Almost but not quite!

If there is an 'almost...but not quite' product sector in the powered access business these days, it must surely go to trailer lifts. At an earlier stage of the powered access market, trailer lifts made up a substantial proportion of the European powered access fleet and have been the starting point for many rental companies dipping their toes into the market before expanding into booms and scissors. However, for a variety of reasons, all that has changed. Cranes & Access investigates...

As specialist powered access rental fleets grew in size, there was a tendency to offer a limited range of standard products, such as 45ft booms, 19ft scissor lifts etc...not so good if you wanted something a little different. This tendency had the effect of limiting user choice and often blocking new products that were not already well established in the market.

Southern Europe has never been a market for trailer lifts, mainly due to road regulations relating to towing equipment and the challenges of type approvals, these factors resulted in the growth and popularity of the small truck mounted platforms in those regions. The result is that the market for larger or more specialised trailer lifts - which remain relatively popular





in German and Scandinavia - never took off in the UK. As the specialist and larger rental companies began to turn their backs on the trailer lift, tool hire outlets had spotted the potential and began to invest in them, but being large national players, they limited their investments to two models, 12 and 17 metre articulated units.

Straight or articulated?

There is another variation between the European markets - articulated or telescopic booms? The first trailer lifts were modelled on and often used the same lifting mechanism as the earlier truck mounted lifts and were largely simple, two boom articulated affairs with mechanical levelling linkage. Lifts such as this are still produced but are massively outsold by models with jibs and telescopic upper booms.

As the access market became more sophisticated in the mid 1980's it became evident that the simple articulated trailer lift did not offer enough outreach for many applications, particularly at lower heights. Another possibly more important issue was the large tail-swing at lower heights and thus the potential for accidents, when working alongside rights of way. To solve the outreach issue most producers added

articulating jibs and telescopic top booms and reduced the length of lower booms/risers, while other manufacturers - particularly in Scandinavia - introduced straight telescopic boomed models which overcame both the outreach and the tail-swing issues. With excellent outreach and in many cases lighter weight, the concept took off in the Nordic countries, almost completely eliminating articulated models for many years. As time progressed and self-propelled articulated boom lifts became more popular, articulatedtelescopic trailer lifts began to creep back into some sectors of the Scandinavia in order to provide up and over reach, including ultra-



trailer lifts

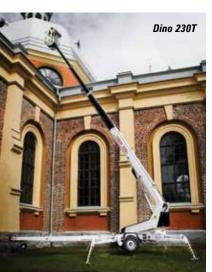
compact 12 metre models with short risers and then larger units which used dual parallelogram risers to eliminate the tail-swing problem, while still offering the up and over reach that is ideal for certain applications. But in the UK, Ireland and many countries in Southern Europe, the straight telescopic trailer lift has not caught on at all.

Nordic users prefer straight telescopics and have always appreciated the cost benefits of larger units - some of which exceed 22 metres - compared to truck mounts or self-propelled lifts of the same height. The strong market supported numerous manufacturers, including Denka-Lift, Ommelift and Dinolift and a few others which have now ceased trading. Germany and the Netherlands - sort of stuck in the middle of the north-south divide - have always used both types and the market has flourished thanks to the highly fragmented nature of the German access rental market.

Trailer lifts lend themselves to the smaller rental companies where an owner operator can run half a dozen trailer lifts or so with a 4x4 vehicle to deliver and service them. Such a set up with a mix of trailer lifts can provide a decent level of income, supplemented with the odd sale of a new or used machine.

Shift to spiders?

In the past year or two there appears to be a shift away from trailers towards spider lifts with trailer lifts now becoming more of a niche product as even the larger rental fleets start to invest in spiders. A small operator can simply add a general equipment trailer to his fleet and deliver most spider



lifts as easily as a trailer lift. However generally speaking, the investment is substantially more - about double - although this differential may be smaller for the larger units.

