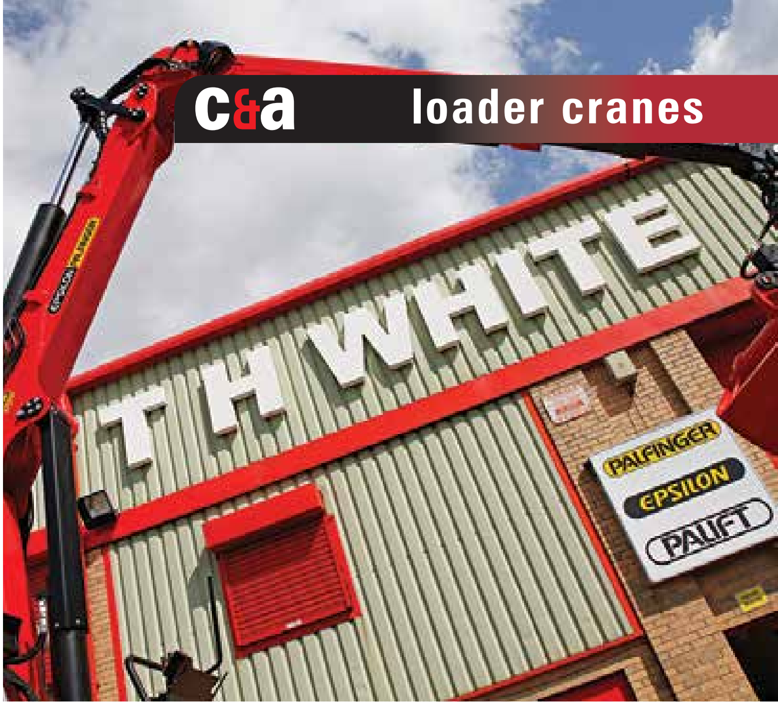
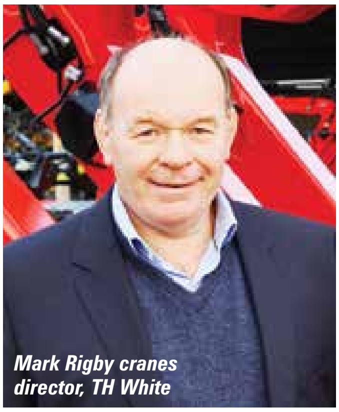
Market leader

Like most equipment sectors loader cranes have struggled to fully recover from the levels reached prior to economic crisis. Recessions have though failed to stop the general upward trend since the 1980s with markets such as the UK increasing year on year from around the 2,000 level to its record-breaking total of around 4,000 in 2007.





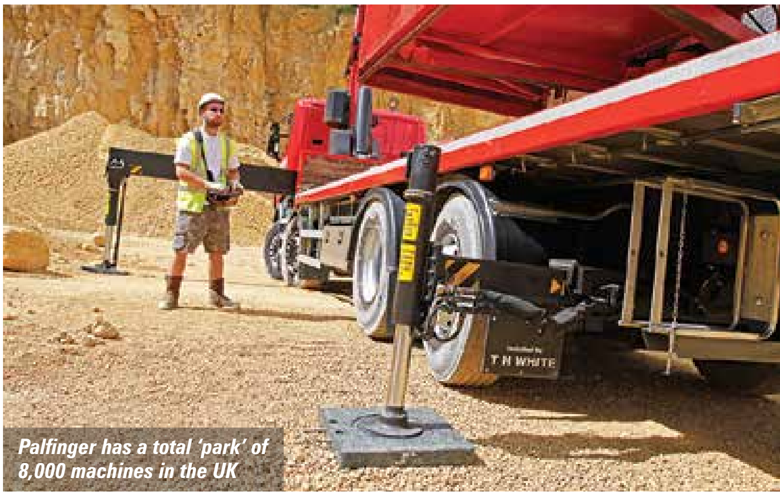
Mark Rigby cranes director, TH White

Following the crash, sales plummeted throughout Europe, down by as much as 70 percent in 2009 - but have slowly recovered in the subsequent years, at least in Northern Europe. The UK is currently growing faster than most, with total sales of around 2,500 units last year with a 10 to 15 percent improvement again this year.

