

# cranes & access



November/December 2022 Vol.24 issue 7

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**PICK &  
CARRY  
CRANES**

**TRUCK  
MOUNTED  
LIFTS**

**OUTRIGGER MATS**

**BAUMA REVIEW**

# DINGLI

Exceed · New Height

## HEAVY LOADING 363kg - 1000kg

 Engine  Electric

**In recovery**

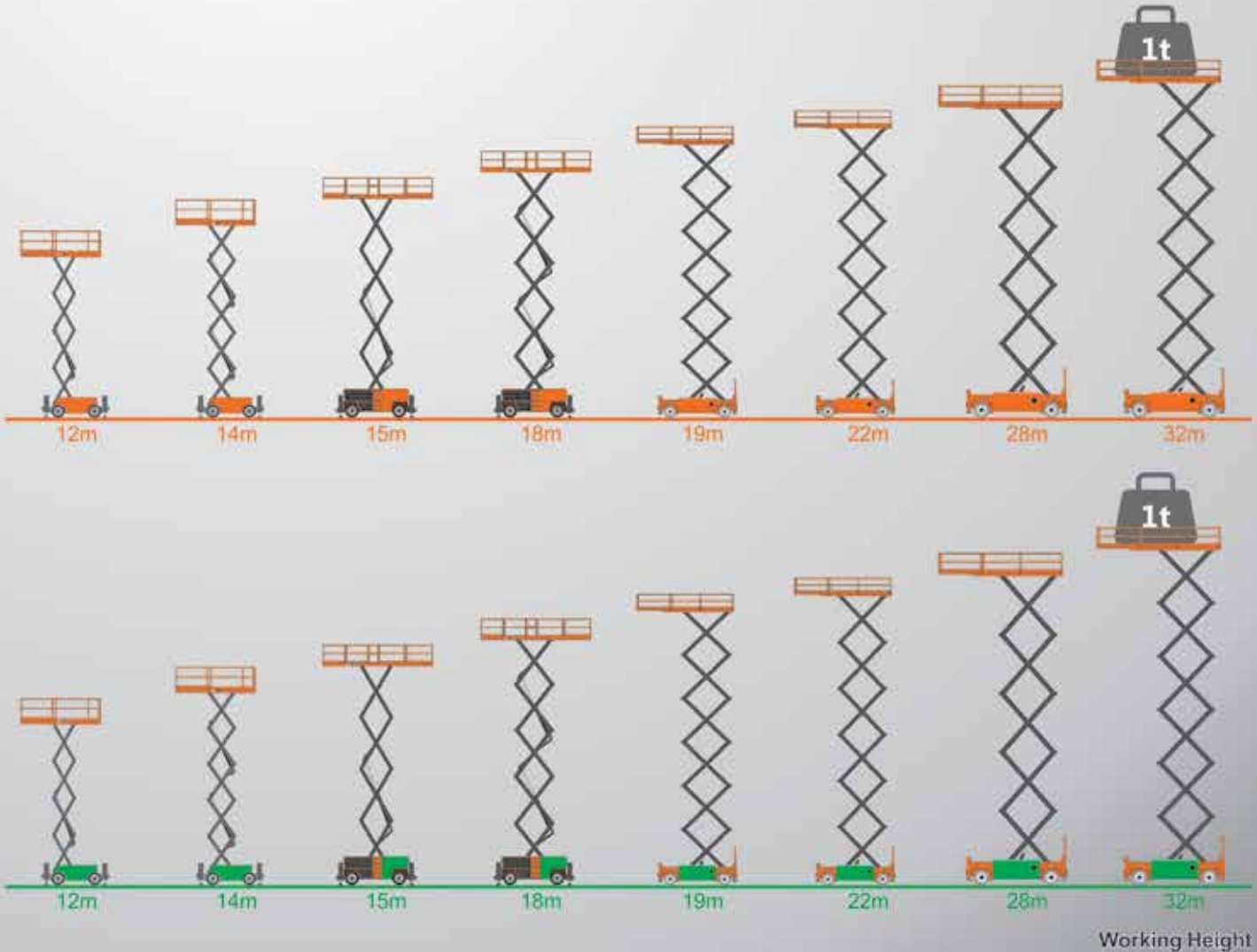
access **M20** MANUFACTURERS

1	JLG
2	Terex A
3	Dingli
4	Skyj

**Global TOP3**

2021 Industry Global Manufacturers Sales Ranking

\*Data source: (Access International)



## Large Scissor Lifts Series

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JLG to acquire Hinowa, XCMG's hybrid European AT, Böcker All electric crane, Smaller JCB telehandler, Tadano unveils new ATs, New Potain MDT, 100 tonne Grove RT, Faresin launches 17m full electric telehandler, 58m record breaking spider lift from Palazzani, New Liebherr 130 tonne RT, LGMG launches two compact masts, CMC's new 27 and 30m spiders, Manitou's new mid-range telehandler range, Grove and Tadano unveil hybrid All Terrain concepts and financials round-up...

