

Stairway to heaven.

THE CLIMBING SPECIALIST

LUFFING CRANES

RANES I FROM S TO XXL

MADE IN GERMANY

Our aim is clear: keep going straight up – to the top. But how? Cranesational luffing technology from WOLFFKRAN shows and leads the way. With pioneering power and unique climbing know-how WOLFF opens heavenly perspectives that set new standards for architecture and construction. Worldwide. For more information about the power brand WOLFF: Tel. +49 7131 9815-0



German ca trailer cranes

Changing the thought process of equipment users can be a long and slow process. Over the years the telehandler and more recently mastclimbers show that it can be done. One item of equipment that is currently trying and stands a good chance is the trailer crane. Crane & Access reviews progress in this growing niche sector.

Equipment such as the mini excavator, articulated dump truck and telehandler were all available for many years before being welcomed by users like long lost sons. All went through a similar process of adoption that took many years before being accepted as the 'norm'. In the crane sector, it took the All Terrain about 20 years before dominating the sector and the mini/spider crane is only now just beginning to gain mass recognition with increasing sales. Unfortunately for the distributors in the UK, the trailer crane is several years behind the mini crane, but has huge potential.

Aluminium trailer cranes are made by three German manufacturers -Böcker, Klaas and Paus. Like other types of equipment (UK van mounted producers in the Market Harborough area for example) the three companies are clustered geographically, Bocker is based in Werne, Klaas in Ascheberg and Paus in Emsbüren - in the adjacent North Rhine -Westphalia and Lower Saxony regions. Two of them have been established for a long time -Klaas is celebrating 75 years and Böcker 50 years in production this year.

The main markets for trailer cranes tend to be Germany and France, which of course are also strong markets for self erecting tower cranes with total European sales now approaching 500 units. In Germany Böcker and Klaas are joint market leaders but it is thought Böcker is European market leader.

The manufacturers of these machines have never really seen the UK or Ireland as a serious market, possibly because of contractors seeming reluctance to use equipment such as small self-erectors, so very few have been used here.

In fact it was SED about two years ago that Oktopus UK showed the Klaas trailer crane for the first time with specialist panel and glass lifting attachments. It was hoping that the machines would primarily gain acceptance through the glazing





sector in the same way spider cranes initially gained popularity. Later that year the Paus Skywalker machine was taken on by GGR-Unic - again a company heavily involved in the glass installation business with its suction devices and Unic spider cranes.

their many advantages. Estimates on the total number of units currently working in the UK hover around the 20 mark, made up mainly of rental machines in the distributor's own hire fleets and a few recent sales.



Some Böcker products have been available in the UK for some time but its aluminium trailer cranes made an appearance last July when it appointed Power Lifting Services to look after its trailer and truck mounted aluminium cranes.

The trailer crane's route to success has so far mirrored that of the mini crane. Initially dismissed by many 'proper' crane hirers as toys, trailer cranes are very gradually beginning to gain a following as contractors start to appreciate The changing attitudes towards the new equipment is being helped by legislation such as the material handling regulations as well as the growing trend towards more environmentally friendly, lower carbon footprint machines. Saving time and money are also high on most users' wish-lists but given the conservative nature of many contractors, supplied by a crane rental industry that prefers to own general purpose machines than niche equipment and it is not hard to understand the slow progress.

trailer cranes



So what is a trailer crane and what can it do? With just three manufacturers all producing what initially look like similar machines, it is fairly easy to decide on a specific machine. Like all things, there are price differentials with some more expensive with build-quality, features and performance to match.

However, being relatively simple and quick to set up and not requiring an expensive and complicated chassis, the units are relatively inexpensive to run and hire compared with the alternatives which range from a small All Terrain crane, to a large 360 degree telehandler, very large lorry loader or self erecting tower crane.

As can be seen from the table. maximum capacities range from 500 to 1,500kg, compared to machines that are currently used for similar duties - ie large truck-mounted loader cranes, larger 360 degree telehandlers or small city, truck and AT cranes this does not sound high, although it is comparable with self erector tower cranes. If you ask trades such as roofers, M&E contractors and housebuilders the question 'what do you want to lift to roof level or over and how heavy is it' the answer you will receive is generally that weight is no more than 500kg. One of the heavier items lifted to the top of buildings is an air conditioning unit that may weigh up to 400kg. So while the maximum capacity is relatively

small, it is more than enough for the tasks required.

All the cranes have maximum lift heights ranging from 24 to 31 metres and all are capable of taking at least 200kg to a radius of 17 metres (and the best 200kg to 21 metres).



So these are aimed specifically at certain sectors of the lifting market. It is hardly surprising therefore that the trades that have already spotted the potential of these machines in a big way are roofing and glazing contractors and general housebuilders.