Globally the two main players are still Palfinger and Hiab with Palfinger now having a reasonable lead.

Accurate sales figures are difficult to obtain in this sector however to give some idea of how they all stand, the top manufacturers overall in terms of unit volume are Palfinger, Hiab, Fassi, HMF, PM and Atlas - probably in that order.

Historically Hiab had a dominant market share with the name being used generically to describe a loader crane. The company recently celebrated the 70th anniversary of Swedish ski manufacturer Eric Sundin developing the first loader crane to unload heavy timber from a truck at his factory in 1944. The 'Hiab Method' as it was named became synonymous with the loader crane resulting in huge market shares, one of its early competitors was Atlas and at one point the two companies seemed to have the market to themselves in many markets. Increased competition from others over the years has however eroded its dominance probably not helped by changes of ownership, becoming part of Partek then Kone, Kone-Cargotec, and Cargotec with shifts from localisation to centralisation and back to decentralisation. During this period of uncertainty and corporate restructuring, family owned Palfinger carried on growing regardless. At one point Hiab looked as though it was destined to be overtaken by Fassi, but the company has recovered its mojo just as the collapse in the big southern European markets more than halved Fassi's sales. While Hiab is back on upward trend it is now almost certainly lagging behind Palfinger in terms of loader crane sales although the gap has possibly narrowed a little this year. With the UK market listed by Palfinger as one of its strongest this year in terms of growth and volume, Mark Darwin went to the company's distributor for England and Wales, TH White and spoke to cranes director - and ALLMI chairman - Mark Rigby.

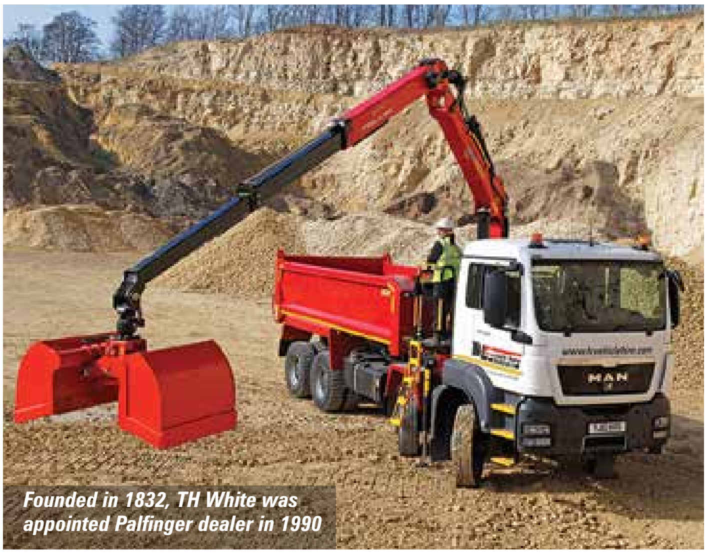


Palfinger has a total 'park' of 8,000 machines in the UK

Pre Victorian start

Thomas White started the up in business in Devizes as an agricultural ironmonger in 1832 selling hand tools, rakes and scythes, cart axles, paint, grease and oils. His business grew steadily, adding manufacturing - wagon wheels, rims and axles etc…as it passed from father to son with grandson Thomas Henry White (TH White) taking control in 1866 and increasing its involvement with horse-drawn machinery. Unfortunately when Thomas White died in 1900 he had no sons to continue the business which was then run by Dick Salmon who remained at the helm for 56 years! He was instrumental in converting the business into a limited liability company in 1914 and as the company sold its first tractor, a Ford Model F in 1917, bought a farm machinery business in Swindon in 1938 and purchased an ironmonger's and blacksmith's business in Marlborough in 1947.