## PICK & CARRY CRANES 17

Traditional industrial pick & carry cranes have been popular, although relatively niche lifting products for many years and their basic concept has remained unchanged for 60 years. In recent years global sales have been relatively flat, however there may be signs of a resurgence...

## TRUCK MOUNTED LIFTS 25

Development in the growing truck mounted platform market is increasingly dominated by the preoccupation with moving to electric power. While seen as a short rather than long term solution by some, most manufacturers are embracing it whole-heartedly, offering a variety of solutions from hybrid, part electric and more recently full electric lifts.

## OUTRIGGER MATS 33

Data from the IPAF accident reporting data base shows that platforms that overturn typically result in the death or serious injury of the platform occupants. Many such incidents could or would

have been avoided had the outrigger mats or tracking been specified and used. Unfortunately, the availability of concise, easily understood information regarding outrigger or wheel loadings/ground bearing pressures is not as readily available as it might be. We take a look at the challenges when trying to correctly size mats.

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Despite most large western aerial lift manufacturers boycotting the show, there were still plenty of new products to see at this year's Bauma. We have an extended pictorial review.

## PLATINUM INTERNATIONAL 55

Platinum International is a company that has gone from strength to strength supplying in excess of 1.5 million batteries a year, with revenues now more than £100 million. Mark Darwin spent time with sales director John Richards to find out more.

## LIEBHERR HYDRAULIC LUFFERS 63

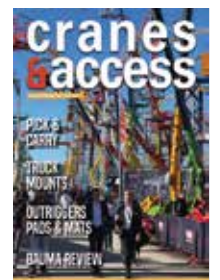
Liebherr announced its apparent late arrival into the hydraulic luffing jib tower crane market at Bauma. However, the company was in fact a pioneer of the concept in the late 1950s with its innovative HB cranes. Nick Johnson reports.

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## ON THE COVER

The sun was shining at the end of October on Bauma, the world's largest trade show held in Munich which attracted almost half a million visitors from 200 countries.



**IN THE NEXT ISSUE** Scheduled for publication in early January, the next issue of Cranes & Access will include features on Truck mounted aluminium cranes, Access in the aviation sector, the C&A annual rental rate guide and a Look back at 2022. 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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# COMMENT

## UNDERSTANDING TECHNOLOGY

Until about 10 years ago, I used to take my car to a very experienced local mechanic who had served time working on Formula One cars. However, when I took my latest car to him for a regular service he had to refuse, saying that the car now needed a computer and particular software to diagnose and reset any problems which a) would have cost a fortune to purchase and b) required training in something he didn't have any interest. "Anything mechanical - brakes, suspension etc - is fine, otherwise forget it." He retired a year or so later, primarily because most of his regulars had cars with similar levels of technology and simply become too complex.

Equipment is also becoming increasingly complex with cranes, aerial work platforms and telehandlers right up there.

At Bauma some of the new technology on show was as mind blowing as walking on the moon was 50 odd years ago. But no matter how advanced these systems, they all need power and knowledge to run correctly.

This fact was brought home recently when the platform of a large scissor lift working at a height of around 20 metres on firm but gently sloping ground, started to move away from the building's façade as one of the levelling jacks partially retracted, seemingly the result of a leak within the system or a seal.

Thankfully, those stranded in the platform were eventually brought down safely but the incident seems to have highlighted the misuse of the Emergency Stop button. The scissor lift - a modern DINGLI machine - had been levelled on the

sloping ground using its levelling jacks, which on this unit are equipped with pressure sensors in addition to level indicators, thus providing an early warning if a jack 'goes light' or the machine moves out of level.

However, as with many, if not most machines of this type, when the 'E-Stop' is activated, all the electrical systems are also shut off. In the past this was rarely, if ever, an issue as safety systems such as this were less common. And while the reliability of hydraulic circuits and seals have improved beyond all measure, cylinders still leak down from time to time.

I am told that most operator manuals, including this one, highlight the fact that the key or engine stop button should be used to cut the engine while working, not the Emergency Stop. In the case above it would not have prevented the leak, but a 'light leg' alarm might well have allowed a more orderly descent to check the issue, before it became more dramatic.

The advent of more technology and sophistication has changed things for the better but that also means it is more important to understand it, by reading operator's manual and proper familiarisation hand overs - both are now more important than ever.

#### 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](mailto:editor@vertikal.net)*