One of the other advantages is the machine's low weight. Given that all are towed by normal 4x4 vehicles, even the heaviest is just 3.5 tonnes. Compare that to a small All Terrain and imagine the effect when working on a school playground with a minimum covering of asphalt

| Trailer Cranes | | | | | | |
|----------------|------------------|-----------------|---------------|-----------------------|----------------|---------------------------|
| Make | Model | Max Capacity | Max Tip ht | Transport LxWxH /m | Machine GVW | Capacity at max radius |
| Bocker | AHK 25/800 PLC | 800kg | 25m | 8.5x2.2x2.45 | 2,700kg | 250 @17.5m |
| Bocker | AHK 27/1200 PLC | 1,200kg | 27m | 8.5x2.2x2.45 | 2,700kg | 200@19.8m |
| Bocker | AHK 30/1400 PLC | 1,400kg | 30m | 9.0x2.2x2.60 | 3,500kg | 200@19.8m |
| Bocker | AHK 31/1500 PLC | 1,500kg | 31m | 9.1x2.3x2.92 | 3,500kg | 200kg@21m |
| Klaas | K17-24 | 500kg | 23.7m | 7.9x2.1x2.20 | 2,100kg | 200kg @17m |
| Klaas | K19-28 | 1,300kg | 28.4m | 8.0x2.1x2.45 | 3,500kg | 250kg@19m |
| Paus | Skyworker PTK 30 | 1.200kg | 29.8m | 9.1x2.1x2.40 | 3,490ka | 250ka@18m |

and very little base. The low weight also means the machines can also be used inside the building in weight sensitive areas.

As we all look for more environmentally friendly, lower carbon footprint machines, these cranes fit the bill. No large gas guzzling, high maintenance chassis, the trailer cranes use a small petrol, diesel or electric power pack to operate the crane functions as well as move itself around site either driving one of the tandem axles or the jockey wheel. Generally they are very manoeuvrable even in poor ground conditions and can be easily and accurately positioned.

Not needing an expensive chassis, the units are therefore cheaper to purchase, rent, run and maintain. They are also much easier and quicker to set up and operate some taking just five

minutes when worked by an experienced operator.

Once in position on site, the machine extends its swing-out outriggers and with manual leveling via hydraulic jacks. Most machines have several outrigger positions so that the crane can be variably rigged to set-up alongside a building or avoid an obstruction.

Böcker is launching its new chassis in June/July which has infinitely variable positions on all four outriggers, this crane also has the very latest PLC control so that depending upon the load and the position of the outriggers the machine automatically calculates its maximum capacity and radius and cuts out when either is reached, obliging the operator to improve the load moment before continuing.

Remote radio controls are also available on all machines with some also including a full LED display of the weight on the end of the hook, the height and boom angle. This also allows the operator to follow the load and visually see it to its final position - even if the crane is out of sight.

Both the Böcker and the Paus machines use closed aluminium profile booms which they claim gives improved rigidity. Klaas on the other hand opts for an open lattice

ladder type arrangement on both the boom and jib.

Either single or double section jibs are manually set into position to suit the application, although the Skyworker has a hydraulic toggleknee joint which allows the jib to be raised from an angle of 0 to 172 degrees. The Böcker hoist features a slack rope device and rope layer control to help avoid rope problems.

So not only are these machines simple, quick and easy to set up and relatively inexpensive to buy and run, but they are also versatile because of the wide range of attachments available. Brick grabs, rubble boxes, long-load carriers,



glass handling vacuum units and of course man baskets are all available.

Until these advantages are fully appreciated by users, these cranes will remain a niche rental machine. However as hires turn to sales, (which is now happening) it will not be long before they start to sell in larger numbers. And unlike most mobile cranes, delivery times are far more reasonable.

Unfortunately, one factor that is currently working against these European produced cranes in the UK - along with every other item of equipment priced in Euros - is the falling value of Sterling against the Euro which is pushing up prices. However with almost all mobile cranes built in the Euro zone, this is true of most of the alternatives.

When choosing between the three manufacturers, all of which offer similar main features, it is likely to be the smaller details, be it construction, design or technical features and the resulting cost variations or of course the company that is selling and supporting it. After all this is still very much a people business. The only way to decide which is right for you is to try them all and see which one you prefer. As they say 'You pays your money and takes your choice'.

Maeda Mini Cranes now in, small, medium, large, x-large, x-x-large.

Consider the possibilities.....

A crane narrow enough to fit through a standard doorway yet powerful enough to lift up to 1 ton in weight, a crane with diesel/electric operation allowing you to work safely both indoor and outdoors, a wide array of below the hook accessories available including vacuum lifters for glass handling and cladding and remote control operation as standard on all machines.

From specialist applications such as, glazing installations, panelling or cladding right through to general lifting work, the Maeda Mini Crane excels in all areas of operation and saves you both time and money.

..... how could Maeda Mini Cranes help you??



