

cranes & access



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November 2020 Vol.22 issue 8

Spider lifts

**Heavy
moving
& alternative
lifting**

**All Terrain
cranes part II**

**Remote control
innovations**



The new AC 450-7

Benchmark on 7 Axles.

The new Demag AC 450-7 is in a class of its own: With a carrier length of 15.99 m and an outrigger base of 8.45 m, it is as compact as a six-axle crane, and yet is as powerful as some eight-axle cranes. In fact, the Demag AC 450-7 can reach lifting capacities of up to 25 tonnes when its 80 m main boom is fully extended, and that is without even using the SSL system. Bring in SSL, and the lifting capacity goes up to an unbeatable 37.9 tonnes.

In addition, Demag is using a new Sideways Superlift design for the first time ever in the AC 450-7 – one that makes handling and setup easier. The system can be extended with an 81 m luffing jib, and the sections of this jib can also be used to assemble fixed extensions.

Above. Ahead. Always.

DEMAG
TADANO GROUP

On the cover:

A Hiab Loglift 118S HiVision remote controlled loader crane owned by Lars Norlings Åkeri in North central Sweden.



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Sinoboom unveils hybrid boom, new 450t Demag, all electric Sarens SGC, Aichi all electric tele booms, JCB's all electric telehandler, Haulotte unveils Pulseo RT scissor lifts, CTE updates B-Lift 27, larger SK from Mammoet, Jekko goes direct in Germany, Snorkel adds to Chinese product line, three new booms from LGMG, Genie E-Drive slab scissors, LoadLift from Penny, Hybeko cliff face boom, Sudhir acquires Star - plus a roundup of the latest financials and news highlights.

Heavy moving and alt lifting 17



Will North reports on the careful planning and innovative solutions required to transport and install the increasingly large power plant modules and components to power hungry, infrastructure poor countries.

Spider lifts 25

Following the results from last month's pulse survey of the tree care sector we take a look at why spider lifts are proving so popular with arborists as well as reviewing the latest spider lift products and features on the market. We also speak to a spider lift distributor and rental company for their insights into the sector.



All Terrain 35

In our second instalment of the 100 to 180 tonne All Terrain crane market, Will North takes a look at the latest cranes in the 130 to 180 tonne range.



While some models target taxi crane work it also marks the point where five axle carriers become standard, with most models designed for project work.

Remote controls 43



The operation of machinery via remote controls has typically been used to allow operators to place themselves in the most beneficial position in terms of safety and visibility. More recently however it has also begun to take on a slightly wider meaning and purpose.

Mastclimbers and hoists 49



Having covered mastclimbers comprehensively earlier this year, we focus on passenger and material hoists. As well as covering the latest new products on the market we also take a look at some interesting high profile projects.

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In the next C&A

The next issue of Cranes & Access, scheduled for mid-January, will include features on scissor lifts and crawler cranes. It will also include our annual rental rate guide as well as take a look back over major industry and worldwide news and events that took place in 2020.

If you have any contributions or suggestions to make, or are interested in advertising in this issue, please contact us today.

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Will electric power be the future?

The past month has been an eventful one for new all-electric machines with JCB, Haulotte, Sarens, Zoomlion, Aichi, Sinoboom and LGMG, all announcing new models, while Genie unveiled its E-Drive scissor lifts. And we can expect further developments in the coming weeks.

When it comes to aerial work platforms, the majority of units have been either electric or hybrid for some time - small scissor lifts have always been so - but boom lifts are following suit, while truck and van mounted lifts are increasingly hybrid powered with electric platforms and diesel

chassis. The stage is now set for telehandlers to go the same way, and with JCB banging the drum, uptake and demand is bound to gather pace.

Cranes are a bigger challenge, although most tower cranes are already electric, while Zoomlion launched a 25 tonne all electric truck crane earlier this year, the Spierings City Boy was hybrid from the start and Liebherr now offers a plug-in option for its MK self-erecting mobile tower cranes. An interesting development this month was Sarens launch of the 1,650 tonne SGC-90 heavy lift crane – so obvious an application that one wonders why it took so long?

But in spite of all this activity, do we really think that electric powered cars and machinery are the ultimate solution to replace the internal combustion engine? When I posted the all-electric JCB story on social media, the cynicism displayed in most comments suggested not. And they may well have a point. The infrastructure is simply not being built fast enough in most countries for stress free recharging or even to provide sufficient mains power for the expected explosion in demand if we are to meet the latest emission targets. All those cars, vans, trucks, construction equipment and homes will take a lot of power and bringing it online takes time and much planning. Then there is the question of manufacturing and recycling all those lithium batteries – but that is another subject. So what's the alternative? Ever cleaner internal combustion engines will help a little in the short term, while hydrogen seems both expensive to produce cleanly and a challenge to handle.

It is hard to second guess what will power our equipment in 30 years' time, however electric – whether battery or mains – seems the best bet at the moment. Take a look at the article on page 24 - the installation of a fusion reactor – part of a multinational effort to commercialise the technology. But in the same feature we also highlight the ongoing growth of new coal power stations.

Who knows - Perhaps small fusion reactors will power our homes and vehicles in 2050? Either that or the climate changes to the point where we all live with intense sun and constant winds – providing us with an abundance of sustainable power, but a planet that struggles to support life as we know it.

In the meantime, I am betting on the innovative human spirit to overcome the obstacles that challenge a rapid conversion to electric powered machinery.

Leigh Sparrow

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