One of the criticisms levelled at the trailer lift when compared to a tracked spider lift is that it is too long and therefore difficult to negotiate in

confined spaces, with narrow tight turns, such as when accessing the rear of individual homes or small office blocks etc... UK manufacturer Niftvlift - which manufacturers both trailers and tracked lifts - disagrees.

It accepts that the trailer lift is longer but when comparing both of its 12 metre models the telescopic 120T is only 550mm longer at 4.5 metres than the tracked machine as the boom is common to both lifts. Other dimensions such as machine height, width, platform capacity, basket size and outrigger spread are all exactly the same. But there are two areas where the trailer lift wins. It is 450kg lighter and about half the price. Weight is important because of the low floor loadings on new construction sites and lightweight machines are ideal. There are some sites where steel erectors use trailers rather than the more common self-propelled booms just because of the reduced floor loading demands.

The lower sales of trailer lifts in recent years has led to its scarcity on the second hand market, to the point where good used lift command very good prices when they do appear and are much in demand.

Rental rates

If we compare rental rates for both







trailer is £213, while a 17 metre trailer is £476, which compares very favourably with a spider lift at £410 for a slightly larger lift up to 15 metres and £586 for a 17 metre spider, and yet the spiders can cost almost twice the price!

The trailer lifts are less intimidating for inexperienced users - coupled with the fact that most small builders are happy to collect the machine with a 4x4 or a van, saving on transport cost. This allows the smaller more specialised rental companies to offer trailer lifts at sensible rates during the week because they can get good money over the weekend. Utilisation of a machine is not the most important factor, rather its profitability, and trailer lifts can offer a very good return on investment compared with many other types of platform. Given all the facts it is hard to see why the trailer is not more popular. Demand should also be on the increase because of the Work at Height regulations and increasing pressure for tradesmen such as window cleaners, painters and general maintenance workers to have a safe method of working at height. Ultimately it is probably down to lack of availability.

North American market

Development in the in the North American market was very different to that of Europe, in that although trailer lifts had always been around, they were relatively rare until the end of the 1990's. From a manufacturing point of view there were a few small companies producing simple, rustic machines which sold to smaller 'Mom & Pop' rental companies or end users such as tree surgeons. Self-propelled lifts had also become popular earlier







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Innovations











trailer lifts

in North America than elsewhere, so that the trailer lift stage of development was bypassed.

Another significant difference was that the cost of transport/delivery has always been far lower in the USA. Most rental companies already owned either specialist delivery trucks or large inexpensive pick- up trucks, this combined with the fact that American contractors tend to rent by the month rather than by the day or week as was common in Europe, meant delivery costs were not a factor driving rental companies towards trailer lifts, or for that matter truck mounted lifts.

However that all changed when UpRight started marketing its two European-built trailer lifts, Bil-Jax started badging Aerial trailer lifts as well as building its own models and Niftylift entered the US market. To the surprise of many there was a relatively strong initial take up, as family rental stores found that the more sophisticated European-built trailer lifts suited their business models. They were relatively cheap and lightweight for the working heights they offered and with most



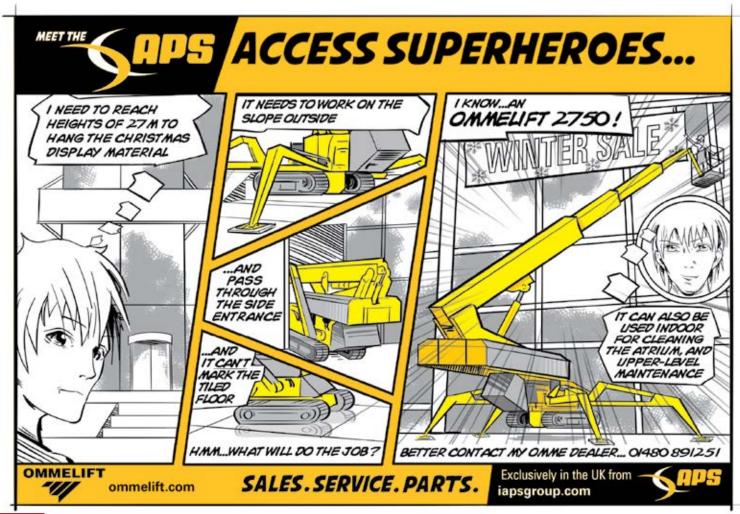


builders and contractors owning pick-up trucks complete with tow hitches collection or delivery was easy