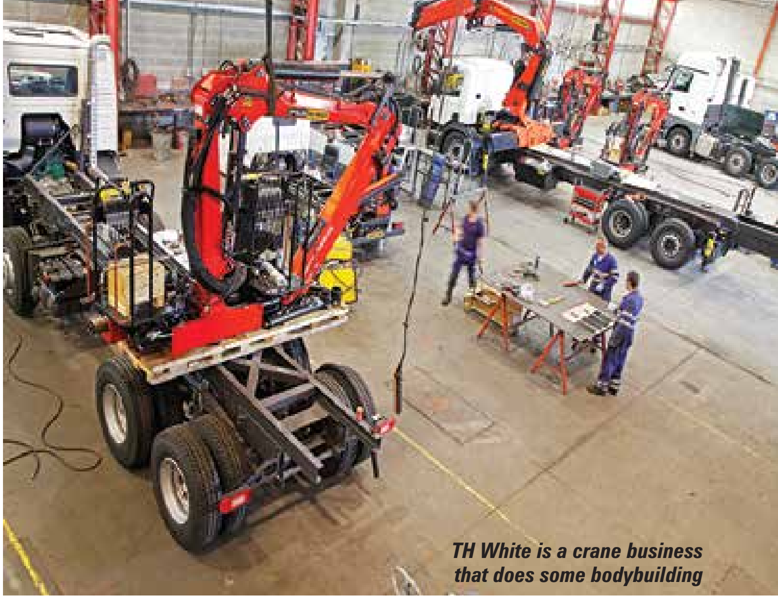
In the post-war years the company significantly expanded its agricultural machinery business and under new managing director Peter Scott the company acquired several businesses including forestry winch

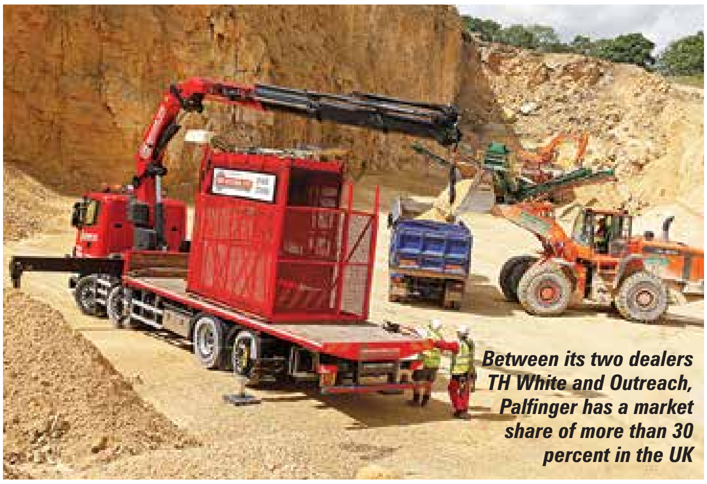


Founded in 1832, TH White was appointed Palfinger dealer in 1990 and cricket field roller manufacturer Auto Mower. Having outgrown its original premises, it moved into its current head office site in Devizes in 1972. It was during the 1980s that the group moved into vehicle distribution - becoming Land Rover, Subaru and Isuzu dealers - and the 1990s saw further expansion in the agriculture side, as well as forming the separate grass care division.

Today the private group has revenues of around £120 million and employs more than 520 people. TH White Ltd is one of two subsidiaries of TH White Holdings (the other being TH White Installation Ltd with divisions for energy, security and fire and materials handling and bulk storage) and has five divisions - lorry loaders, vehicles,

agricultural, grass care and construction - representing 50 or so brands including Palfinger, Manitou, New Holland, Land Rover, Fiat, Alfa Romeo, Jeep, Ransome Jacobsen, Hatz, Ifor Williams Trailers and Terex dumpers. As well as running the loader crane division Rigby is one of five main board directors along with family owners David, Charles and Alex Scott.


