It also offers an Aircraft Protection Pack for its booms designed to protect the aircraft and other sensitive work surfaces from damage. It features a foam padding to cover the top and lateral auxiliary platform rails plus a padded proximity sensing rail beneath the platform.



Foam padding on the basket gives added protection should it come into contact with any part of the aircraft

What has changed over the past 15 years or so are the numerous mechanical and electronic warning systems - some using a similar technology to car reversing sensors - that alert the operator when the basket or platform is in close proximity to an object/aircraft.

Maintenance schedules

In normal circumstances commercial aircraft do not make money when they are not flying, so turnaround times for the maintenance and inspection programmes are critical, given that an aircraft sitting on the tarmac or in a hangar costs tens of thousands a day.

Access solutions for these essential maintenance/servicing tasks come in many forms depending on the duties, the type of aircraft and facilities available. Airlines and other commercial operators of large or turbine powered aircraft follow a continuous inspection programme approved by airworthiness authorities such as the Federal Aviation Administration (FAA) in the United States, the Transport Canada Civil Aviation Directorate (TCCA), or the European Aviation Safety Agency (EASA). Each airline operator prepares a Continuous



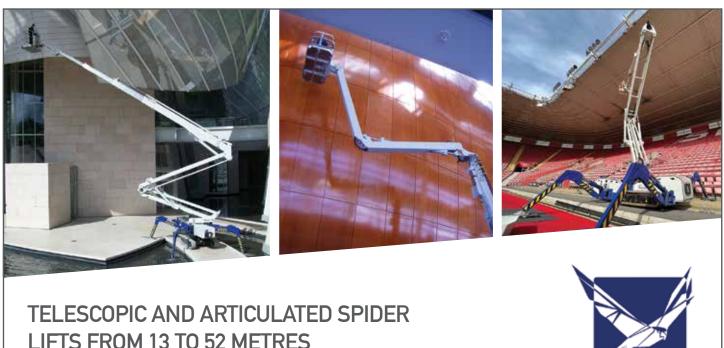
Airworthiness Maintenance Programme (CAMP) under its Operations Specifications which includes both routine and detailed inspections.

ABC check system

Airlines and authorities casually refer to the detailed inspections as 'checks' commonly referred to as A, B, C and D (or variations on the theme). A and B are easier checks while C and D are considerably more onerous. Aircraft operators may perform some work at their own facilities, but often the more in-depth checks take place at maintenance, repair and overhaul (MRO) company sites.

The A check is performed every 400 to 600 flight hours, takes a minimum of 10 hours to complete and is usually performed in an airport hangar. The B check takes place every six to eight months taking about 160 to180 man-hours depending on the aircraft and is usually completed within one to three days.

For example, a common jet such as the Boeing 737 has it's A check performed at 600 hours and is completed overnight taking between eight and 10 hours and then the plane is straight back into operational duties. Under this time pressure it is imperative that engineers gain access to all areas of the aircraft in a quick and safe manner.



Spider lifts at a higher level for 40 years



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During this inspection the tail of the aircraft needs to be checked for damage as well as checking out flying surfaces and navigational lighting. A 46ft boom lift is ideal for this operation and also gives access to the top of the fuselage where other checks are carried out. Access to the fuselage windows and doors are other important areas that need to be inspected, this can be carried out with a selection of small self-propelled scissor lifts. When the checks are completed and the aircraft is signed off, it can then leave the hangar to get back to flying in the morning. This work will normally be covered by one 46ft boom and four to five 26ft scissor lifts and is an example where the correct access equipment can offer quick and safe turnaround times.

The C check is carried out every 20 to 24 months or as defined by the manufacturer. This is much more extensive than the B check requiring a large majority of the aircraft's components to be inspected

resulting in the aircraft being out of service for between one and two weeks. It also requires more space than A and B checks and is therefore usually carried out in a hangar at a maintenance base. The C check can take up to 6,000 man hours to complete.

Some authorities use a 3C or Intermediate Layover (IL) check which typically includes light structural maintenance including checks for corrosion on specific high load parts of the airframe. The 3C check may also be used as the opportunity for cabin upgrades such as new seats, entertainment systems and carpeting etc. This shortens the time the aircraft is out of service by performing two distinct tasks simultaneously. As component reliability has improved, some MROs now spread the workload across several C checks or may incorporate this 3C check into D checks.

The D check - also known as a 'heavy maintenance visit' (HMV) - is by far the most comprehensive and demanding check for an airplane. It occurs about every six to ten years and includes taking the entire airplane apart for inspection and overhaul - even removing the paint for a complete inspection of



The D check may even involve removing all the paint for a complete inspection of the fuselage's metal skin

the fuselage's metal skin. Such a check can generally take up to 50,000 man-hours and two months to complete depending on the number of technicians involved. It also requires the most space of all maintenance checks and must be performed at a suitable maintenance base. The requirements and the tremendous effort involved in this check make it by far the most expensive, with total costs for a single D check upwards of \$1 million.

Because of the nature and the cost of a D check, most airlines - especially those with a large fleet - plan them years in advance. On average, a commercial aircraft undergoes two or three D checks before being retired. Often, older aircraft being phased out of a particular airline's fleet are either stored or scrapped upon reaching their next D check due to the high costs involved in comparison to the aircraft's value.

The current Covid pandemic has greatly impacted the commercial aviation sector with aircraft fleets grounded overnight. With planes not flying the need to maintain them particularly the more onerous C and D checks - have effectively stopped. However, as more planes are taking to the skies, these checks will again have to be carried out again and there may well be a good deal of 'catch up' involved.

Access all areas

Line maintenance is also carried out by engineering crews based at out stations at all airports. Work can take place in either the ramp area where passengers disembark, or the apron area where aircraft is parked up. In most cases a guick turnaround is needed.

The ramp can be some distance from the apron - two to three miles at some airports - so most airline maintenance crews use truck mounted boom lifts for access to the tail. Truck mounted access platforms offer the flexibility to cover both and can quickly and easily travel the distances between. In reality there is little to inspect apart from a light on the top and the bulb needs checking and changed if necessary, which on a Boeing 747s tail, for example, is about 20 metres high.

Truck mounted scissor lifts are mostly used to gain access to the APU area - a small Axillary Power Unit fitted in the rear tail cone area of the aircraft. Engineers also need to access the navigational lights fitted to the horizontal wing tips, again bulbs may need to be changed.





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aviation





The aircraft maintenance described so far has been for quick turnaround A and B check situations and selfpropelled access platforms play a major part in getting this work done. However, when an aircraft needs longer and more in-depth maintenance such as C and D checks, then the aircraft can be parked up in one position in some cases for up to six weeks in the case of a Boeing 747 D check. For many of these procedures a specialist designed aircraft docking is the preferred solution - some are fixed and some mobile. The design of fixed docking is very much dependent on the design of the hangar. In some cases, the nose goes in first and in others the nose is at the rear.

These bespoke systems provide a more efficient and safer method of carrying out regular maintenance or repairs both for commercial aircraft and helicopters. A few years ago, Planet Platforms supplied helicopter maintenance platforms to the 10 UK search and rescue bases (SAR) operated by the Bristows Group. The equipment helps maintain its fleet of S-92 helicopters which replaced the popular yellow Sea King helicopters. More recently it has supplied two complete aircraft docking systems - including a Taildock - to Airbus Military UK (AMUK) for the maintenance of the Royal Air Force's fleet of A400M military transport aircraft.

Many of the major airlines which run their own maintenance facilities tend to put their aircraft nose in first so that they can park the nose into a fixed access nose dock combined with a mezzanine floor. This area also houses the engineers' work stations. The nose access dock stretches back far enough to access the forward cabin access doors allowing seats and galley items to be removed from the aircraft. The seats can be stored on the mezzanine floor or taken away to the workshops allowing the work to be carried out on one level saving the engineers valuable time from walking up and down stairs to different levels.

Newer hangar designs can feature a tapered roof at the nose end with the normal height at the rear at the





hangar door for the tail access. The tapered design reduces construction costs and heating what would be empty space. This system works especially well if the hangar is dedicated to one aircraft type. In a number of cases the tail docking is suspended from the roof and can slide in and out to allow the aircraft to exit the hangar. Access via staging to the fuselage and wings can either be of a fixed or mobile design.

When an aircraft is positioned in the docking system it may have to be raised up and down using hydraulic jacks to allow for the undercarriage to be removed or operated and tested in the static position. In this case all the aircraft staging needs to be adjustable in height. This is where self-propelled scissor lifts have an advantage due to their variable platform heights.

There are many aircraft maintenance companies around the world which offer engineering services and act as a type of service and repair garage. Many airlines are happy to subcontract their maintenance to these companies such as AFI BMI E&M. The company is a worldleading MRO - Maintenance Repair & Overhaul - provider with about 200 customers offering services including comprehensive technical support, inline maintenance, engine overhaul and aerostructure maintenance. It employs 14,000 and covers about 2,800 aircraft around the world.

Line Maintenance

One powered access company that is supplying equipment to the major airlines and MRO companies in the Middle East is Rapid Access - part of the Loxam group - as it's equipment is well suited to multiple line maintenance duties such as component replacement, structural and special assessments or repairs and exterior washing.

"Our clients are tasked with maintaining high despatch reliability and reduced delay and our range of mobile powered access solutions are perfect for achieving their KPIs. We provide a range of ready to operate diesel or hybrid machines, including large deck scissors with high payloads and truck mounted articulated booms ideal for reaching stabilisers or fuselage mounted services such as inflight Wi-Fi. All our products can be fitted with particulate filters, fire suppression, . stop/start technology, handrail protection and our SkySentry device. We supply bespoke products perfectly suited to the requirements of guick turnaround maintenance and with the use of our SkySentry product, it is simple

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ACCESSWITH ZOOMLION GREEN **NEW ROUGH TERRAIN** ZA16JERT ELECTRIC ARTICULATING BOOM LIFT





Zoomlion Intelligent Access Machinery Co., Ltd.





to locate and identify machines that are unused and deploy these in a quick and timely manner to any area of operation."

The company also says it can provide machines for use in paint hangars, specifically engineered with zero emissions and an explosion-proof build. Its electric, explosion-proof scissor lifts provide a simple and reliable solution for most stripping and painting requirements and offer flexibility across multiple aircraft types. They are also perfect for large and small format decal applications, with extendable work decks and easy manoeuvrability for exact positioning.

