

# cranes & access

www.vertikal.net

February 2020 Vol.22 issue 1

**Van mounted  
platforms**

**Aluminium  
cranes**



**Conexpo preview  
Telehandlers**





## Extraordinary Height Larger SWL Ultra-light Design

### Subversive Design

Sophisticated European R&D·Intelligently manufactured by Dingli in a new state of the art facility·Global Patent Protection

### Subversive Innovation

Innovative technologies such as dedicated axles, overall component downsize, lower counterweight for lower center of gravity and lighter machines, modular design for ease of maintenance and interchangeability of parts.

### Subversive Performance(Compared with the same model in the industry)

The maximum working height heights have been increased by more than 2m to 30m on the telescopic Boom Lifts is 30m and 28m the Articulating Boom Lifts. Both models can be loaded into a standard container.

Maximum SWL increased by more than 30% to 454kg on telescopic booms and 300Kg on articulating Boom Lifts.

Maximum Horizontal Reach is increased by more than 1m.

Maximum gradeability is 50%, an increase of more than 20%.

The weight of the whole machine will also be 1 ton lighter.

### Subversive Maintenance(Low maintenance costs)

With a family-style modular design, 95% of the parts and more than 80% of the structural components are common across the range.

More convenient maintenance and lower cost of components storage.

Simple to maintain with integrated component down design.

With dedicated axles, the failure rate is lower.

### Telescopic Boom Lifts

**BT24RT**(24m) **BT26RT**(26m) **BT28RT**(28m) **BT30RT**(30m)

### Articulating Boom Lifts

**BA24RT**(24m) **BA28RT**(28m)



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Booth:BL262



Donington, UK  
May 13-14, 2020  
Booth:407

## On the cover:

A compact Merlo Panoramic 27.6 telehandler is used to carry building materials including ready mixed concrete from a drop off point in the street, through a tight entrance into the courtyard of an old building undergoing renovation in Beaune, France.



# C&A contents

17

Van mounted lifts



25 Aluminium boomed truck cranes



33

Telehandlers



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Three new Tadano RTs, Wednesday mornings carry most risk, New 6 tonne Klaas K1100 RSX, Ernest Doe pick up mounted crane, Haulotte launches BIM library, First Bobcat Waste Expert, 10 Demag City cranes for Felbermayr, New foldable platform, 80 cranes for Ulferts, TRT to handle Kobelco cranes, Rosenbauer acquires Italian dealer, First Potain MDT 809 in USA, New president for Manitou, New EWPA Good Practice Guide and financials round up...



The move towards electric power in the utility and public services market is gaining substantial momentum with a particular benefit for van mounted platforms, given that most of them work in the urban environment. We review the latest developments.

Aluminium boomed truck cranes 25



The aluminium boomed truck crane now appears to be making its mark as a useful tool among the mobile crane community in a good number of markets. We compare the new six tonne Klaas K1100 RSX with Böcker's flagship model the AK 52.

Telehandlers 33

We explore the history surrounding the 'telescopic handler/variable reach forklift' and check out some of the latest developments and products unveiled over the past year or so.



Comment 5  
News 6

Conexpo  
preview 43

This year's international construction equipment show is Conexpo in Las Vegas to be held in early March. We highlight some of the major new product launches along with a guide and full listing of lifting exhibits at this year's big show.



Batteries 53

The shift in people's attitude over the past year towards reducing their carbon footprint has resulted in an enormous move towards battery powered equipment, and in particular lithium ion battery packs. We take a look at this rapidly growing sector and some of the latest developments in battery technology.



regulars

Training 59

ALLMI Focus 61

IPAF Focus 63

PASMA Focus 65

Books and Models 67

CPA 69

Letters and obituaries 70

What's on 72

Online directory 78

In the next C&A

The next issue of Cranes & Access scheduled for late March will feature a Vertikal Days 2020 preview, reviews of the Conexpo show in Las Vegas and the ARA show in Orlando Florida, Telescopic crawler cranes and Mastclimbers and hoists. 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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## A massive impact

Just how big an impact will climate change have on the lifting sector? In a word - massive - and that is probably a 'massive' understatement.

Not many will remember the introduction of the first emission rules and regulations for cars - the 1970s in California and Euro 1 in Europe in 1992 - however as standards tightened with each subsequent level of legislation up to the current Euro 6d and Stage V for non-road mobile machinery, engine and equipment manufacturers have had to constantly redevelop their products to accommodate the changes.

We now know, however, that exhaust emissions from diesel engines - however small - are not only a major contributor to environmental pollution, but also the cause of major health problems.

Programmes such as Sir David Attenborough's The Blue Planet and efforts by Swedish environmental activist Greta Thunberg and Extinction Rebellion have highlighted the issue and increased pressure on governments around the world, transforming the public's attitude towards the subject. The UK for example, has just brought its ban on the sales of petrol, diesel and hybrid cars forward five years to 2035.

With their products due to become unsaleable, engine manufacturers are having to switch development programmes to alternatives. We are already seeing changes in the aerial lift and telehandler market as manufacturers move towards all electric machines, mostly using lithium-ion batteries. Our feature on page 53 outlines some of the latest battery technology and products.

But are lithium-ion batteries the long-term answer? Probably not, given the environmental cost of manufacture and problems with recycling. A substantial increase in development work on new technologies is now essential.

But the problem of climate change will not be solved by 2050 or whatever target date governments choose as their carbon zero deadline. We already have climate change which can be seen with the more extreme weather resulting in more manmade 'natural' disasters such as the bush fires in Australia. Extreme winds and storms are also increasing in frequency and power, resulting in a higher incidence of crane collapses and longer periods of crane and lift inactivity on job sites. These extremes are only likely to get worse in the years ahead as we try to tackle the issue.

With all this in mind, perhaps crane and work platform designs and standards need to be reviewed to take into account the more frequent cases of extreme weather, for example by designing products to cope with higher out of service windspeeds or the ability to work safely in higher wind speeds.

To anyone who thinks that just swapping from diesel to battery power is the solution.....think again!

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*