Cranes Gracess

next

Do you receive a hard copy?

Would you prefer to receive your own personal copy of the printed version of **Cranes & Access**? Then register on-line now for your personal subscription. Cranes & Access: The Lifting Professional's magazine. www.Vertikal.net/en/journal_subscription.php

Download complete issues

Laptop users: Download complete issues of Cranes & Access or Kran & Bühne to read when you have the time. Using the latest version of Adobe Acrobat you can search for specific words or names in the issue or even have your PC read the articles out loud to you while winging your way across the Atlantic (or wiling away the hours on the Motorway!).Cranes & Access: www.Vertikal.net/en/journal.php
Kran & Bühne: www.Vertikal.net/en/journal.php



Do you read German?

Do you need to keep up to date with what's happening in the German, Austrian and Swiss lifting industries? Then our sister magazine, Kran & Bühne, is the magazine for you. Subscribe now to Germany's leading publication for the crane and access industries and keep up to date with the latest news (published in German). www.Vertikal.net/de/journal subscription.php



When major news breaks in the lifting world, be the first to hear about it ..Free! News bulletins by e-mail straight to your mailbox. Register for News Alerts to get major head line news as it happens. www.Vertikal.net/en/newsletter.php



Use our on line access and lifting directory

Have you tried our on line Access and lifting directory? Direct links take you to supplier's web sites with one click of the mouse, with 29 product categories and hundreds of the best suppliers, this is a very convenient source guide as well as an easy way to find a lifting company's web site.

English guide: http://www.vertikal.net/en/links.php German guide: http://www.vertikal.net/de/links.php



Central European rental companies

The world's largest on-line listing of mainland European crane and access rental companies is available to you now. Just click the link below to go to Vertikal.net/Vermieter where the bi-lingual site will guide you to hire companies throughout Europe. www.Vertikal.net/Vermieter







CRANES EUROPE

























The new UNIC range of mini-crawler cranes. Discover incredible power and reach in the most confined of working environments. With an overall width from 600mm, UNIC mini cranes are small enough to get in there, and big enough to get the job done.

A094CR 0.995t x 1.5m (boom length 5.49m) A095CR 0.995t x 3.5m (boom length 8.65m) A295CR 2.9t x 1.4m (boom length 8.65m) A376CL 2.9t x 2.4m (boom length 14.45m) A506CL 3.0t x 3.4m (boom length 15.64m)

For more information about UNIC, please phone 01844 202 071, visit the UNIC Cranes website www.unic-cranes.co.uk or alternatively, email the UNIC Cranes sales office: sales@unic-cranes.co.uk

www.unic-cranes.co.uk

Grab it while you can

Ever since the widespread growth of the lorry loader crane during the late 1960's, more and more attachments have been introduced to optimise the lifting and loading process. The continually improved specification of the latest knuckle boom lorry loaders means that they are capable of lifting heavier loads further than ever before. Specific attachments also significantly improve the flexibility and utilisation of the loader crane as well as improving safety.

Although there is a vast array of attachments - almost one for every application imaginable the most popular in the UK are the clamshell buckets and brick/block grabs. But the list is endless with pallet/crane forks, wallboard forks, polyp grabs, timber and log grabs, augers and kerbstone placers to name but a few, as well as the specialist attachments for specific industries such as rail and forestry.

There are several reasons driving the growth of attachments. Firstly legislation is forcing the increased use of mechanized lifting. Secondly, with materials supply now a global

business, packaging is generally standardized and geared towards unloading with a specific type of attachment. And finally, the huge growth in lorry loader sales over the last few years continues apace.

50,000 articulated cranes a year

Estimates suggest that more than 50.000 articulated loader cranes were sold worldwide in 2005. Reports suggest that this will increase by around a further seven percent this year and looks set to continue into 2007. The UK and Ireland is an important market possibly taking up to 10 percent of the worldwide total this year.



The 500 litre clam shell bucket is the most popular in the UK.



Specific attachments optimise the performance and utilisation of the loader crane as well as improving safety.

All the leading lorry loader manufacturers - Palfinger, Hiab, Fassi and PM - have produced excellent financial results and many are expanding production to meet this increased demand. Even the USA - an area usually preferring straight booms - industry estimates put the knuckle boom market up 50 percent, admittedly from a smallish but still sizeable total. All these factors add up to increased demand and a busy time for attachment suppliers. Major loader crane users in the UK are the national builder's merchants such as Travis Perkins, Jewson and Wolseley which run huge delivery fleets fitted with loader cranes. But whatever the organisation or industry, the main problem for all lorry loader operators is the huge range and variety of products that have to be loaded and unloaded. Even allowing for global standardisation of packs - the result of positive communication between equipment and materials suppliers - there is still a limitless amount of variation.

Remote controls lead the way

One of the major recent developments and benefits in the operation of loader cranes is the increasingly widespread use of radio remote controls allowing the operator to move around freely to get the optimum view of the lift. This not only allows him to place loads in difficult positions on his own, but also contributes to reducing the number of accidents where drivers fall while climbing to elevated control stations. It also reduces the chance of injury from crushing caused by standing in a fixed position by the truck-mounted lever system.