Rapid Access also claims to be the first company to offer customers in the Middle East a virtual simulator courses with the ability to model a range of scenarios.

The benefit is not only improved retention of technical information and enhanced operator confidence and ability, but also a reduction in total practical hours in familiarisation and refresher training. Its virtual classroom lessons can be tailored to individual or organisational requirements and are available for short or long term delivery.

MROs

These specialist companies can work on many different types of aircraft from a private jet the size of a Gulfstream G5 up to a wide body Boeing 747 or Airbus A380. Their access requirements need to be flexible and include a mixture of adjustable mobile docking and self-propelled scissor and boom lifts. Self-propelled or push around platforms also give an additional advantage of taking up less space in what can be a crowded hangar.

An area that can be difficult to access is the main undercarriage bay. This is a cavernous area on most wide bodied aircraft and can also be slippery due to the number of hydraulic valves situated in its upper ceiling. It is also open to the elements when landing or taking off. Mobile staging has been traditionally used, but again it must be adjustable if the aircraft is in the jacked up position.



Because of the design of the bay, outreach is also needed. Access manufacturers often work with the major aircraft manufacturer to supply specially modified equipment such as mast booms to gain access to this area of the aircraft. Push around platforms are also used in both the front nose wheel bay and main undercarriage bay areas.

The stage is set

Access staging plays a major part in aircraft access particularly during the more in-depth maintenance/ inspection tasks. Staging was originally manufactured from steel but is now often made from aluminium, reducing overall weight and therefore making it easier to move around a hangar. Steel is obviously heavier and tends to be used when fixed docking positions are needed. There are a number of companies who specialise in this area such as Planet Platforms and Semmco.

Safety when operating around aircraft with access equipment is paramount, both for the operator and the aircraft particularly as the hangar environment can be a busy and congested area during maintenance checks.

aviation

While self-propelled aerial lifts are now featuring ultra-smooth proportional controls they can be safely operated alongside or over an aircraft, although many airlines look for more protection, just in case. Most manufacturers or specialist distributors are able to provide an aircraft specification self-propelled lift as well as various options and levels of protection from simple buffer material around the platform to systems that cut all functions when part of the machine is too close to aircraft components. These can range from the mechanical 'cats whiskers' to sophisticated radar type sensors.

Whatever the access system used, getting it right is a lot less expensive to specify than the repair bill for a damaged commercial jet!







CRANES, ACCESS PLATFORMS, TELEHANDLERS & EVERYTHING IN BETWEEN BOOK NOW



East of England Showground, Peterborough





A look back at



The one positive we can take from 2021 is that it was a better year than 2020!

Covid still dominated the global news, however COP26, the postponed Olympics, the invasion of the US Capitol, the end of a 20 year war, refugees, natural disasters and global shipping and logistics issues also figured prominently.

2021 began with global hopes of an economic recovery following the Covid downturn of 2020 largely founded on the development and deployment of vaccines. However rising energy prices and supply chain pressures triggered a rapid rise in inflation and product shortages. With many people taking stock of their work/life balance 2021 marked a seminal moment on the pathway to net-zero, with many governments and businesses pledging at COP26 to move away from fossil fuels. Here are just a few of the highlights.

January

In the US, the Capitol was stormed by Donald Trump supporters following his election defeat. Joe Biden was sworn in as the 46th president of the United States.



For the UK the year began in covid lockdown.

In Indonesia, a passenger jet crashed into the Java Sea minutes after taking off from Jakarta, killing all 62 people on board.

February

NASA's Mars Perseverance landed on the red planet on its mission to seek out signs of life.



Golfer Tiger Woods revealed he was 'lucky to be alive' after he was involved in a car crash in which he could have lost a leg. In football the ill-fated European

Super League project cause so much outrage amongst football fans that it was abandoned soon after. March

The Ever Given - a 400 metre long container ship - blocked the Suez Canal for six days preventing almost 400 ships from passing through the canal blocking an estimated US\$9.6bn worth of trade.



April

In the UK, the Queen's husband and consort Prince Philip passed away peacefully at the age of 99 in Windsor Castle.

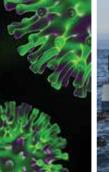
In the US, police officer Derek Chauvin was convicted of the murder of George Floyd whose death had sparked worldwide protests against racial injustice.

Caa look back 2021

















TRT 90 LEVEL UP

DISCOVER THE LATEST TEREX TRT 90 ROUGH TERRAIN CRANE.

With its only 3 m width, TRT 90 is easy to transport and maneuver on jobsite. The five section, 47 m fully hydraulic boom features three boom telescoping modes and can be further extended with additional 9 & 17 m jibs to extend your capabilities on long reach applications.

The new TEOS Operating System, with its 10" touch screen display and customizable electro-proportional joysticks, offers improved information flow and accessibility to increase operating efficiency. · 90 t lifting capacity

TEREX

TEREX

- 47 m max boom length
- Additional 2-section jib of 9/17 m
- 66 m max tip height with jib











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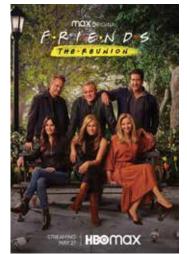


May

Some of the worst violence erupted between Israeli and Palestinian groups since 2014. An 11 day conflict killed at least 243 people in Gaza and 12 in Israel before a ceasefire was agreed.

Boris Johnson's former top aide, Dominic Cummins, says the UK Government is incompetent - a year after he defended driving to Barnard Castle to test his eyesight during the first lockdown.

The cast of the US-based TV show Friends reunited for a special episode to recall their time on the hit US sitcom - the first time they had been together on screen since the finale aired in 2004.



June

In the UK Cornwall plays host to world leaders and the G7 Summit where climate and Covid are discussed.



In the US, a catastrophic building collapse in Miami killed 98 people and it was revealed concerns had been raised about structural problems in the condominium block three years earlier.

Danish footballer Christian Eriksen collapsed on the pitch after suffering a cardiac arrest during their opening match against Finland in the European Championship.

July

Italy wins the Euro's beating England in penalties

Jeff Bezos becomes the first billionaire to fly his own rocket -Blue Origin - to the edge of space.

Blue Origin



The Tokyo 2020 Olympic Games are held with the USA winning the most medals.

In Europe, nearly 200 people died as torrential rain swept across parts of Germany, Belgium and the Netherlands.



The Taliban take control of Afghanistan causing western nations to evacuate nationals. Kabul Airport was targeted in a terror attack which killed more than 70 people.

The final plane left Kabul on August 31st ending America's longest war after 20 years.

August

Hurricane Ida wreaked havoc in the US, bringing 150mph winds and record-breaking rainfall to the country's north eastern states.

As devastating wildfires swept through parts of Italy, Greece and Turkey, the United Nations warned of a 'code red for humanity' following a landmark report into climate change. Open tennis championship without dropping a set.



October

UK MP Sir David Amess was killed in a terror attack whilst serving his constituents in Southend.

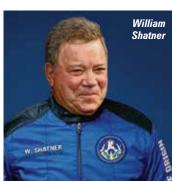
Wild fires sweep through parts of Italy, Greece and Turkey



September

Thousands of people fled the Spanish island of La Palma after a volcano eruption.

Qualifier Emma Raducanu beat Leylah Fernandex to win the US



Star Trek actor William Shatner become the oldest person to reach space after the 90 year old blasted off on a rocket owned by Amazon founder Jeff Bezos.

Hollywood, actor Alec Baldwin accidentally shot dead cinematographer Halyna Hutchins on the set of the movie Rust.





November

World leaders descended on Glasgow for COP26 with the goal of limiting temperature rises to 1.5 degrees.

Britney Spears regained control of her life after her 13 year conservatorship was cancelled.

Omicron - the new Covid 19 variant - is discovered in South Africa.

December

The 2021 Hong Kong legislative elections are held with approved candidates only.



NASA, ESA, the Canadian Space Agency and the Space Telescope Science Institute launch the James Webb Space Telescope, the successor of the Hubble Space Telescope.

C<mark>1</mark>a look back 2021

And now, the industry news highlights from 2020



• Time Manufacturing/ Versalift acquires Ruthmann creating a €375 million business.



 Mammoet's 2,500 tonne Focus 30 crane completes testing.



Nagano's Belgian distributor Vertimac announces a new 31ft Z11Auj tracked boom.



Liebherr launches its first battery electric lattice boom crawler cranes - the 200 tonne LR 1200.1 Unplugged and 250 tonne LR 1250.1 Unplugged.

Artic Cranes

upgrades its four tonne Raptor 84 articulating tower crane to the five tonne Raptor 85.



Magni adds six new TH telehandlers with five to six tonnes capacities and heights to 19 metres.



Bobcat launches a new range of Magni-built 360 degree telehandlers in Europe, Russia, the Middle East and Africa.

Spierings delivers the first e-Lift versions of its SK597-AT4 and SK1265-AT6 selferecting mobile tower cranes.







Haulotte unveils 46ft 'Sigma 16' and 'Sigma 16 Pro' all-electric articulated booms.

 Potain adds to its Chinese-built MCT flat top tower crane range with the eight tonne MCT 185 Topless.





Terex Utilities announces the Genie-based 45ft Z-45 Substation Utility Boom (SUB) and the articulated telescopic 16.2 metre Hi-Ranger TL48.



Almac and Multitel Pagliero develop the 43ft AlmaCrawler Jibbi U-1570 tracked boom lift.

Skyjack unveils the 20ft SJ20, 13ft and 14ft micro scissor lifts, a 64ft SJ9664 RT full size Rough Terrain scissor lift and two new versions of its sub 66ft boom lifts.







 Valla launches a new battery powered pick & carry crane - the 11 tonne V110R.

look back 2021

April/May

industry

news

Genie launches two micro indoor/ outdoor scissors - the

4ft GS-1432m

and 19ft

GS-1932m.



Jaso announces its first flat top tower cranes - the 200 tonne/ metre J200 Series.



JMG announces a new pick & carry forklift-type crane line - the 25 tonne MC 250.09 FL.



 Potain unveils the 20/25 tonne Frenchbuilt MDT 489 flat top crane aimed at the North American market.



articulated tracked boom.

Tadano launches the 50 tonne HK 4.050-1 and 70 tonne HK 4.070-1 truck mounted cranes on commercial chassis.





