

# cranes & access



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mats and  
trackway**

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# Truck mounts go hybrid

The speed of the recent move away from diesel powered cars has been staggering. Several manufacturers have led the way announcing either a move to full electric production or ceasing diesel engine production over the next few years. A number of equipment manufacturers - including crane and access producers - are following suit, with many aerial work platform companies introducing hybrid models, while pushing the all-electric threshold to greater heights. Haulotte for example, announced a completely new strategy earlier this year - dubbed Blue Orientation - and plans to cease making diesel machines over the next few years. Holland Lift meanwhile says that diesel models now represent only 25 percent of its production, the rest being electric or hybrid models.

The move towards electric is now spreading rapidly to the truck mounted platform market. Our last feature on the smaller 3.5 tonne truck mounted platforms last June did not even mention the word 'hybrid'. However, over the past few months numerous manufacturers have introduced hybrid versions. In the following few pages we take a look at the new hybrid models and catch up on the other developments across the sector.

Before we look at the latest hybrid introductions an unusual truck mounted variation has reappeared that can be driven on a B+E (BE) driving licence. The 31 metre Comet Compact 3117 Jib is a joint effort between Italian manufacturer Comet and Dutch sales, rental and service company Hoogwerker Centrum, which also owns PowerLift in Germany. It uses a 3.5 tonne Iveco chassis with the



The 31 metre Comet Compact 3117 Jib uses a 3.5 tonne Iveco chassis with the platform mounted on trailer frame that creates a third axle.

platform mounted on trailer frame that creates a third axle which is connected to the top of the truck's chassis. The platform looks as if it is mounted to a three axle chassis although it is claimed that the 'trailer' with platform can be disconnected in about 10 minutes leaving the bare two axle 3.5 tonne chassis.

The all up weight of the truck and 'trailer' is 6,950kg which means that the combination can be driven with the trailer driving licence but not a standard B licence (see Licence requirements below).

The Compact 3117 uses a dual sigma type riser with three section telescopic boom and jib. Maximum outreach is 17 metres with 250kg platform capacity covering a 240 degree area over the rear and front outriggers. Outreach with 250kg is reduced to 13.5 metres over the cab, while the 17 metres outreach through 360 degrees is possible with a reduced 120kg capacity. Overall length is 8.62 metres and it has a rather exposed overhanging rear jib and basket. Overall height is 3.1 metres, with an overall width 2.36 metres, maximum spread on the beam and jack outriggers is 3.6 metres.

Controls are fully hydraulic, while the main hydraulic system is relatively low pressure at 25 bar. Other

features include a bi-energy electric/diesel power pack, and 180 degrees platform rotation. Price is said to be 'attractive' - at least when compared to a high-tech 29 metre 3.5 tonne truck mount or a regular 31/32 metre model on a 7.5 tonne chassis.

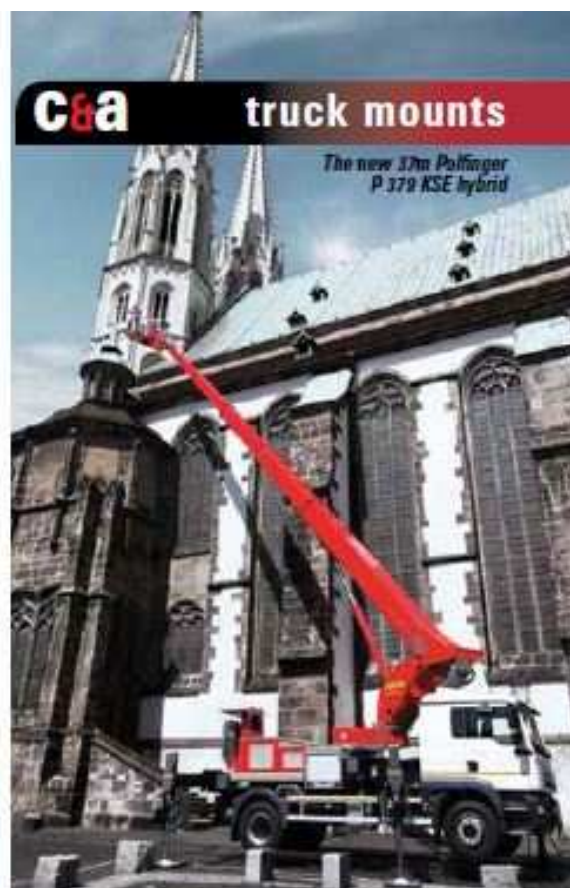
#### Seen it before?

This concept has of course been seen before. In 2010 Hoogwerker Centrum worked with Oil&Steel to launch a similar format platform but with a lower 27 metre working height called the Snake 2714 Compact. The platform had a 14.5 metre outreach and 300kg platform capacity. The new machine obviously benefits from the recent gains in design and high strength steels.