TH White is a crane business that does some bodybuilding


Between its two dealers TH White and Outreach, Palfinger has a market share of more than 30 percent in the UK

Historically agriculture accounted for about 60 percent of the company's revenues, but this has decreased in recent years primarily with the growth of the loader crane

and vehicle distribution businesses. Cranes now account for around 25 percent of sales and employs 140 at its two depots in Devizes and Bradford. Apart from the Bradford loader crane depot, the rest of the divisions are southern-based with operations in Redditch in the West Midlands to Reading in the east and onto Timsbury in the south going as far west as Frome in Somerset.

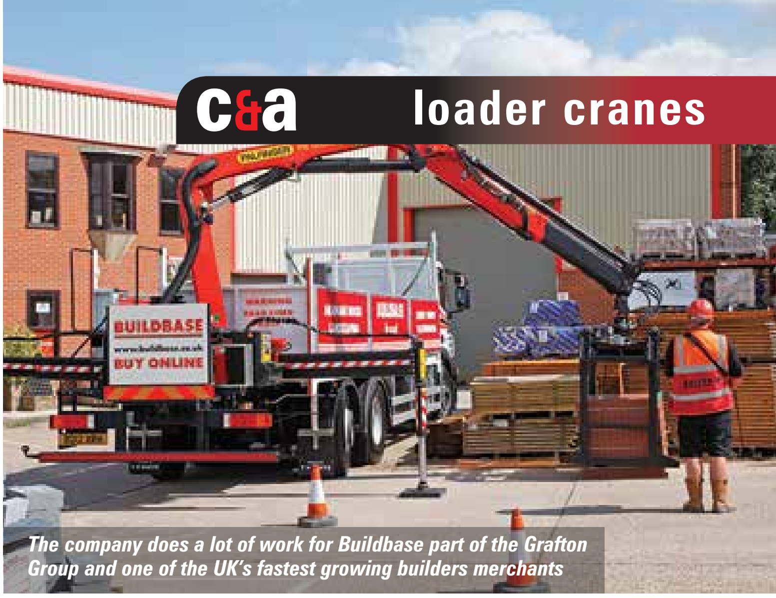
Loader cranes

It was during the 1970s that the company started selling and servicing loader cranes at Devizes. These were initially added to take up the slack in the agriculture business in the winter months when welders and hydraulics engineers were more available. It started by doing sub-frame work and then fitting cranes which attracted the attention of German loader crane company HAP which appointed it as its UK agent in 1984 until it went out of business in December 1989.

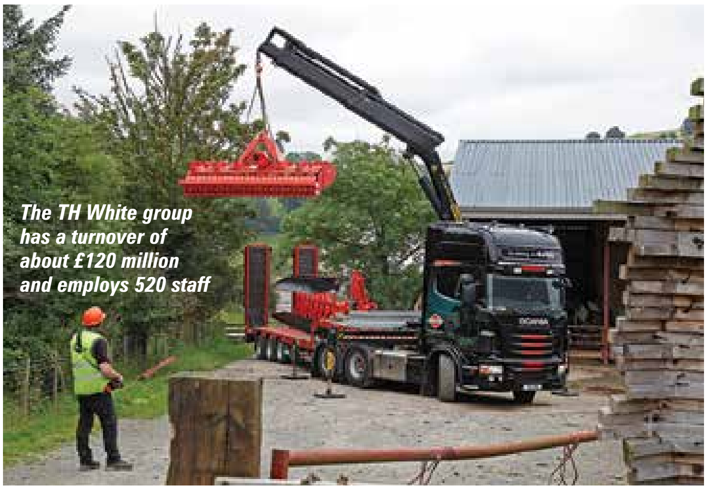
The market at that time was a lot smaller than today with total sales in the region of 2,000 units a year. Hiab was the major player taking about 1,500 of these, although its dominance faded as Atlas gained ground and took over a few years later. During this time Palfinger was looking for distribution and became interested in appointing TH White, but this was not going to happen while it was the HAP dealer. With HAP going out of business Palfinger immediately appointed TH White as its dealer for England, Wales and Northern Ireland. Palfinger was also in discussions with Scottish company Outreach to cover the UK, but with TH White and its established HAP business already in place, it decided to split the UK and appointed Outreach to cover Scotland.