Sinoboom launches two new battery powered tracked scissors.





lgo T 99 self-erecting tower crane with 48 metre jib and 38.5 metre under hook



Konecranes launches its sixth generation series of mobile harbour cranes, 15 years after the launch of the fifth generation.

Link-Belt launches a new four axle 65 ton (59 tonne)

crane.

65 | HT truck crane and starts





Ruthmann unveils a redesigned compact version of its



Dingli introduces two heavy-duty • narrow aisle battery electric scissor lifts - the 86ft JCPT2814DC and 99ft JCPT3214DC.

Potain









Grove launches the GHC110 - a 100 tonne/110 ton long boomed telescopic crawler crane for the Americas, built in Germany by Sennebogen.



Liebherr adds the 10 tonne 205 EC-B 10 flat top tower crane with the first units sold in France and Italy.

Sinoboom announces a 53ft Rough lift - the diesel powered 1623RD and the battery 1623RE





Snorkel introduces a lithium battery powered 46ft A46RT articulated boom lift at Vertikal Days.

 Uplifter launches the 1,125kg Glassworker GW 1125 - its largest pedestrian controlled glazing robot to date.





Tadano announces updates to its 100 to 120 tonne class four and five axle cranes and updates its model Tadano/Demag



Liebherr becomes one of the first crane manufacturers to announce a full move to pure Hydrogenated Vegetable Oils (HVO) fuels for its mobile and crawler cranes.









Jaso announces an 18 tonne hydraulic luffing tower crane with the first five units going to UK rental company **Tower Crane**

Faresin launches its first of a new generation of telehandlers in the form of the FS 7.32 Compact.





· Kranlyft launches the new 2.98 tonne Maeda MC305CB-3 electric powered spider crane.



Ruthmann unveils the Bluelift ST31 telescopic spider lift using the new five section boom and articulated jib from the Ruthmann T 330 XS truck mount.



launches its highest working height van mounted platform to date - the 19 metre KT18PZ



JLG is to add 360 degree

telehandlers manufactured

- initially for the American

market.

by Dieci to its product range



JCB announces its second 360 degree telehandler, the 5,500kg/25.5 metre 555-260R





or Crevo 250 G5 Rough Terrain crane aimed at the domestic Japanese market.

look back 2021





Potain updates its 20 tonne MCT 385 flat top tower crane and adds a new 16 tonne version with the introduction of the MCT 385A.



Skyjack unveils upgraded versions of its 12ft and 16ft masttype lifts with the introduction of the new SJ12E and SJ16E.

- Galizia launches its 42 tonne, battery powered GF420 pick & carry crane.
- Cela launches a range of trailer mounted lifts with the 22 metre DT 22 Trailer and 25 metre DT 25 Trailer.

Maeda unveils its full electric, six

tonne CC1485 mini crawler crane.

· Liebherr launches its second

1110 All Terrain crane originally

generation 110 tonne LTM

announced at Bauma 2019.



Grove unveils two new five axle, long-boomed All Terrain cranes, the 120 tonne GMK5120L and the 150 tonne GMK5150XL.



Zoomlion unveils two

fully electric telescopic

ZT22JE and 88ft ZT26JE.

first of its new 55

mounted lift - the

lift manufactured in

400 tonne LR 1400 SX

crawler crane.

Japan.



Valla tops its range of battery powered pick & carry cranes with the 20 tonne V210R.

Mammoet's Wind **Turbine Assembly** (WTA) lifting system an alternative to conventional wind turbine ready' for shipping in



XCMG says that it is ready to start shipping its new 25 tonne hybrid truck crane, the XCT25-EV.





specifically at the North



The first batch of CE certified Nagano 09AC ultra-compact tracked boom lifts are delivered. • Liebherr ships the first units of its new





the first in its new iQ range.

tonne/metre iQ.1188 HiPro -



Industry deaths 2021

David Sargent 83 - former CEO of aerial lift manufacturer UpRight.

Fred Taylor 70 - founder of wheel and tyre manufacturer OTR.

Access training & IPAF veteran Geoff Marshall 87.

Australian crane company owner Barry James, 89.

Rick Robinson 67 - a former Grove crane employee.

David Mort 92 - an early pioneer of the European powered access rental industry.

Ib Steffensen 55 - former truck mounted lift director of Danish rental company BMS.



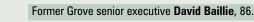
Australian crane veteran Ron Downie.

UK-based crane and access veteran Keith Smith.

Philip 'Snowy' Allen 56 - founder and managing director of Adelaide-based crane rental company Fleurieu Cranes.

Georg Thierer 89 - a leading pioneer of the German powered access industry and founder of TKD.

Sander Splinter 49 - former MD of Mammoet and Eriks.



Patrick Stemmer 28, Eric Stemmer 32 and Jared Zook 32 - all from Canada's Stemmer construction in a fatal tower crane dismantling incident.

Michael Burcombe 73 - founder and co-owner of Burcombe Crane Hire in UK.







100TJJ.

November/ December

industry

newś

Socage



Veteran UK/New Zealand based crane operator Morlais 'Mol'

'Davies 56.



UK-based John Sutch Crane Hire.

UK crane market veteran John Rome, 71.



Pat (Paddy) Joseph O'Carroll 77 - owner of UK-based Millennium Crane Hire.

US crane veteran Stephen 'Steve' Pirigyi, 83,

Swiss crane veteran Leo Clausen-Gerold, 81

Access industry veteran Denis Ashworth, 97.

Rental industry veteran Dan Kaplan, 78.



Jerome 'Jake' Liptak 83 - co-founder of ALL Erection & Crane Rental and a pioneer of the US crane rental industry.



Stephen Gray 43 - tower crane operator with UK-based Falcon Tower Cranes.

José Antonio Eiriz 61 - owner and chief executive of Spanish crane and aerial lift rental company Gruas Eiriz.

William 'Bill' McKenna 64 - of US crane and rigging supply company F&M Mafco.



André Martin 96 - veteran of the French crane rental industry and founder of Transport Martin Levage.

Gerry Marsden 78 - Gerry and the Pacemakers frontman Mary Wilson 76 - Supremes co-founder and singer

Don Everly 84 - Half of US rock n roll duo The Everly Brothers Les McKeown 65 - Bay City Rollers frontman Mike Nesmith 78 - Musician and Monkees star Dusty Hill 72 - ZZ Top bassist Stephen Sondheim 91 - Musical theatre icon

Kenneth Kaunda 97 - Zambia's first president

Phil Spector 81 - US pop producer jailed for murder Sally Ann Howes 91 - Chitty Chitty Bang Bang star Sean Lock 58 - UK comedian Olympia Dukakis 89 - Hollywood actress Lionel Blair 92 - UK TV presenter and dancer April Ashley 86 - English model, actress Robert Downey Sr. 85 - American film director/actor Joe Mercer 86 - Champion jockey Tom O'Connor 81 - UK comedian Rajiv Kapoor 58 - Indian actor Eileen Ash 110 - English female cricketer



Celebrity deaths 2021

Prince Philip 99 - husband of Queen Elizabeth II





ORANGE CRANES with a GREEN HEART



Electric lifting up to 40 m



MINICRANES | MINIPICKERS ARTICULATED CRAWLER CRANES | VACUUM & TOOLS www.jekko-cranes.com



Unsafe work at height costs £52,800 + community service

Exquisite Solutions (Alsager) of Salford, UK, was fined £42,500 plus costs of £5,200 while Company director Ali Wit Wit was given a community order for 270 hours of unpaid work and ordered to pay costs of £5,100.

The HSE was alerted after men were spotted working on the roof of the building in Manchester between January and February 2019, with no safety measures in place. The HSE carried out two visits to site, on the second occasion employees were found working on the roof with nothing to prevent falls. The Inspectors intervened and stopped the work. HSE inspector David Norton said: "The HSE will not hesitate to take appropriate enforcement action against companies that fall below the required standards and endanger their employees."

£21k for fatal fall

Peter Saunders Builders of Cambridge, UK, was fined £16,000 plus £5,140 costs, following the fatal fall of an employee in September 2017. Sean Harding was working from a mobile scaffold tower levelling a steel beam over a door. He was using a crowbar to raise the beam so that a colleague could insert packing into the gap. Harding caught his jacket sleeve on the tower, lost his balance and fell over the single guard rail to the ground. He was taken to hospital but died three months later from complications resulting from the fall.

An investigation by Health and Safety Executive found that the mobile tower was not configured correctly due to the limited headroom, but double guard rails could have been used, had it been set up correctly. HSE inspector Stephen Hartley said: "Those in control of work have a responsibility to select access equipment that is suitable for the task and the work environment and ensure that it is safely used."

ARA rental scholarships

The American Rental Association (ARA) Foundation is to make \$128,500 available for scholarships in the 2022-2023 academic year in an effort to attract talent into the rental industry. The 66 scholarships worth between \$750 and \$5,000 will be available for students seeking higher education through trade schools, universities, and community colleges. Applicants must be associated with the equipment and event rental industry, either as a student member of ARA or with a rental company, manufacturer or supplier of rental equipment and pursuing a career that supports the industry.

Applications are being accepted until March 7th at www.ARArental.org/ARA-Foundation/scholarships.





Loader crane incident costs £427k

Northumbrian Water has been fined £365,000 plus costs of £14,480, while contractor JW Colpitts & Co of Blyth was fined £30,000 plus costs of £17,572 after an employee's leg was crushed by a 1.5 tonne valve in June 2018. Northumbrian Water had contracted Colpitts to install the submersible discharge valve in a deep chamber at the Kielder Reservoir in Northumberland. The valve was lifted by a loader crane from outside of the chamber. The man was struggling to install the bolts on the valve, the crane operator was instructed to raise and lower it when the valve caught his leg. He sustained an open compound fracture of his tibia and fibula and was airlifted to hospital.

An investigation found that both companies had failed to risk assess the work or the additional hazards introduced by a change in the scope of work. They failed to implement suitable safety measures and safe systems of work or provide adequate supervision.

HSE inspector Clare Maltby said: "Companies must understand that work activities involving confined spaces, work at height and lifting operations must be subject to a robust risk assessment. Furthermore, risk assessments should be reviewed if the scope of work changes and additional hazards

are introduced. **Companies must** also ensure that they have suitable safety control measures and safe systems of work in place to address the identified risks. Appropriate arrangements should be in place to supervise and monitor work."



Who trained them?



Spotted just before Christmas, three men repairing damage to the roof of St John's Church in Tralee, Ireland, following Storm Barra, To reach the roof they combined a telehandler fitted with a material bucket with two long ladders - right in the middle of the busy town centre!