Seeing this market begin to take off, Genie surprised many at the time by launching its TZ trailer lifts. With the market gathering pace JLG started work on its Tow-Pro range which it announced in mid-2004, leading to the first model launch - the 12.6 metre T-350 - at the 2005 ARA, followed by the 17 metre T-500J. This period probably saw the peak of the North American market for

this type of lift. With hundreds of new trailer lifts pumped into the sector, demand appeared to have been satisfied and growth not only slowed, but stopped and even contracted. Since then the market has been mainly a replacement one. Perhaps the two big manufacturers dived into this market prematurely? Needless to say they are not exactly devoting significant engineering resources to this sector, or planning to expand their two model line ups. Niftylift - the UK market leader for trailer lifts, almost since it started

producing in 1985 - says that over the past few years North America has been one of its best markets. In the early days, it had a lot of local competitors Basket - Hi-Spec, TR 15.80 Go Industries, Aerial and Simon to name a





few - and it always maintains that the market for trailer lifts has never been as big as many people think. It also says that there are many aspects of a trailer lift design that makes them tricky to manufacture and this has caught many manufacturers out.

The other significant market for trailer lifts over the years has been Australia and New Zealand, with Snorkel having acquired New Zealand based Talon Access Equipment from Crown in 1990. Snorkel still builds trailer lifts in New Zealand, the latest model being the 13.2 metre working height, 5.9 metre outreach TL39J.

Emerging markets

One would think that trailer lifts would be ideal for emerging markets and certainly they do appear to lend themselves to such markets, with lower cost and easy transport. But with a few small exceptions this does not appear to be the case. In some cases this is due to road regulations (such as Russia) and in others, a lack of decent used trailer lifts. Oddly as sales of new trailer lifts has flat-lined, the price of used models has grown as demand remains buoyant.

So what does the future hold for the trailer lift and are its days numbered? It is hard to say but it should not be written off just yet. As developing markets continue to move towards powered access trailers may find a new audience, while in those parts of Europe where trailer lifts can be towed, we may just see a resurgence, at least for smaller models, as tradesmen who carry out work on domestic buildings and small commercial/industrial premises finally step up the move away JLG from ladders and T350 towers. We would not be surprised to

see growth in

lightweight, full



specification 10/12 metre models and possibly the ultra-light one man units from Dinolift, Omme and Denka, as well as some of the specialised larger models, including the growing number of trailer cranes with decent platform attachments such as the Böcker. Watch this space.

Trailer lifts the pros and cons

- Lightweight for their height
- Low price per metre of work height
- Simple delivery/collection for smaller companies
- Rental rates strong
- Easy/less intimidating to operate
- Durable with a long life
- Can be specified with an on-site drive system

Cons

- Utilisation patchy for rental companies
- Longer than self-propelled machines
- Cumbersome to manoeuvre in tight quarters - really needs two people to set up
- Delivery and short rental periods inconvenient for larger specialist rental companies
- Outriggers require proper set up



trailer lifts C&a Trailer roundup

It has been almost four years since Cranes & Access took an in depth look at trailer lifts, during that time the sector has developed very slowly, in terms of products and manufacturers. As discussed in the previous pages, the trailer lift is a stable. dependable product but no longer appeals to many mid to large rental companies, and as a result end-user take up has not progressed, in fact it has almost certainly declined.