TH White and Outreach

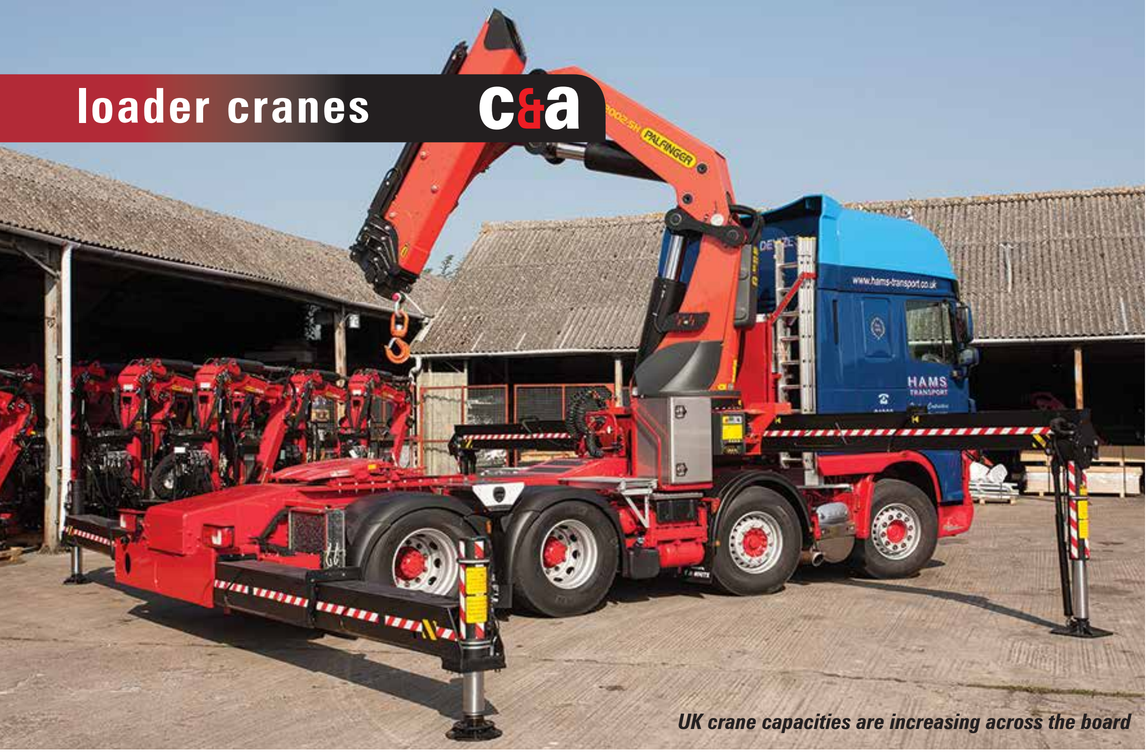
Through the 1990s both TH White and Outreach sold Palfinger and Epsilon forestry cranes but when the forestry market in England and Wales collapsed in the early 2000s - the majority of the UK forestry crane market is in Scotland - TH White further developed the grab/tipper market, originally using a Palfinger PK knuckle boom crane and then an adaptation of an Epsilon forestry crane, which needed to be a B4 rather than a B3 rated crane for strength and durability. Palfinger was continually expanding its product range throughout this time, partly taking a stake in the German based Epsilon forestry crane business in 1988 before incorporating it in the business and moving it to Austria in 1993.



The company does a lot of work for Buildbase part of the Grafton Group and one of the UK's fastest growing builders merchants


The TH White group has a turnover of about £120 million and employs 520 staff

"When Palfinger acquired Ratcliff Tail Lifts in 2005 - which had more than 30 percent share of the UK commercial vehicle tail lift market - a clarification of Palfinger distributorship rights was needed," says Rigby. "Together with Outreach we agreed to split the Epsilon range between forestry and construction cranes for the tipper market. TH White would sell Epsilon construction cranes, while Outreach sold Epsilon timber cranes to the whole of the UK. That has since been refined slightly in that TH White does not sell construction cranes direct into Scotland but



UK crane capacities are increasing across the board

supply through Outreach, while Outreach supplies any timber related enquiries in the south through us."