Leave the heavy lifting to us Heavy lifting specialists for commercial and residential sites Freestanding tall tower cranes ideal Download our for cladding application **REE Buver's Guide** Pre-cast and pod specialist – 10t+ lifts Modern fleet of luffing, saddle jib and remote-controlled cranes Focus on health and safety Luffing jib Saddle jib Remote-controlled CONTACT US TODAY WEB tower-crane.co.uk TEL 01453 811754 OWER CRANE PROFESSIONALS EMAIL sales@tower-crane.co.uk FOR HIRE AND FOR SALE **UK RAIMONDI DEALER** ALLMI accredited Lorry Loader Operator Training Providers ALLMI Nationwide Nationwide PALFINGER UK LorryLoader Contact: Sunny Patel **Training Ltd** t: 01380 722381 m: 07483 039588 Email: sunny.patel@thwhite.co.uk 24, Mayfair Drive, Crewe, Cheshire, CW15BB www.palfinger.co.uk Tel: 01270 505 824 Mob: 07970061171 Professional Training Devizes, Bradford and Falkirk Web: www.lorryloader.co.uk Nationwide Nationwide CRANES UK LTD Wharfedale Road, Euro Way Ind. Est. Bradford. BD4 6SL Hiab Ltd Tel: 08444 996688 Cargotec Industrial Park, Ellesmere, Shropshire, SY12 9JW Neale Martin: 07836 238281 Tel:07792 831869 Web: www.atlas-cranes.co.uk e-mail: wayne.ctsl@gmail.com • Web: www.hiab.com Are your Lorry Loader Operators properly trained? Call an accredited ALLMI training provider and insist on the ALLMI card. The training accreditation service for the lorry loader industry ALLMI, Unit 7b, Cavalier Court, Bumpers Farm, Chippenham, Wiltshire. SNI4 6LH. tel: 0344 858 4334 email: enquiries@allmi.com web: www.allmi.com

Pre-operational checks campaign - reminder

The effective maintenance of a lorry loader is an essential part of the equipment's safe operation and preoperational checks are a crucial element of this regime. Pre-operational checks are also a legal requirement, and the Driver & Vehicle



Standards Agency (DVSA) has the authority to issue on the spot fines for non-compliance. For these reasons, it's imperative that the checks are carried out and that operators undergo the necessary training in order to fulfil this part of their job role.

As a key part of its ongoing campaign to raise awareness and further improve industry practice in relation to this important topic, ALLMI has the following tools available:

- A web based video: 'Pre-Operational Checks'. Broken down into three sections, this covers the most common lorry loader applications, i.e. hook, builders' merchants and utilities.
- A readymade toolbox talk template for use by supervisors and managers.
- Pre-Operational Check Pads and associated windscreen holders.

To view, download or order the above, please contact ALLMI or visit www.allmi.com

Brick grab safety procedures

ALLMI has highlighted important safety related procedures concerning brick grabs.

Technical manager, Keith Silvester said: "One of our members, Kinshofer UK, is reiterating these issues in relation to its own product and asked us to help disseminate the message. However, the requirements are not necessarily brand specific and so, as always, we would encourage any users of brick grabs to check the manufacturer's instructions and adopt the necessary safe practices."

To avoid any malfunctions in the hydraulic circuit and ensure maximum clamping force is applied:

- If the brick grab has not been used for a significant period of time, including overnight, a functional test of the hydraulic system, consisting of two full movement cycles, should be carried out before lifting any load. Note that this becomes increasingly important during cold weather conditions.
- When in use, to ensure maximum clamping force is applied to every load, cylinders should be fully pressurised and held for at least two seconds
 four seconds if the load is wet - after the brick grab is fully closed and before lifting.

· For storage, brick grabs should either be completely open, completely

closed with cylinders pressurised this must be adopted if stored in a free hanging position or clamped to a load with cylinders pressurised.

For a full copy of the communication on this subject, please contact ALLMI.



Caa ALLMI focus

10 Years of social media

ALLMI is celebrating 10 years on social media, having launched its profiles on Facebook, Twitter and LinkedIn in 2012.

ALLMI business manager, Amy Adams, who handles the association's social media accounts said: "As for many organisations, the use of social media is an important part of our communications strategy, enabling us to raise further awareness of important issues affecting the lorry loader industry. We have seen our engagement numbers grow exponentially over the years and we would encourage those in the industry to follow us on these platforms, as it's a great and easy way to keep abreast of our activities."

Follow ALLMI:

- Facebook ALLMlorg
- Twitter ALLMIorg
- LinkedIn ALLMI



New ALLMI Card & CSCS Smart Check app coming soon

By the end of March this year, ALLMI will launch a new ID card featuring a QR code.

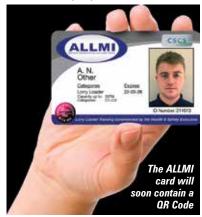
Chief executive Tom Wakefield says: "The introduction of a QR code on our card is tied in with the forthcoming launch of the CSCS Smart Check app. The QR code will facilitate the ALLMI card being scanned by the app, which will immediately allow site personnel to establish the validity of the qualification."

Developed in conjunction with the 38 card schemes displaying the CSCS logo, the CSCS Smart Check app is set to radically improve the construction

industry's ability to verify qualifications quickly and efficiently, thereby tackling card fraud and improving site safety.

"We will be providing further details in due course, including options available for current cardholders to obtain a QR code or replacement card," added Wakefield.

For further information on the Smart Check app, please visit cscs.uk.com/smartcheck



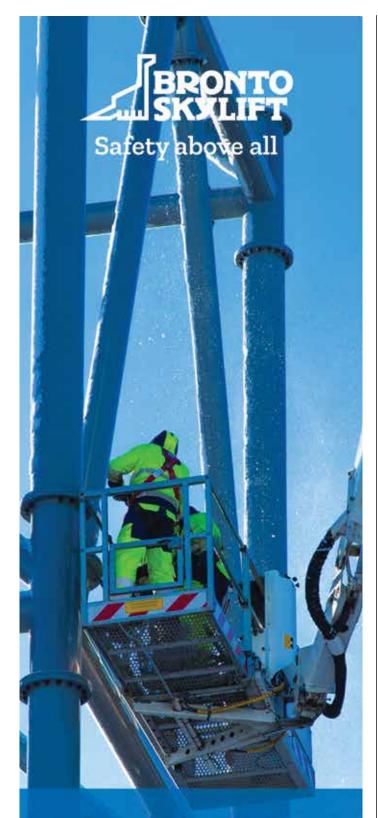
Pre-Course tuition videos

ALLMI is currently working on a variety of PowerPoint based, precourse tuition videos for candidates attending its range of training programmes. Numerous topics will be covered, including lift complexity, rated capacity, hydraulic and safety systems, sling configurations and angles, and Uniform Load Method.

Look out for further details in future issues of ALLMI Focus.



For details of ALLMI standards, guidance documents and training, visit: **www.allmi.com**

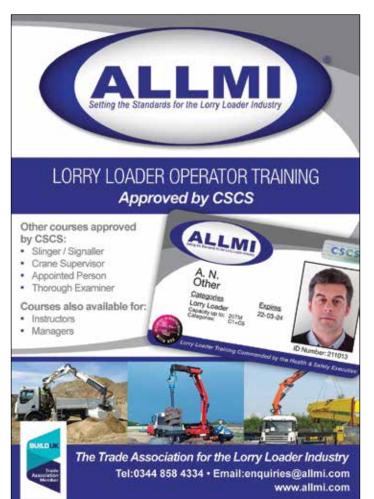


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IPAF adds to board

IPAF has appointed Jacco de Kluijver, of Genie Europe to its board of directors ahead of the AGM in London on 10 March. Kluijver began his

powered access career in 2000 with HDW, Genie's importer for the Netherlands. After a short stint outside the industry, he returned to work for Genie in 2007 as territory sales manager for the Benelux region, adding the role of sales director for the UK & Ireland the following year. He was promoted to his current role as vice president of sales & marketing for Europe, Africa and the Middle East in 2015 adding India in 2020.



IPAF president Norty Turner said: "We welcome Jacco to the board. He offers extensive knowledge, and his acumen and experience will greatly benefit the Federation as it continues to build back from the coronavirus pandemic."

IPAF membership passes 1,500

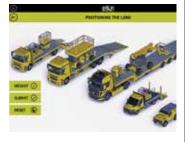
IPAF saw a surge of new members in the second half of 2021 taking the overall number beyond 1,500, exceeding the federation's target for the year. At the end of the first quarter of 2021 IPAF had 1,431 members and set itself the challenge of reaching 1,500 by the end of the year, reaching 1,504 members in early December.

The new members are attributed to in-person events since last August such as Vertikal Days and IPAF Elevation in UK, Platformers' Days and A+A in Germany or GIS in Italy. The take-up of the new category of Safety Professional membership has also been encouraging.

Updated IPAF load & unload training in additional languages

IPAF is to overhaul its Load/Unload course after analysing global data gathered through its online accident portal, which shows most work platform incidents involving serious injuries and even fatalities, occur while loading or unloading during delivery or collection. All information covered in the course content conforms to EN 12195 Load-restraining on road vehicles - Safety and references both the **IPAF** best practice guidance Load and Unload and Loading And **Unloading MEWPs on the Public** Highway. The updated course is now available in Spanish, Italian, German, French and English.









IAPAs 2022 shortlist announced

IPAF has published the nominations for the 2022 International Awards for Powered Access. The winners will be announced at the awards dinner, following the IPAF Summit on March 10th at the Millennium Gloucester Hotel, London.