In terms of manufacturing the sector has seen both bankruptcies/ acquisitions and a new player entering the sector. Four years ago we reported on Italian tracked spider manufacturer Platform Basket's surprising interest in trailer lifts. given that they have never been popular in Italy due to the towing regulations. It had clearly set its sights on export markets. When the first model - the 17.7 metre working height TR 18.90 - was launched at Bauma 2010 the company was

planning a three model range with a 15 metre model ready to go followed by a 13 metre at the end of 2010. Since then the 15 metre TR 15.80 has made an appearance but not its smaller brother. Being relatively late into the market the pair have all the latest features bi-energy, articulated jib, platform rotation etc... but no radical technology developments.



How the Platform Basket TR 15.80 compares with other 15 metre lifts

| Make | Platform Basket | Niftylift | Dinolift | Omme | Omme |
|-------------------|--------------------|-------------|------------|--------------|-------------|
| Model | TR 15.80 | 150T | 150TB | Mini 15 EXJ | 1550EX |
| Working height | 15.0m | 14.7m | 15.0m | 14.6m | 15.35m |
| Max cap | 200kg | 225kg | 215kg | 125kg | 200kg |
| Max outreach | 8.6m | 7.55m | 10.0m | 8.27m | 8.5m |
| Height stowed | 2,140mm | 2,000mm | 2,140mm | 1,940mm | 1,990mm |
| 0/A Width | 1,650mm | 1,600mm | 1,780mm | 1,500/1050mm | 1,600mm |
| O/A Length | 5.70m | 5.55m | 6.43m | 6.03m | 7.25m |
| Basket dimensions | 1.2 x 660mm | 1.4x650mm | 1.3 x700mm | 850 x 700mm | 1.25x800mm |
| Weight | 1,900kg | 1,725kg | 1,835kg | 1,500kg | 2,000kg |
| Boom | Articulated | Articulated | Telescopic | Articulated | Articulated |



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trailer lifts



The TR 15.80 has a 15 metre working weight and 200kg platform capacity. As can be seen from the chart below, for an articulated machine its 8.6 metre outreach is impressive, and surprisingly 1.8 metres more than its bigger brother. And while other dimensions are very similar to the TR 18.90, the TR 15.80 is 100kg heavier at 1,900kg.

The Denka story

Over the past few years one company has been through a massive transformation - but has emerged possibly stronger than before. In March 2012 Danish manufacturer Denka Lift - acquired in 2011from Skako by four investors - filed for bankruptcy after efforts

to make a go of the company failed. The company had re-started production at Denka's iconic plant in Holbæk, but did not have the necessary cash flow to continue operations. It also ran into CE approval problems.

Denka's German distributor Rothlehner acquired the design rights and replacement parts business and immediately offered worldwide product support for all Denka Lift products from its base in Germany. It also started to look into the reality of resuming new machine production in Germany. "We want to end the turbulent times of Denka and bring the brand back to his former strong

position," said chief executive Manfred Rothlehner, "Before we considered the first deliveries of any new machines we had some challenges that had to be solved." Rothlehner

began by securing the

delivery of replacement parts and components and just a year after rescuing the company, has started ramping up its German production facility as deliveries of new Denka trailer lifts begin to flow again - two years after it went bankrupt and three years after full production had ceased.

"The operations are returning to normal and we see that our performance from month to month is growing," says Rothlehner. "Manufacturing the standard trailer equipment such as Junior 12, DK18, DL18, DL21 and MK25 is already underway and the first narrow DL22N and DL28N trailers are also in progress. At the end of the year the big trailers DL25 and DL30 will

Denka

iunior





also be produced. In our view, there will still be a demand and place in the market for trailer lifts - even if a significant proportion of the sector has shifted to 3.5 tonne truck mounts and crawler lifts."

A feature of all the Denka narrow atrium lifts is the minimum width of just 890mm. The two smaller narrow lifts - the 19 metre working height DL19N and the 22 metre DL22N - have been specifically developed to be very compact and feature a removable basket as well as a built-in drive system on all three wheels.