Radio remote control also enables the loader crane to challenge the traditional boundary between the loader crane and conventional cranes.

Contractors are realising that the larger lorry cranes with fly jibs can be used as a regular crane, particularly for lifting roof trusses, steel beams to third or fourth floor levels.

attachments

c&a

When a conventional crane is used to do a contract lift, there generally a requirement that a banks man (Slinger/signaller) is used to give the operator directions. However an increasing number of operators now do a similar job with an articulated loader crane. By using radio remote control they can move freely and position themselves to get the best view for the lift. And as there is no second wage to pay, the job is less expensive. It can also be argued that it is also safer, by cutting out the middle man.

Specialist or in-house?

Historically, loader attachments have been produced by specialist manufacturers which often supply the OEMs. One of the most popular in Europe is Kinshofer. Based near Munich, the company has been supplying specialist loader crane attachments (as well as attachments for other cranes, forklifts and timber handling equipment) for about 35 years building up a reputation for quality and reliability. It dominates the brick/block and clamshell market in the UK.

Kinshofer's current loader crane range covers all common applications as well as the more unusual items such as augers, manipulators - for moving poles, pipes, barrels and even road barriers - as well as special grapples for rail work, rocks, brushwood and refuse materials. The most popular clamshell capacity in the UK is around 500 litres capacity covered by Kinshofer's KM602 which is aimed at heavy-duty soil and rubble collection. The company's range of brick grabs feature a mechanical latch allowing the operator to set the plunge depth to match the size of the stack as well as an automatic clamp pressure boost when the arms are fully retracted. The lighter weight KM331 unit is a compact and budget-priced brick unit with tapered legs for easier access between packs. For paving stones or bricks or any other unit load, the KM401 and KM401H crane forks provide quick loading and unloading with spring supported hydraulically adjustable centre of gravity.



There are many different designs of pallet forks all making loading and unloading much easier.



In recent years however, loader manufacturers have started to offer their own range of attachments to further improve the utilisation of their cranes.

Palfinger started its Equipment Centre specifically for that reason and now has a range of attachments including buckets, polyp grabs and board grabs. There are even some heavy duty attachments for Palfinger's Epsilon range of heavy duty cranes specifically the forestry and scrap handling sectors. All Epsilon cranes are fitted as standard with hose fittings for two accessories such as grab and hydraulic rotator. PM has an extensive range of its own attachments including log grabs, clamshell buckets, pallet forks, block grabs and grapples. Both its T and TM ranges of log grabs make extensive use of hardwearing Weldox 700 and the main feature of the heavier units is the large aperture openings ranging from 1.0 - 2.15 metres. PM's FTP pallet forks are manufactured using a weld-less, hot-bent design which it claims offers maximum resistance against deforming.

Rotating hooks

The RH rotating hook is recommended to be used with the FTP pallet forks to eliminate any stress on the crane caused by the load and also to help with load positioning. Hydraulic rotators - both flanged and without flanges - are also available with the company developing a load monitoring unit (LMU) - comprising of a load-sensing hook and receiver - which acts as a load limiting device for manual extensions to comply with EN12999. The hook is available in three weight versions 2,000kg, 3,200kg and 5,400kg with the display placed near the controls showing the load on the hook. A similar device called the RLC is also available from rival loader crane manufacturer Ferrari



IMAI offers a full range of baskets.

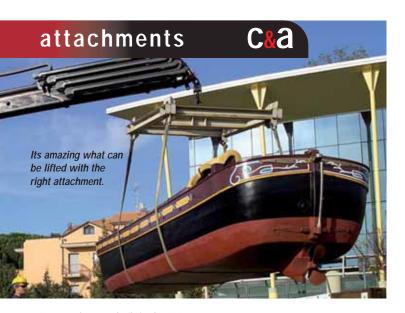


PALFINGER makes the best knuckle-boom cranes in the world. Unrivalled in technology, quality, and service. Outstanding In precision, reliability, and power. Allowing the success of our customers to reach beyond the outreach of our cranes.

More information at www.palfinger.com

PALFINGER CRANE





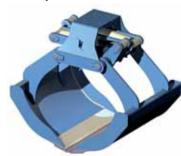
For attachments built in the UK, Halifax-based Fielden designs and manufactures a wide range of hydraulic materials handling equipment for lorry loaders and lift trucks. Three types of brick/block clamps and two clamshell ranges are available. The BB1 and BB2 series of clamshells feature dished construction for added rigidity, wear resistant blades and open access for manual filling. The BB1 also has the option of digging teeth.

Basket case?

The issue of lifting people in baskets suspended from cranes or lorry loaders has been a hot topic for several years. Earlier this year EN 14502-1 outlined key points if a basket is suspended from a loader crane. However a basket mounted onto a loader crane boom falls under EN280 and not the suspended basket legislation. This requires the platform and crane to be fitted with all of the safety systems and margins of safety as a purpose built aerial lift. Socage launched its Automatic Levelling System (ALS) at the recent SAIE show in Bologna which it says complies fully with EN280 and in particular item 5.6.1 which states: The sloping of the work basket cannot be more than five degrees from the horizontal And the leveling system must include a security device so that in the case of a breakdown, the system keeps the basket from moving a further five degrees. The ALS uses an electronic leveling sensor that checks the position of the basket relative to the horizontal and then uses a series of valves to restore

the basket into the correct position. If the basket reaches an inclination outside the maximum allowed, the system blocks further movements and there is an audible warning to stop further crane movements.