The nominations are:

Product of the Year -Self Propelled Booms & Atrium Lifts

AlmaCrawler - B1890 EVO Quick-Pro tracked boom Dingli - BT30RT telescopic boom Haulotte - SIGMA 16 boom lift JLG - 670SJ self-levelling boom Platform Basket - RR9200 railway unit Snorkel - A46JRTE electric boom Teupen - LE039GTplus spider lift

Product of the Year - Scissor Lifts & Vertical Masts

Airo - XL20RTE large deck scissor GMG - 94-ERT Ultra Deck Haulotte - Pulseo electric RTs JLG - DaVinci all-electric scissor Snorkel - S2755RTE compact RT

Product of the Year -Mastclimbers/Hoists

Ciclo Fapril (Elevek) - SL20 all-in-one Fraco (Torgar) - PL-20 EXT 2V Maber - MBA2000-EU construction hoist

Scanclimber - Glide Rail

Product of the Year -Vehicle/trailer mounted

Dinolift - 230VTH hybrid truck mount Multitel Pagliero - MZ 350 truck mount Socage - ForSte 24D Speed truck mount

The Sustainability Award

Hoogwerkt - Electric and digital rental JLG - Electric conversion kit MEC - Leak Containment System Nationwide Platforms -Environmental initiatives

Riwal - Lifting sustainability strategy

Access Rental Company of the Year

Advanced Access Platforms, UK Joly Location, France Kranpunkten, Sweden Mills, Brazil Nationwide Platforms, UK UKTH Group, UK

Contribution to Safe Working at Height

Genie - Online training Halo4Safety - Halo protection helmet Hinowa - Safety devices and components Nationwide Platforms - Safety initiatives

Digital Development Award

AFI - MEWP Hire app Alimak - BIM project Cramo - Equipment Pool Manlift Middle East - My Manlift portal & app Nationwide Platforms myNationwidePlatforms suite Serious Labs - PAL Card conversion

IAPA Innovative Technology Prize

CTE - S3 EVO stability system Kiwitron - Kiwi eye Nest Rentals (Mills) - Nest Express Snorkel - 2100SJ mega boom Tech EQSS - OverWatch secondary guarding

IPAF Training Centre

of the Year AST, Germany Mills, Brazil Nationwide Platforms, UK UKTH Group, UK

IPAF Training Instructor of the Year

Anna Sarah Costa Morais, Mills Rob Foster, 2 Start Training Phil Drayton, Nationwide Platforms

To be announced at the ceremony Access Photo of the Year Lifetime Achievement Award

On the 9th of March there will also be a networking event at the Science Museum and a visit to the Niftylift factory. www.iapa-summit.info/ booking.html

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Tower standards level up

Towers for sale or rental in the UK are covered by one of two European standards EN 1004 or EN 1139-6 (or BS EN). Both of which have been updated.

EN 1004

EN 1004 covers mobile access towers, defined as a freestanding, single bay structure with four legs and wheels, which has only one working platform at a time and can reach a maximum platform height of eight metres outdoors and 12 metres indoors. They are generally made of aluminium or GRP/ fibreglass.

A revised European standard for these towers was published in November 2020, as EN 1004-1:2020 (published by BSI in the UK as BS EN 1004), replacing EN 1004:2004, which was withdrawn in November. The -1 means part 1.

Alongside that came a new second part to the standard, which covers the drafting and content of instruction manuals for these towers. This standard, also published in November, is EN 1004-2:2021 and the new part 2 replaces EN 1298.

BS 1139-6

A tower that doesn't fit the definition of a mobile access tower is a prefabricated tower scaffold and these fall under the scope of the UK national standard BS 1139-6. They include towers with cantilevers, stepped towers, linked towers, towers with bridges and large decks. They also include any tower that has one or more of these conditions:

- · towers on baseplates, instead of wheels
- · towers tied into a supporting structure, and not freestanding
- towers above 8m outdoors or 12m indoors
- towers subject to wind loads greater than 0.1 kN/m2
- · other towers designed specifically for a site

The revised standard for prefabricated tower scaffolds came into effect in January 2022, as BS 1139-6:2022. It replaces the previous version BS 1139-6:2014.

Learn more about tower standards and choosing safe equipment on PASMA's website: pasma.co.uk/towers

PASMA training for 'I'm a Celeb' crew

Shortly before filming began for the UK TV show 'I'm a Celebrity Get

me Out of Here' at Gwrych Castle, they attended a PASMA Towers for Users course. Instructor Simon Blackham took photos.



Explore the history of towers

The PASMA online Archive has been revamped, it includes manuals, training materials, adverts, press articles and photos from the 1970s onwards: www.pasma.co.uk/archive



INSURE S. W.L. OF TOWER IS NOT EXCEEDED.



Cta PASMA focus

PASMA training certificates go digital

Delegates who complete PASMA training will now receive a virtual certificate instead of a hard copy to confirm that they've passed their course. Virtual certificates are easier to share, impossible to lose and better for the environment.

Certificates can be downloaded from the PASMA website: pasma.co.uk/ check-a-card All you need is your name and certificate number, which is printed on your card. This service is available for any current PASMA qualification and there's no limit to the number of times a certificate can be downloaded. PASMA will continue to

issue plastic cards for now, but plan to launch a virtual version. To reduce the environmental impact in the meantime, it has switched from standard 30 percent recycled PVC to 50 percent.



Safe equipment action plan

With the recent changes to tower standards, PASMA is recommending that businesses follow these four steps:

- 1. Review your company's purchasing policy to ensure it specifies that any new tower equipment must be certified to the latest version of EN 1004 or BS 1139-6.
- 2. Make sure any existing tower equipment is certified to the current or previous version of EN 1004 or BS 1139-6
- 3. Inspect any tower equipment you own to ensure that it's in good working condition. If a tower is certified to standard and in good condition, there's no need to replace it until it's worn out or damaged.
- 4. When the time comes to replace a tower or if you want a new one, simply follow your updated purchasing policy.

PASMA also recommends you check to see if the manufacturer has released an updated instruction manual for any towers that you own, following the release of the new standards.

More unsafe work at height at Paddington

Two years ago, CCTV footage at Paddington Station, in London, captured a man falling from a tower. Late last year station staff noticed more unsafe work occurring on towers in the exact same location. Thankfully no one was injured this time. But a review of the CCVT footage highlighted over 40 health and safety breaches which could have

nignighted over 40 nearth and safety breaches easily resulted in another serious accident. They included standing on unprotected platforms, moving towers without reducing the height, using aluminium towers below overhead powerlines, forgetting PPE, not setting up an exclusion zone and climbing the outside of a tower.

Network Rail shared a presentation on its Safety Central site highlighting the mistakes that were made. https://safety.networkrail. co.uk/wp-content/uploads/2021/10/2021-Paddington-unsafe-working-NR.pdf



For more information about the Access Industry Forum (AIF) and the No Falls Foundation charity for working at height, please visit: www.accessindustryforum.org.uk and www.nofallsfoundation.org

Vertika The guide

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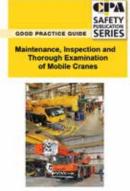






Updated guide to Maintaining Roadworthiness of Mobile Cranes -**CIG 1901**

Some large vehicles - including mobile cranes mounted on bespoke chassis which form the majority of the UK mobile crane fleets - are not included in the regulatory regime for the annual road safety testing requirements. Therefore, in the interest of road safety, CPA's Crane Interest Group has introduced a voluntary annual roadworthiness scheme for those mobile cranes exempted from the HGV testing requirements titled Annual



Roadworthiness Inspection Scheme for Mobile Cranes Mounted on Non-standard Chassis (CIG1901).

As well as providing an annual record of the crane's condition, the inspection provides valuable monitoring of the effectiveness of the crane owner's maintenance regime. The CPA scheme is based on the requirement of the Driver and Vehicle Standards Agency's Heavy Goods Vehicle Inspection Manual taking account of the derogations permitted by The Road Vehicles (Authorisation of Special Types) (General) Order 2003 (STGO).

CIG 1901 has recently been revised to now encompass all mobile crane types which is reflected in a change of title along with internal amendments to the publication. It can be downloaded free of charge at www.cpa.uk.net/safetyand-technical-publications/mobile-and-crawler-crane-guidance

New guidance on lifting items with engineered lifting points

CPA technical staff are working with members of the industry's Lead AP Group and the Health and Safety Executive to devise a **Technical Information Note (TIN)** on the lifting of items that have engineered lift points. Topics that are being inserted include types of loads with engineered lifting points, CE and UKCA marking, inspection of



engineered lifting points and design standards and codes. It is envisaged that the TIN will be available in early 2022.



Caa CPA focus

Stars of the Future Awards 2022

The CPA is inviting employers across the UK construction equipment sector to recognise and



reward their apprentices and trainees by entering them into the Stars of the Future Awards 2022. The awards are now open for entries. Employers can nominate their outstanding apprentices and trainees which they see as being the industry's future leaders.

Nominations are welcomed from all employers including rental companies, manufacturers, contractors, suppliers and others operating in the construction equipment sector with apprentices and trainees in their workforce. There are around 900 apprentices across the six main equipment-based occupations in the UK, all of which are eligible.

2022 marks a landmark year for the CPA's Stars of the Future Awards as it is the 10th year of the awards programme. This year, six national titles will be awarded - Plant Mechanic of the Year (Level 2), Plant Technician of the Year (Level 3), Plant Operative of the Year, Plant Installer of the Year, Lifting Technician of the Year and Hire Controller of the Year - as well as some special awards.

The 2022 winners will be announced at a live awards presentation at the Heart of England Conference and Events Centre in Fillongley, near Coventry, on 7th July 2022. Stars of the Future winners will be in contention for several prizes, as well as national recognition. Previous



prizes have included Snap-on tool kits, iPads and an all-expenses paid trip to Germany to visit the Liebherr crane plant in Ehingen.

CPA chairman Kevin Minton said: "Each year, Stars of the Future gets bigger and better and we're very excited that this year marks the 10th year of the awards. It is now firmly established as the premier event of the construction equipment sector for recognising and rewarding the skills and calibre of the industry's apprentices and trainees. There were 70 nominations from across the industry for Stars of the Future in 2021 and we anticipate there will be even more nominations this year."

"As the nominations closing date is 31st March, we urge employers to act now and complete and submit their nominations in good time. Nomination forms can be downloaded from the CPA website at www.cpa.uk.net/skillstraining/stars-of-the-future. You can also watch a video clip of last year's event to find out what Stars of the Future is all about."

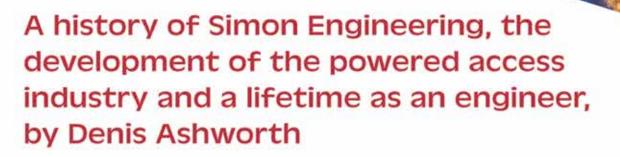
The national winners for Stars of the Future 2021 were Dean Johnston of Liebherr and NSCG Stafford College; Luke Thornton of GGR and Activate Apprenticeships; Jim Baraclough of L Lynch Plant Hire; Liam Basson of

Falcon Tower Crane Services; Amy Wicks of L Lynch Plant Hire; Beth Doel of HSS and Reaseheath College and Lucy O'Rourke of Sunbelt Rentals and Reaseheath College.