Denka Lift will offer a range of machines from the 12 metre working height, 985kg GVW Junior 12 right up to the big, battery operated DL machines with working heights of 25 and 30 metres. These are also available with a diesel or petrol generator. The largest platform - the DL30 - has a total weight of less than 3,500kg.

One of the latest machines to be delivered is an 18 metre DL18 to Essen-based Enderling platform rental, a Denka customer since 1992. Managing director Joachim Enderling said that the decision to buy a new 18 metre Denka trailer lift had been suspended after uncertainty about the continued existence of the brand and its later problems. "However all those concerns have been eliminated now that Denka is in the hands of its long standing supplier Rothlehner," he said.

Denka Lift has also moved back into the Nordic market, with two recent deliveries of Denka Junior compact

trailer lifts, following a Scandinavian road show. The first unit off the line went to Carlsson & Co, Denka's Swedish sales and service partner based in Falkenberg, while another unit was delivered to Ringsted Liftudlejning in Ringsted, Denmark.

New Dinolift for mid-summer

Finnish manufacturer Dinolift is planning to launch a revised 180XT Il articulated telescopic trailer lift at Apex this June. The company says the 18 metre 180XT II is more versatile and includes new safety features. The compact unit has a platfrom capacity of 215kg, with an unrestricted outreach of 9.2 metres. As a one man machine the outreach increases to 11.2 metres. Its spidertype outriggers, allows the unit to be levelled on slopes of more than eight degrees. In addition to its technical improvements, the Dino 180XT II has an auto Start/Stop function which automatically switches off the engine when the machine is stationary, thereby reducing both fuel consumption and noise. Other features include automatic chassis leveling and hydraulic coupling of the self-drive system.

Dinolift is also promoting the smallest machine in its 17 model trailer lift range, the ultra-light 10.5 metre 105TL, weighs just 970kg and can be towed by most vehicles.

Omme type approvals

Danish-based Omme lift has invested in full EU road type approvals, for all of its trailer lift





models, including its Mini-Series. The three model range, the Mini 10.5. E Mini 12 EJ and Mini 15 EXJ. offer working heights of 10.5, 12 and 15 metres respectively. With fully equipped weights of between 1,050kg and 1,500kg they are designed to be towed behind a mid-size car or small van. All models have adjustable axles that can retract to under 800mm, in order to allow them to pass through a garden gate to reach the rear of homes and small businesses etc...

The Mini 12 and 15 are available with on-board battery power, while the 10.5 is supplied as a 230/240 volt mains-powered unit. Carsten Poulsen, Ommelift area sales manager, says: "Even the small Mini 10.5 offers outreach far beyond what an articulated 12 metre trailer can achieve, particularly at lower heights."

A Mini 12 EJ fully equipped with friction self-drive and auto-set hydraulic outriggers, costs around €25.000, but Ommelift believes this is justified by its enhanced working envelope. "Although the price maybe a little higher than for other trailers with similar working heights, customers and users appreciate the substantially bigger working envelope of the Ommelift," says Poulsen.

Northern Europe especially Denmark, Norway, Sweden, Finland and Germany are the main markets for the Mini-Series. One popular application is the maintenance of smaller shopping centres, where the trailers provide a cost-effective solution to working at height.

Launches of larger trailer mounted products are few and far between however 18 months ago Ommelift added the 22.6 metre 2300 EX to its 12 model trailer lift product line. The articulated lift has a dual riser to provide up and over reach without tail swing and offers an outreach of 12.7 metres with 80kg or 10 metres fully unrestricted with 200kg in the platform. Up and over height is about six metres. Weighing 3,150kg it has an overall length and width of 7.32 by 1.7 metres and is powered by a 200Ah battery pack however it can also be used in conjunction with a petrol or diesel engine or supplied as 230V AC mains unit.





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