As far as we know, the Oil&Steel machine is the only machine that used this format and it would appear that a fair few have been sold in the Netherlands and Germany. How well this machine is adopted in other countries will depend on several



In 2010 Hoogwerker Centrum worked with Oil&Steel on a similar format 27 metre platform called the Snake 2714 Compact



**c&a** truck mounts

The new 37m Polfinger P 379 KSE hybrid



Maximum outreach of the Comet is 17 metres with 250kg platform capacity covering a 240 degree area over the rear and front outriggers



## truck mounts

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The Sorage forSte 32DJ has a 32 metre working height, 17 metre outreach with 280kg capacity

factors - the driving licence regime in each country and how rental companies view it.

However, with a working height

of 31 metres, the Comet may just have hit on a winning formula. Equivalent working height machines are mounted on 7.5 tonne chassis



The Ruthmann TB330 has a 33 metre working height, 320kg capacity and 17 metre outreach

and moving up a metre or two means using a much larger and more expensive 18 tonne chassis. This means that the Comet is the only manufacturer with a 31 metre working height truck mount that can be driven on the B+E licence. For the 7.5 tonne chassis platforms

the driver must have or pass the C1 licence. For those with only a B licence limited to driving 3.5 tonne trucks the 28.6 metre Ruthmann TB290 is still the highest platform available.

The Comet is long at more than 8.6 metres - the result of bolting on the trailer section - however it has 17 metres of outreach even with its maximum 250kg capacity and weighs in at under seven tonnes. The only other machines to better these figures are the Sorage 32DJ and Ruthmann TB330 - both on 7.5 tonne chassis. The Ruthmann TB330 tops the 7.5 tonne chassis platforms with its 33 metre working height, 320kg capacity and 17 metre outreach. The Sorage is not far behind with a 32 metre working height and 17 metre outreach with 280kg and is mounted on a much more compact chassis, but weighs 7,600kg which may need an additional category on the driving licence.

### How the Comet compares to other 28m+ truck mounted platforms

Make Model	Comet 3117	Palfinger P280 B	Sorage forSte 32DJ	GSR E290PX	Multital MX280 EX	Ruthmann TB290	Ruthmann TB330
Work height	31m	27.6m	32m	28.7m	29.3m	28.6m	33m
Chassis	3.5 + trailer	3.5/5/7.5t	7.5t	7.5t	7.5/6t	3.5t	7.5t
Max capacity	250kg	230kg	280kg	220kg	225kg	230kg	320kg
Outreach with max capacity	17m/250kg	9.5/230kg over side 13m over rear	17m/280kg	15.6/220kg	13.2m/225kg	10m/230kg side 13.2m over rear	17m/220kg
Max Outreach	17m/250kg	17m/100kg over rear	19m/120kg	15.6m/220kg	14.9m/120kg	16.2m/100kg	21.2m/100kg
Length	8.62m	7.85m	7.99m	7.6m	7.94m	6.94m	8.79m
Height	3.1m	2.9m	3.15m	3.5m	2.95m	3.02m	3.56m
Weight	6,950kg	3,500kg	7,600kg	7,500kg	7,500kg	3,500kg	7,490kg
Slew degrees	360 Cont	500	700	450	400	450	500
Licence required	B+E	B/C1	C1/C LGV	C1	C1	B	C1

*What you can tow on a standard licence depends on when you passed your test*



#### **Licence requirements**

The trailer concept appears to be more acceptable in Germany and the Netherlands while in many other countries, the UK included, the concept has not been adopted and people's understanding of the law regarding licences and tachographs etc appears somewhat vague. Tachograph rules apply throughout the UK if the maximum permissible weight of vehicle or vehicle combination is more than 3.5 tonnes.

Depending on where you live, if you are younger than 38 years old you will have a regular B licence and are limited to driving vehicles with a GVW of less than 3.5 tonnes. If towing, the trailer must weigh less than 750kg. In many parts of Europe, including the UK, older drivers automatically have the B + E (BE) category licence and can drive a vehicle up to 3,500kg and tow a heavy trailer.

With the B licence, you can tow a heavier trailer, BUT the weight of

the vehicle and trailer combination must not exceed 3.5 tonnes.

There is also a B+ trailer driving licence where you can tow more than 750kg and may exceed the 3500kg maximum of the category B licence. In this case, your car and loaded trailer may weigh up to 4,250 kg together.

The B + E (BE) licence allows you to tow a much heavier trailer - a 3.5 tonne GVW truck and up to a 3,990kg 'fixed' trailer - and this is where the Comet should comply as it weighs 6,950kg.

#### **Hybrid truck mounts**

As we have mentioned before, there has been a dramatic move among aerial lift manufacturers towards alternative power sources to diesel. The main reasons for this trend is air and noise pollution, however probably the most powerful driver for the equipment owner is the prospect of much lower running costs. Electric vehicles are simpler, more reliable and less costly to power and

**The 31m Comet  
Compact 3117**