Construction Plant-hire Association

GOING UP IN THE WORLD



The PSO, Our first Simon Design, 1958

Ashworth was a keen engineer and from an early age found himself in at the very start of the modern powered access industry.

His book is an unusual combination of autobiography and history of Simon Engineering Dudley, a pioneer of the powered access industry and at one time, the world's largest manufacturer of aerial lifts.

The coffee table sized book, is highly readable and includes around 150 photographs and drawings from the very beginning of the industry. It is a 'must read' for anyone who is interested in powered access, the hydraulic equipment industry or in comparing modern day engineering challenges with those of an entirely different era.

The book is available direct from the publishers at £19.50, plus £4.50 postage and packing.

- Continental Europe €23 plus €6.50 postage & packing
- Rest of world \$31 plus \$10 shipping

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GOING UP IN THE WORLD

XCING XGC260 Cta books & models Crawler crane

The XCMG XGC260 is a 260 tonne capacity crawler crane, which has been modelled by Yagao in the unusual small scale of 1:120. It is fully assembled out of the box, although the reeving of the main hook block was changed for the review to a two fall configuration.

The small tracks are metal with good detailing, and they roll very well. The carbody ballast blocks - between the track frames have graphics applied. The crane cab has grab rails and hand rails, which look too thick for the scale. The cab rotates from the transport position into its working position.

The crane superstructure has ladders on each side, and the counterweight stacks are one piece, but they look surprisingly good for their size. On one side of the superstructure there is a winding handle to operate the winch.

The gantry looks right although the reeving of it is weird and does not appear to represent the real machine. Brass sheeve blocks are used.

The boom and jib are fully modelled lattice structures, although the thickness of the lattice chords detracts from the look somewhat. Walkways are represented by grey plates and there are signs attached. Hydraulic cylinders are modelled,

but again they look over large on the model.

The winch drums are brass, as are the sheave blocks at the boom and jib heads. There seems to be one extra set of sheaves at the top of the jib and the luffing pendant ropes are glued to it. Two metal hook blocks are supplied. They have fixed sheaves, but nice graphics.

The boom and jib luffing mechanisms are non-functional, although the jib angle can be altered by hand and a different angle could be set with the pendant rope lengths adjusted to suit.

The main winch works well and is operated by the handle. It is possible to operate the secondary winch also, but it has no friction to hold it.

This model has a high metal content given its very small size, and the quality level is fine overall. Inevitably there are compromises, but it would suit anyone looking for a smaller sized heavy crane model. It costs \$96 from China with shipping costs on top.

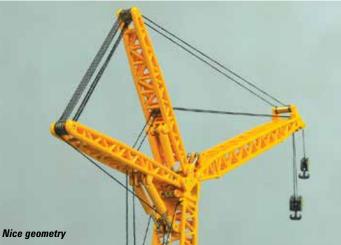
To read the full review of this model visit www.cranesetc.co.uk

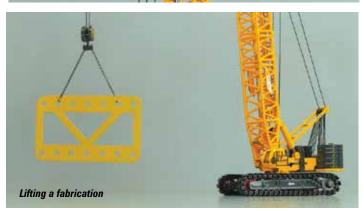
Cranes Etc Model RatingPackaging (max 10)7Detail (max 30)22Features (max 20)12Quality (max 25)21Price (max 15)11Overall (max 100)73%











IN THE NEXT ISSUE OF C&a



Place your products in front of 17,000 crane, telehandler and access buyers & users who will be reading the February/ March issue of Cranes & Access...

The issue will include features on: Van and small truck mounted platforms

Last year saw significant growth and changes taking place within the sector including changes in ownership, capital injections, acquisitions and a trend towards bringing distribution in-house. Moving into 2022, manufacturers are having to balance growing demand with vehicle shortages and increased component lead times. We take a look at the latest new product launches and key developments.





Alternative Lifting Equipment

We take a look at the wide array of alternative equipment available for lifting loads in comparison to mobile or tower cranes, including jacking and skidding, customer crane solutions and the latest techniques in rigging.



Battery Developments

With many manufacturers spending an increasing amount of their development budgets and time on battery power, this year's annual feature will take a look at the latest battery technology and Lithium options as well as developments in AGM batteries

and other alternative technologies. If you have any news, views or good photography please make contact.



Vertikal Days preview

With its core centred firmly around access platforms, cranes, telehandlers and associated lifting equipment, Vertikal Days is a specialist two day event providing a chance to meet up with all the major suppliers and see their latest products in a single day without travelling thousands of miles. Following a successful and sunny 2021 event, Vertikal Days will be returning to The East of England Showground,

Peterborough on 11th & 12th May.

Every issue of **C&A** is also packed with our **regular columns**, **news** plus **reader's letters**, **books**, **models**, **training**, along with the latest news from the **CPA**, **ALLMI**, **IPAF** and **PASMA**.

Send any information, news, photographs or ideas on these subjects to editor@vertikal.net

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Readers Le

Brokers not all bad

I have just read the letter from Jim Longstaff in your August issue. I understand that things might have changed a bit since then, but I firmly applaud his taking a stand, and doing something rather than just talking about it!

I used to be in crane hire game but am now on the other side of the transaction and you could say benefit from companies quickness to give an extra discount. I don't particularly buy-in to blaming brokers though, but I do get what he says, and I am sure that there are plenty of 'brokers' that add nothing to the transaction but just know how to screw hire companies and have the gift of the gab to get good prices from contractors. I have had a few call me over the past year or two, BUT some so called brokers really do add value and can take often some of the pressure off, especially on a complex job just like a good architect or insurance broker you can leave them to sort that aspect of the job and depend on them. They add real value and can charge for their service and at the end of the day they only get the crane hire prices that rental companies decide to give them. You can't blame someone for haggling. I can almost see a version of the Monty Python sketch where someone calls up a hire company and asks for a price for a crane, and then simply accepts the quote. Would the hire desk clerk say "well aren't you going to haggle?" If you don't know the scene, I am talking about you have to google it. I think it's in the Life of Brian.

Despite this I respect the man for putting his money where his mouth is. Sustainable crane companies need to have more respect for the fantastic service that they provide and demand a fair price for it!

Keep up the good work, while I cannot always read the mags when they arrive, I enjoy reading yours and always take something away from it. Geoff Brisbby

This letter is in response to one we carried in the July/August issue of the magazine, If you no longer have it, you can access it without registration or charge at link[https://vertikal.net/en/cranes-and-access/issue/393]

(https://vertikal.net/en/cranes-and-access/issue/393)

Where do all the plastic mats go?

Your article on outrigger pads and ground protection jolted my attention to something that might well have a positive explanation. With some form of plastic being used in most mats these days what happens to them when they are condemned and worn out? Are they easy to recycle or do they end up in the landfill?

Wood mats we all get... but like real Christmas trees they do not last. Could it be that if plastic mats last for twice or three times that of wood and can be reformatted, they are a greener alternative? These days you also ought to ask where the wood comes from and is it from sustainable forests etc... and on and on it goes. And what about aluminium mats that you focused on? Can they still be easily recycled with all that yellow paint and grit or whatever is on it?

I am not your typical 'tree hugger, but while reading what was an interesting article, I began to wonder about these things, probably because my daughter and I got into a heated debate about the merits - or not - of our artificial Christmas tree. And it turns out is not as clear cut as you might think - forget Plastic Bad - Wood Good... it is much more complex than that and as we are all supposed to be using HVO fuel or battery power I thought what about recycling crane mats?

Maybe one for the future?

Phil Smith

A good point and one that to be honest we had not really considered before. But it is on our list now and will start looking into what the industry has to say. It promises to be an interesting one.

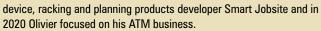
Jean-Louis Raymond Olivier 1952-2022

Jean-Louis Olivier, founder and former chief executive of French tower crane anticollision system designer and manufacturer SMIE has died. He passed away on 8th January at the age of 69.

Olivier established SMIE in 1975 to build anticollision warning devices for tower cranes,

well before the market had really begun to consider the concept. For many years SMIE was the 'only show in town'. The initial market was limited to France but gradually spread to other markets, particularly where there were job sites with limited space. This included setting up a business in the UK in 1982 with Tim Rowley called CraneSafe. In 2002 CraneSafe became a wholly owned subsidiary and was later rebranded as SMIE UK.

In 2016 he launched a new business alongside SMIE called AMG (Ascenseur Monte-Grutier) a crane operator elevator. The following year he handed over the day to day management of SMIE to Fabrice Bonassera and then in 2018, Jean-Charles Delplace, who took a majority stake in the business. The following year SMIE merged with French connected lifting



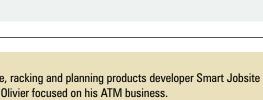
Jean-Louis Olivier was a first-class individual. Not only was he a talented pioneer and entrepreneur but also a thoroughly decent, kind, gentle and charming human being. A relatively quiet person he preferred to listen and understand rather than talk first. He had a wonderful yet quiet sense of humour, enjoyed a funny story and he always had time for people, both suppliers and customers. The industry has lost one of its finest.

A statement from SMIE said: "Words may not suffice to express the heartfelt sorrow that we feel for the passing of Jean-Louis Olivier, founder of SMIE. On behalf of the entire team, we would like to express

to Jean-Louis's family our deepest condolences." All of us at Vertikal would totally and fully agree with the feelings expressed in that message.

Rest In Peace Jean-Louis - you will be truly missed.







letters

C<mark>8</mark>a

Hermann

Paus

Hermann Paus 1932-2022

Hermann Paus, the founder of crane, construction and furniture hoist and aerial lift manufacturer Paus, has died. He passed away on December 27th just a month before his 90th birthday.

Paus was one of eight children. At the age three he lost his father in a work accident

and had to help his mother in her small business as a milliner, which gave him a taste of business. Tragically his mother died from a lung disease when he was only nine years old. He was separated from his siblings and went to live with an aunt and uncle who ran a small farm near Munster. His uncle was also the village blacksmith. While the couple had eight children of their own, they were called up, one by one to fight in the war, so Hermann had to assume an increasing amount of the farm work.