From a servicing point of view Outreach has eight mobile engineers and TH White has 30 in England and Wales. There are also two 'Palfinger-branded' vehicles which are shared to cover the Border areas - giving a total of 40 mobile engineers covering the whole of the UK. In total the Palfinger 'park' of machines in the UK is about 8,000.

Market stats

"The agreement works brilliantly between the two companies and it provides customers with a seamless service, wherever they are based

A new plastic safety railing system on a National Grid lorry

or work across the UK," says Rigby. "At the moment between TH White and Outreach, Palfinger has a market share of more than 30 percent. The best year for total sales so far was in 2007 with the market at about 4,000 units. The first year of the recession was also reasonable due to the forward order book, but 2009 and 2010 were terrible at just 30 percent of the previous years. Since 2010 sales have been on the up and this year may be back up to around 2006 levels. Last year we were the clear market leader in the UK, a position we believe we have had since 2006. The tipper market is very UK orientated and TH White has a huge market share - which has followed the continual development of the Epsilon construction crane."

"When legislation for leg deployment was introduced it caused tipper operators problems in that they often work in very restricted areas. We asked the market what they wanted and it was obvious that the forced extension of the outrigger legs was not liked, so we developed a fixed leg crane. After carrying out calculations with all the different chassis options we found that the difference between capacities with legs extended over fixed legs wasjust about 100 kg at boom end. This was such a small difference that we introduced the three model range of the Epsilon Classic in 2012. The market response has been unbelievable because it means they do not have to have complex electronics for the outrigger deployment system and it has good features such as inboard protected boom hoses. Every 18 months or so we keep improving the design to keep it ahead of the competition."

"Like most other industries everyone is desperate to know their market share but unlike all the other big players in the UK which are wholly-owned subsidiaries of European businesses, it is not our focus. TH White is totally independent of Palfinger and together with Outreach we are its UK business. We are of course under pressure to deliver volume back to the factory, but we tend to view market share differently to the competition. We need to be focussed on the success of TH White and our future, but it helps enormously having the best brand available!"

"Palfinger continually support us, because we deliver," he says. It currently has a few countries around the world where it owns or has a stake in its distribution business, but everywhere else is covered by independent partners, and it wants to keep it that way."

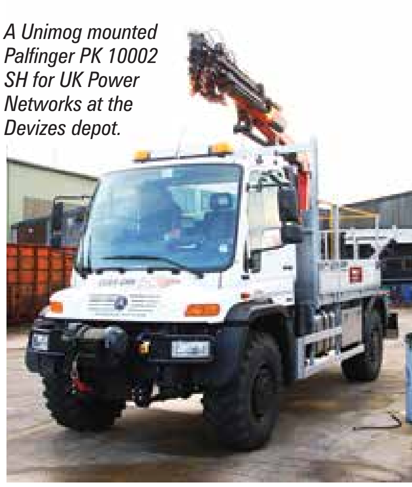
UK fleet market

"The main reason the UK market varies so much in terms of market share, is the builders' merchant fleet market. A large percentage of annual UK sales are decided by the big four or five Builders Merchants," says Rigby. "If you secure one of these big orders you get the volume but the margins are too small and it is not a good foundation to build a business. We now do bodies in this market as well as cranes and the combination is worth doing. This has been the basis of development for Palfinger and TH White in particular with the real growth coming from body building for certain customers giving a one stop shop which we have offered since the recession. We were on the verge of expanding into this area before the recession, but as it bit other bodybuilders went out of business. Post-recession, some companies needed a new supplier for its truck bodies, so in 2010 we started doing a few bodies, and have continued to build our volumes since."