IMAI offers a similar looking system for fiberglass and steel baskets - Biposto -which use gravity rather than powered leveling. It offers the platforms for installation on new loaders cranes by the manufacturer or as a retrofit for existing cranes. The company also offers a more sophisticated AL Series of self-levelling system for aluminium baskets measuring 2000mm x 1135mm and 2500mm x 1200mm that also have 180 degree rotation at the jib.



Call me number one?

Bakker, one of the leading attachment manufacturers in Europe, is relatively unknown in the UK. Claiming a massive 90 percent of the grab market in Holland, its home market, it also claims almost a 50 percent market share in Belgium, France and Sweden. The company's profile looks set to change with the recent appointment of Manchester-based Approved Hydraulics as its distributor for the UK. Approved Hydraulics also handles Pesci lorry

loaders and Kinshofer attachments although as the two attachment ranges are very similar, it will in future merely stock spares and offer repairs for the Kinshofer range.

"The most popular attachment in the UK is a half cubic metre bucket," said Approved Hydraulics' Geoff Hindle. "However in other parts of Europe the open sided general purpose grab is very popular as it can also pick up poles and sheets as well as soil and waste. And by fitting rubber edges can also handle packs of bricks." The company has just sold a unit to a local council so it will be interesting to see how it



example during pole erection, where positive manipulation is required.

A large percentage of the demand in the UK for attachments is brick/block and clamshell grabs for the 'muck away' civil engineering and local authority sector. However, new demands from a



performs and whether it will increase in popularity.

"Generally the UK uses smaller lorry cranes than in Europe and there is a need to produce lighter attachments specifically for the UK market," said Hindle. "Bakker is currently developing a lighter brick grab specifically for the UK."

Approved also distributes the competitively priced Baltrotors hydraulic rotators from 1-16 tonnes - the latest addition being the GIR 10, a 10 tonne grapple rotator. Also in development is a range of piston rotators from 4 tonne and larger unit that can be used in the vertical or horizontal position needed for

diverse range of applications that fit within the capacity of the lorry loader have created interest in several sectors including the recycling industry for bespoke attachments to handle, for example, glass bottle banks, and others to lift, rotate and discharge 1100/1200 litre wheeled containers. Local Authorities are also now seeking a safer solution to replacing and erecting new street lighting columns. The list is endless and will continue to grow as the performance and popularity of the lorry loader grows and there is an increasing need for mechanized handling.





There also exists a huge range of attachments for other items of equipment such as telehandlers, excavators and the original 'Swiss Army Knife' machine - the skid steer loader. Here is just a brief look at a few recent attachment additions.

Hydraulic Generators go main stream

As aerial lifts have become more familiar and have been incorporated into methods of work, so the demand for attachments and equipment has grown.

One of the most common additions to machines has been the fitting of on-board generators to power hand tools and other equipment. In the beginning these were often traditional 'off-the-shelf' petrol powered generators, however they proved to be less than ideal, requiring different fuel and being a magnet for thieves. The industry quickly got to grips with the problem and the result has introduced builtin hydraulic powered generators.

UK Generators - already known for its traditional silent pack generators - saw the potential, designed its own and as a result claims to be a major supplier of hydraulic generator packs to powered access manufacturers such as Genie and Skyjack.

Haulotte is the latest producer to install the company's generators having recently taken delivery of 30 of its 3.5Kva 110v units. This generator is designed to operate in isolation to the functions of



The hydraulic generator powers hand tools and other equipment.

the platform and incorporates a standard integral flow control valve, on/off solenoid and earth leakage circuit breaker protection. The company says its design is easy to install - requiring just two hoses to be connected - the pressure in and tank return. Some additional electrical wiring is needed but this varies from platform to platform.

The unit was originally designed specifically for the access platform market its versatility means that it is now used on a variety of equipment.

Bobcat expands line of winter attachments

The new snow pusher attachment is the latest addition to the Bobcat range of winter attachments. Designed to push snow from car parks, driveways, school playgrounds and industrial sites, the attachment is available in 2,438mm and 3,048 mm widths allowing it to be used on Bobcat compact and skid steer loaders as well as telehandlers.

The free floating blade on the snow pusher offers lift, tilt and oscillation to keep the moldboard in contact with the surface across the width of the blade. The flotation feature extends skid shoe life by avoiding excessive down pressure on uneven surfaces. When removing snow on flat surfaces, the flotation feature can be locked into a rigid position with the tilt function.

Bobcat also offers a range of snow blowers and blades, buckets and sweepers, as well as more specialist tools such as the 'super scraper' and 'salt and sand spreader'. For the removal of light snowfalls with depths of 100 mm or less Bobcat recommends the angle broom which it says is ideal for use on pathways, which it says provides quick access for pedestrians by removing snow in just one pass.

attachments