At the age of 14 he began working with his uncle shoeing horses and fixing everything from bicycles, reapers and binders and even soldering pots. At 15 he started attending a local vocational school once a week, where he was inspired to become an engineer. In 1950 he got his first job as a mechanic and moved back into the old family home. He also enrolled in a preparatory class for technical college, attending night classes four days a week and on Saturdays alongside his day job. He almost came unstuck when he suffered a work accident which inflicted serious head injuries, triggering a temporary paralysis on his right side.

However, in 1953 he managed to convince the director of the State Engineering College to let him fill a vacancy on one of the engineering courses, obtaining his engineering degree three years later. in his first job as a designer of farm equipment he registered his first patent for a tractor throttle. In 1961 he took a job with farm equipment manufacturer Krone, the owner - Bernard Krone - would prove to be an inspiration and mentor to him that lasted for most of his career. 1961 was also the year that he married his wife Agnes who would also be instrumental his future business ventures.

In spite of his positive experience at Krone, he and Agnes decided to set up their own company in 1968. Their first products were dump trucks, followed by articulated wheel loaders. In 1974 the product range was extended to include underground mining vehicles, inclined material and furniture hoists came two years later, and cranes and aerial lifts later still.

In spite of all his early setbacks, Herman Paus never gave up or lost his drive and optimism and always managed to find a solution to the new challenges he faced, which often spurred on new product introductions and innovations.

For his services to the Russian mining industry, he received a mining honour medal and in 2002 was appointed an honorary member of the faculty of the

Belarus Mining Academy in Minsk. More recently he was inducted into the International Mining Hall of Fame in Denver, USA.

Paus also played his part in industry associations and for many years was a member of the municipal council in his home town of Emsbüren leading to the award of the Federal Cross of Merit. He also had a reputation for looking out for his employees and taking responsibility for any issues. "My name is on the product, so I stand by it," was one of his mottos.

He leaves behind wife Agnes, two sons - Franz-Josef and Wolfgang who run the company - and daughter Elisabeth 'Lisa' Paus, a Green Party member of the German Bundestag, as well as a number of grandchildren who are following in their grandfather's engineering footsteps.





Geoffrey 'Geoff' Peter Marshall 1934-2021

Powered access training veteran Geoff Marshall passed away on Saturday, December 12th. He was 87.

He began his access career in the 1980s as a trainer with UpRight's UK distribution subsidiary, Instant



Zip-Up, based in Newport, Shropshire and in 1992 worked with IPAF on the drafting of the original training manual and quality system that formed the basis for the current PAL card. The programme was initially used by the very first IPAF training centres - 10 member companies that had applied to become training centres in 1991. While his original work provided the foundation for the global training programme we have today, the fact that most critical elements of that first programme remain in use 30 years later says a great deal about his thoroughness.

In 1995, Marshall wrote the manual and laid out the quality control procedures and systems for Powered Access Certification (PAC), the notified body that IPAF set up to CE certify aerial work platforms. In order to be certified as an EU notified body the organisation had to be verified and approved by the Department of Trade, achieving this substantial hurdle was very much contingent on the quality of the organisation's manual and operating procedures.

Marshall was also instrumental in getting the IPAF Training Centre audit process rolling and served as the organisation's first auditor and was lead auditor for many years after, training many of the people that have followed on in this role. One colleague said: "Geoff was IPAF's original and at the time, only auditor and was very well respected with his relaxed, but firm approach."

He was also instrumental in implementing the Continual Professional Development requirements for IPAF instructors. As one ex-colleague put it: "The success of IPAF's PAL Card training is largely down to some of the quality control systems Geoff put in place."

He liked to keep fit and swum 50 lengths of the pool every Friday, while enjoying a regular round of golf. He retired a few years ago, and sadly his wife Thelma passed away in September.

A seemingly quiet man, he was a professional, consistent, reliable, well liked and always a gentleman. He also had a great sense of humour. The industry has lost one of its training pioneers.

Fredrick Blake 'Fred' Taylor 1951 - 2021

Fred Taylor, founder of aerial lift and off-road wheel and tyre manufacturer OTR, passed away peacefully on Monday December 13th at the age of 70.

An entrepreneur and innovator, Taylor was born in Pontiac, Michigan, and grew up in the north western Michigan town of



Ellsworth, he graduated with a degree in mechanical engineering. And returned home to worked in his family's business. But in 1982, he and his wife moved to Rome, Georgia, to start his own business. While he was responsible for several start-ups, he is best known for founding OTR Wheel Engineering in 1987. He managed the company as chief executive until earlier this year when he handed over to Tom Rizzi, remaining as chairman. Taylor was the driving force behind the creation of serval innovative tyre and wheel assemblies, securing numerous patents along the way, including the outrigger tyre.

Frank Hasenfratz 1935-2022

Frank Hasenfratz, founder and chairman of Skyjack's parent company Linamar, passed away on January 8th following a battle with cancer. He was 86.

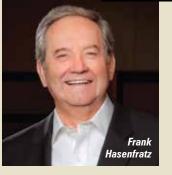
He was born in 1935 in the town of Szár - to the west of Budapest, Hungary and given the name Ferenc. In his teens he began earning extra money fixing bikes, while attending technical school before starting an apprenticeship with engine manufacturer Csonka Janos Gepgyar.

In 1955 his apprenticeship and his life were both disrupted by compulsory military service. When the 1956 Hungarian uprisings began, which rejecting the Soviet occupation, Hasenfratz sided with the 'rebels' and, when the Soviet Union finally stepped in and crushed the revolution in 1957, he decided it was time to leave crossing the border into Austria. He worked his way north to the French coast and took a ship to Canada, where he knew he had an uncle.

Arriving penniless in Quebec City in May 1957, Hasenfratz was handed a visa and a \$5 note by the Canadian immigration officials. Over the next few weeks, he survived by washing cars and sleeping on a bench on the station platform. He eventually made his way to Guelph and the house of his uncle whom he had never met. He quickly found work as a toolmaker and machinist with Sinterings Ltd and before long was promoted to supervisor.

In 1960, he married another Hungarian immigrant, Margaret Ferter, and using his modest savings, along with money Margaret had saved while working on a tobacco farm, they purchased their first family home north of Guelph, Ontario. In 1964 he purchased a lathe and set up a small machine shop in the basement of his home, even modifying the kitchen oven to heat treat copper aircraft components.

In 1966, although a 'one man band', Hasanfratz incorporated his fledgling business using the names of his two daughters, Linda and Nancy, and his late wife Margaret to create Linamar. In 1986 the company was listed on the Toronto Stock Exchange. His determination and entrepreneurial zeal enabled him to build the business into a global automotive parts and component supplier with 26,000 employees. The company acquired Skyjack in a friendly takeover bid in June 2002, having previously acquired a 49



percent stake from founder Wolf Haessler a few years earlier, setting up a joint venture to build Skyjack scissor lifts in Hungary in 2001.

During his lifetime, Hasanfratz received many awards and accolades, including an induction into Canada's Manufacturing Hall of Fame and the Canadian Business Hall of Fame. When accepting his award, he said: "A quart of milk was 17 cents at that time, and a loaf of bread 17 cents. With a quart of milk and one loaf of bread, you can live comfortably for a day."

Hasenfratz was also appointed to the Order of Canada, which recognises the achievement of outstanding merit or distinguished service by Canadians who have made a major difference to Canada through lifelong contributions in every field of endeavour.

Frank Hasenfratz was also a philanthropist and generous contributor to the greater Guelph community, supporting institutions such as Guelph General Hospital, Western University, St. Joseph's Foundation and the local performing arts.

A statement from the company said: "It is with profound sadness that we announce the passing of the company's founder, beloved leader and long-time executive chairman, Frank Hasenfratz, who passed away peacefully at home on January 8th, 2022, surrounded by his family after a courageous battle with cancer."

"Frank will most fondly be remembered in the halls and on the production shop floor at Linamar where he mentored a generation of manufacturing and business leaders. At Linamar, we will continue to live by Frank's words to strive to continuously improve, act quickly and decisively, set goals and track progress and always 'Do What We Do Best, Better'." He leaves behind his daughters Linda and Nancy and four grandchildren.

Caa





Ricky 'Rick' Eugene Robinson 1954 - 2021

Rick Robinson, a former Grove crane employee in Shady Grove, Pennsylvania, passed away at the Meritus Medical Center in Hagerstown, Maryland on Thursday, December 9th at the age of 67.

Born in Chambersburg, Pennsylvania, he joined Grove Manufacturing in the 1970s as a clerk in the traffic department, where he was involved with organising crane shipments to customers all over the world, using the company's own truck fleet and thirdparty carriers.

He later moved into the sales administration group, as a district sales administrator which involved greater contact with customers and distributors. He was always professional, consistent, smart and helpful and well thought of by all who worked with him. He remained with Grove for more than 27 years, followed by a career in insurance, becoming an agent for Aflac.

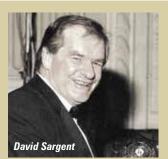
He is survived by his wife of 44 years, Kathy and three daughters, Andrea, Whitney and Victoria and five grandchildren.

letters



David Keith Sargent 1938-2021

David Sargent, the former chief executive of aerial lift manufacturer UpRight passed away at home in the early hours of December 31st having succumbed to his battle with cancer. He was 83 in October.



David Sargent began his working

life in the Merchant Navy, moving to London in 1965 to join Trident Equipment which provided electrical controls and distribution units and other items to the construction and shipping industries, his first role involved selling flares to boat owners, essentially an industrial version of the classic door-to-door salesman. In the 1970s he joined Wyse plant/ WysePower selling temporary generating equipment for cranes and other purposes to sites across the UK and Middle East and began to build a solid reputation for commercial management.

In 1983 he was recruited by UpRight, initially to head up the company's alloy scaffold and scissor lift distribution and rental business in the UK - John Rusling Ltd. The company founder and former owner John Rusling



was due to retire, and Sargent was hired as managing director designate. However, in June 1983, shortly after he joined, UpRight acquired Hemel Hempstead based Access Equipment, after its parent company - William Moss - had gone into administration. Sargent was parachuted in to manage the acquired business, which had been an UpRIght licensee for its original Zip-Up welded joint scaffold towers. John Rusling agreed to delay his retirement a little, while the new acquisition was digested.

Sargent oversaw the transfer of Access Equipment's scaffold tower production from its plant in Sheffield to the UpRight facility in Dun Laoghaire, Ireland. A couple of years later he planned and organised the merger of Access Equipment sales and rental operations with John Ruslings to create Instant Zip-Up, using the brand names of the tower systems that the two companies sold, both of which were UpRight designed products and compatible, at least in terms of dimensions.