CCRD - Create Separaty (kg/m) 4000/2 1 Max Radius (m): 14.52 Max Regist (m): 16.35 Engine. Diesel

Gapecity (kg/m) Max Hadus (m) 1.1 Max I leght (m) Brgine Diee

THE MATIONAL EVENT FOR CONSTRUCTION

Capacity (kg/m) 2900/1 Main RacTux (m) 12 16 Main Haight (m): 12 66 Engine: Diresel / Electric

> Interested? Find out all about Maeda and why

> Find out all about Maeda and why they are the best selling Mini Cranes in the World

> > Kranlyft UK +44 (0)117 982 6661 Kranlyft Sweden | 46 (0)31 807 000

or visit www.maedacranes.com/uk to find your local distributor



Come and visit us at a show this year and see, feel and touch the full range of Maeda Mini Cranes for yourself !!

21. - 22.5.2008, Oulu

Oktopus has legs

Klaas aluminium crane distributor and suction lifting specialist Oktopus UK says that the company's trailer cranes are beginning to prove popular with construction companies in the UK. According to Andrew Hinton-Sheley, head of the cranes division, the latest models can be adapted with a wide range of factory built lifting accessories.

"From an environmental aspect, the Klaas trailer crane has a much lower carbon footprint as it's not reliant on a HGV based chassis - instead it is towed by a suitable vehicle and is ready to work within 10 minutes of arriving at its working position." He adds: "The onboard diesel engine can also be turned off when not in use which makes it a much 'greener'option compared to a mobile crane. By using its Hetronic remote control and fully hydraulic outriggers the crane operator can rig the crane as required without any manual handling issues such as handling jib sections or rigging fly jibs."

He says that Oktopus has supplied cranes for contracts as varied as lifting glass into

position at the O2 arena, to building oak framed houses in the Malvern Hills. "Weighing 3.5 tonnes the trailer crane can be lifted by a larger crane onto working areas where mobile cranes couldn't possibly work, such as concrete slab areas with ground bearing limits or into positions where tower cranes are out of radius. The trailer crane is also usable on grassed areas without the need for portable roadway due to its low ground pressures."

The company has recently sold three new cranes, including a Klaas TC28 trailer crane with access platform attachment to Ken Wilson Roofing and two TC30s one each to lifting specialists McAndrew Milne and Cannock-based building facades specialist Parry Bowen.

"We are seeing a definite rise in sales for the Klaas range of cranes for 2008, along with an increase in demand for trailer cranes from our own hire fleet," he adds.

Ken Wilson Roofing has purchase a 22 metre working radius and 1300kg TC28 trailer crane complete with an access platform attachment.



Rugby quick in and out

Power Lifting Services, the Böcker trailer and aluminium truck crane distributor in the UK, regularly provides one of its trailer cranes on a rental basis for short light lifts. A recent contract involved using its Böcker AHK 31 crane to lift a 450kg roof truss pack onto a two storey house on a Miller Homes site in Rugby.



After unhitching the crane from its 4x4 tow vehicle it was driven across the site under its own power and into the position for the lift. The crane lifted the 450kg load, to an 11 metre radius with an under hook height of 21 metres, with partially extended outriggers on the back side to avoid a small excavation. The AHK31 was delivered,

set up and had completed the lift in under an hour.

With offices in London and Stafford, Power Lifting Services covers the whole of the UK specialising in contract lifting, truck mounted ladder hoists and traffic management. Its hire fleet of Böcker trailer cranes includes three, 1,200kg capacity AHK 27s with 27 metre maximum lift height and a 1,500kg, 31 metre AHK 31 which was launched last year at Bauma. The AHK 31 can also be converted into an access platform with a two man basket, increasing the versatility of the machine and offering a 250kg capacity at 12 metres outreach or 150kg at 15 metres.





The AHK 31 took less than an hour to complete the lift for Miller Homes at a site in Rugby

The company has recently sold several cranes to a timber frame house erector and a contract lifting contractor as well as its first Böcker aluminium truck crane - an AK 32/1500 on a MAN chassis to Towcester-based Berry Cranes.

For those interested in seeing and trying out this novel truck mounted crane Power Lifting Services is due to have a demonstration unit in the UK from mid May.



Rough terrain? Sloping ground?

When other machines don't make the grade, you can rely on the UpRight Speed Level.

The unique oscillating axles can cope with most rough terrain and will automatically self-level the machine at gradients of up to 35%. This heavy duty lift also boasts a large platform area, making any working at height task both safe and easy.

KEY FEATURES:

WORKING HEIGHT **UP TO 11M**

AUTOMATIC PLATFORM LEVELLING ON SLOPES OR UNEVEN GROUND

ROUGH TERRAIN FEATURES INCLUDE 4WD, OSCILLATING FRONT AXLE, HIGH GRIP TYRES 19"/ 35% GRADEABILITY

PROPORTIONAL DRIVE/LIFT CONTROLS FOR SMOOTH, PRECISE OPERATION DIESEL POWER

Universal Aerial Platforms now offer the UpRight Speed Level for hire or purchase. For more information on this or any other machine call today or visit www.universalplatforms.com