In 1987 Upright was acquired by Rick Stowe's Griffin Group in a leveraged buyout. Stowe promoted sales and marketing director Hugo Kapelke to president, but the two men clearly had different ideas on how the business should be run and the relationship was short lived. Sargent's work with the two UK businesses caught Stowe's attention, his interest was reinforced at a group planning meeting in San Francisco, where Sargent presented his vision for UpRight in the UK as well as the rest of Europe. As a result, in 1988 Stowe appointed him as president/chief executive of UpRight, which required him to move to company headquarters in Oakland, California. He quickly began to transform and expend the business, and then as a global economic slowdown took hold in the early 1990s, it became evident that Stowe and the Griffin group faced problems with the relatively short-term financing that they had taken on to acquire Upright. Sargent played a key role, even critical role, in keeping UpRight out of Chapter 11 when all had looked lost. The company bounced back strongly in the 1990s and became the market leading scissor lift manufacturer. He reluctantly handed over the president's role to Jim Dillon in 1999 to work more closely with Stowe as an advisor and director of the Griffin Group. When Upright faced another financial challenge in 2001, Sargent was no longer in a position to prevent the US part of the business from into Chapter 11 insolvency, from which it later emerged.

He continued to work as an advisor to Stowe for several years. But after he retired, he helped out as a tour guide at Salisbury Cathedral - the town where he was born had grew up. He loved meeting new people and showing them part of his heritage. He also enjoyed a game of golf and captain of his local golf club for several years. He was also a keen country sports enthusiast, but you apparently had to watch out if you were standing too close to him when he was shooting. In the 1990s he spent a great deal of time working from the UpRight plant in Dun Laoghaire and grew to love the country, its traditions and its people. In fact, one of his Irish colleagues said: "He become an honorary Irishman".

David Sargent was a very special person, a people person, who was comfortable in his own skin and as such was not afraid to hire people who would challenge and question him. He would always listen and take soundings on major decisions and strategies, was open to persuasion, but was never afraid to take the final decision. Once he did, he expected everyone to go along with the decision and make it work. And invariably they did. He was the only person

who was ever capable of managing a challenging owner, in the form of Rick Stowe, well.

He enjoyed people, travelling and life in general and got the very best out of it, but most of all he was family man. His passing will be felt and mourned by the many people who knew him all

over the world. He leaves behind wife Jackie, son Robert, two daughters Rebecca and Katie along with seven grandchildren.





What's o

2022

Executive Hire Show H February 09-10, 2022 UK tool and small rental equipment show Ricoh Arena Coventry, UK Tel: 0207 973 4630 www.executivehireshow.co.uk

The IPAF Summit and awards

March 10, 2022 Annual Summit and IAPAs awards ceremony of the International Powered Access Federation London, UK Tel: +44(0)15395 66700 A laps) www.ipaf.org

LiftEx Middle East

www.liftex.org

March 21-22, 2022. The first Mid East conference of the Lifting Equipment Engineers Association Manama, Bahrain Tel: +44 (0) 203 488 2865

National Heavy Equipment

Show

March 31 - April 1, 2022 Canada's largest heavy equipment exhibition Mississauga, Ontario, Canada Tel: +1 8884547469 www.nhes.ca

Swissbau

03.-06. January 2022 Swiss construction exhibition Basel, Switzerland Tel: +41 58 200 20 20 www.swissbau.ch

Vertikal Days 2022

May 11-12 UK/Ireland Crane, access and telehandler event. East of England showground, Peterborough Tel: +44 (0) 8448 155900 www.vertikaldays.net

Innovationstage der Höhenzugangstechnik May 24-25, 2022

Aerial lift Innovation Days, an informal event for access equipment, cranes & telehandlers Hohenroda, Hessen Hotel Park, Germany www.borntolift.de/innovationstag/

Hire 22 May 25-26, 2022

Annual convention and exhibition of the Hire and Rental Association of Australia and the Elevating Work Platform Association Adelaide, Australia Tel: +61 (0)2 9998 2255 www.hire21.com.au

Interschutz 2022

June 20 - 25 2022 International fire and rescue show Hannover, Germany Tel: +49 511 89-0 www.interschutz.de

LiftEx 2022 **Crane Safety 2022**

Date to be confirmed. Crane safety conference organised by the Institution of Mechanical Engineers & supported by the Vertikal Press Virtual, UK Tel: +44 (0)207 973 1251 www.events.imeche.org

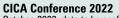
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JDL Expo June 22-24, 2022 French cranes and access exhibition Beaune, France Tel: +33 (0)1 45 63 68 22 EXPO www.jdlexpo.com

HCEA International Convention and Old Equipment Exposition September 23-25, 2022

The Historical Construction Equipment Association's convention and expo Bowling Green, Ohio, USA Tel: +1 785 243 0083 www.hcea.net



October, 2022- date to be confirmed The annual conference of the Australian crane association - possibly the best crane conference in the world. Tel: +61 03 8320 0411

www.cica.com.au Liftex conference

October 5-6 2022 Annual conference of LEEA Lifting Equipment Engineers Association Aberden, UK Tel: +44 (0) 203 488 2865 LiftEx 2022 www.liftex.org

Bauma 2022

October 24 -30th 2022 World's largest construction equipment exhibition, Munich, Germany Tel: +49 (0) 89 51070 Gauma www.bauma.de

SC&RA Annual Conference

October 25-29, 2022 Annual Conference of the US cranes and heavy transport association Washington DC, USA Tel: +1(703) 698-0291 Carton 6 Rigging

www.scranet.org Bauma China 2022

November 24-27, 2022 SNIEC Shanghai, China Tel: +49 (0)89-9492051 www.bauma-china.com

Bauma Conexpo India

December 06-09, 2022 The bauma/Conexpo exhibition in India Delhi, India Tel: +49 89 949-20255 1 militre www.bcindia.com

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/htm/home.htm

The ARA Show 2023 February 12-15, 2023 he American Rental Association's annual conference and exhibition Orlando, Florida, USA ARA Tel: +1800 334 2177 www.arashow.org



March 14-18, 2023 The leading US construction show Las Vegas, Nevada, USA Tel: +1 414-298-4133 www.conexpoconagg.com



Samoter March, 2023 International earthmoving and building equipment show Verona, Italy Tel: +39 045 8298111 SaMoTer www.samoter.it/it

Smopyc 2023

April 2023 Dates to be confirmed Spanish construction equipment exhibition Zaragoza, Spain Tel: +34 976 764 700 SMOPYC www.feriazaragoza.com/smopyc

Apex 2023



June 06-08, 2023 International powered access trade show Maastricht, The Netherlands Tel: +31 (0)547 271 566 www.apexshow.com

Platformers' Days 2023 September 8-9 German access

and lifting show Karlsruhe, Germany Tel: +49 721 3720 5096 www.platformers-days.de PD



Date to be confirmed Italian crane, access and heavy transport exhibition Piacenza, Italy Tel: +39 010/5704948 www.gisexpo.it

The Utility Expo September 26 – 28th 2023 Previously The International Construction & Utility Equipment Exposition /Demo Expo - is the US utility industry's largest show Louisville, Kentucky, USA Tel: +1 414-274-0644 www.theutilityexpo.com



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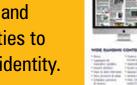


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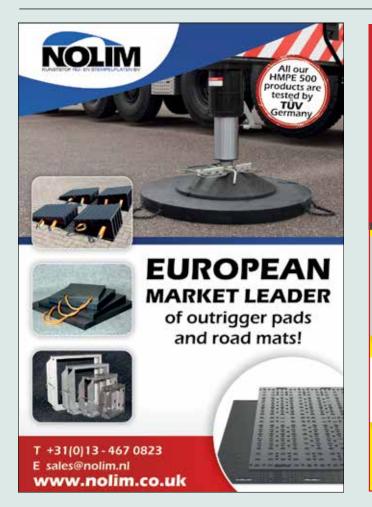
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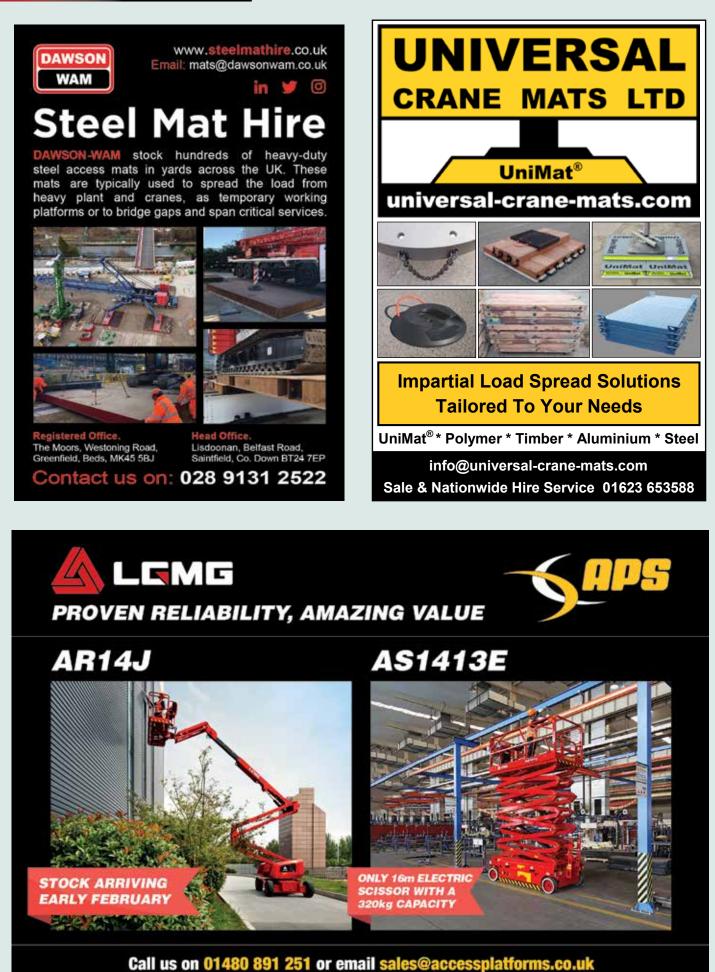
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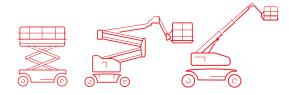


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