"TH White is a crane business that does some bodybuilding - we are not an outright bodybuilder," said Rigby. "We will do certain bodies for certain customers. Basically we do flats and drop sides for certain market sectors and certain customers as well as some flat deck plant bodies for some of our big crane customers. We are very specific because we do not have the resources and don't want to do it. The market for bodybuilding is out there - it is about adding value and looking after your customers. However we will be adding a further 30 percent capacity to our crane and body shops at Devizes and Bradford depots from 2016 onwards. A big expansion programme, but we know we can do more and wish to develop more in-house capability.

Pan European deals are being requested more now, however the chassis difference in particular, and different crane applications has not allowed a significant uptake as yet. The UK tends to sell a lot more smaller cranes and imports/exports for other European countries is not usually practical due to the right/left hand drive issue.

A Unimog mounted Palfinger PK 10002 SH for UK Power Networks at the Devizes depot.



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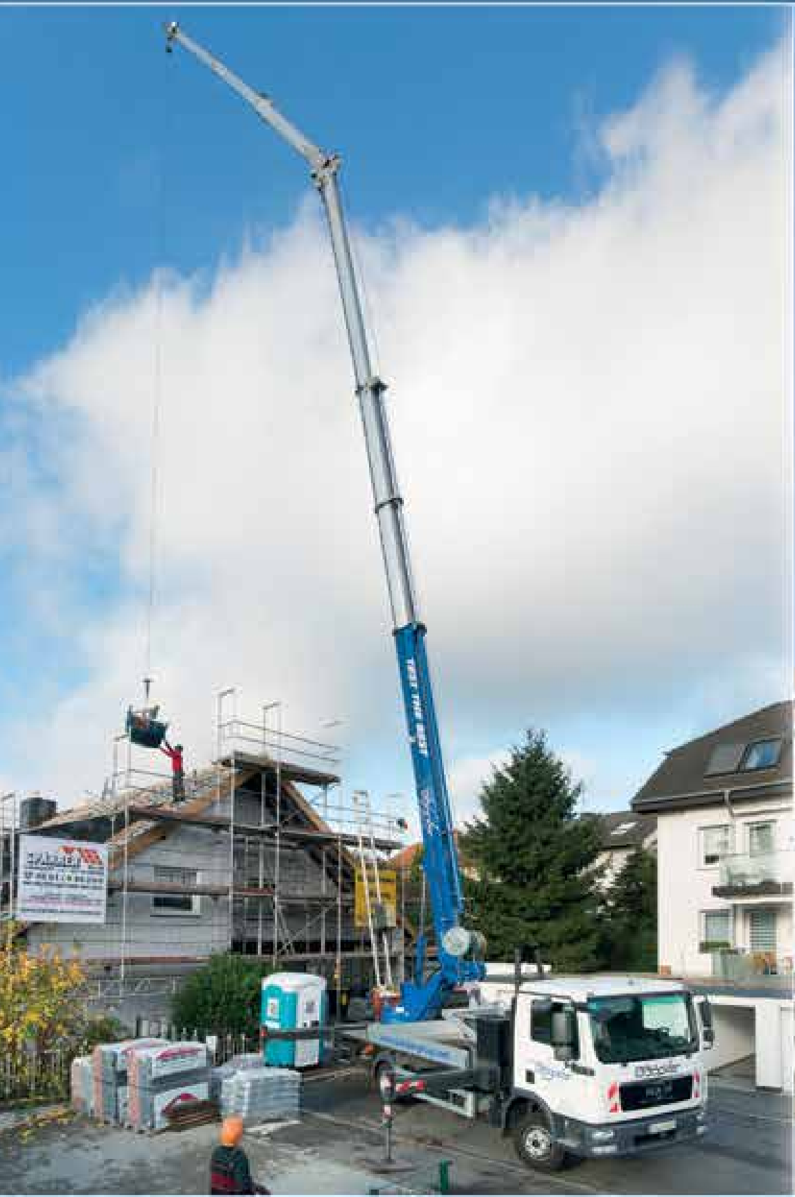

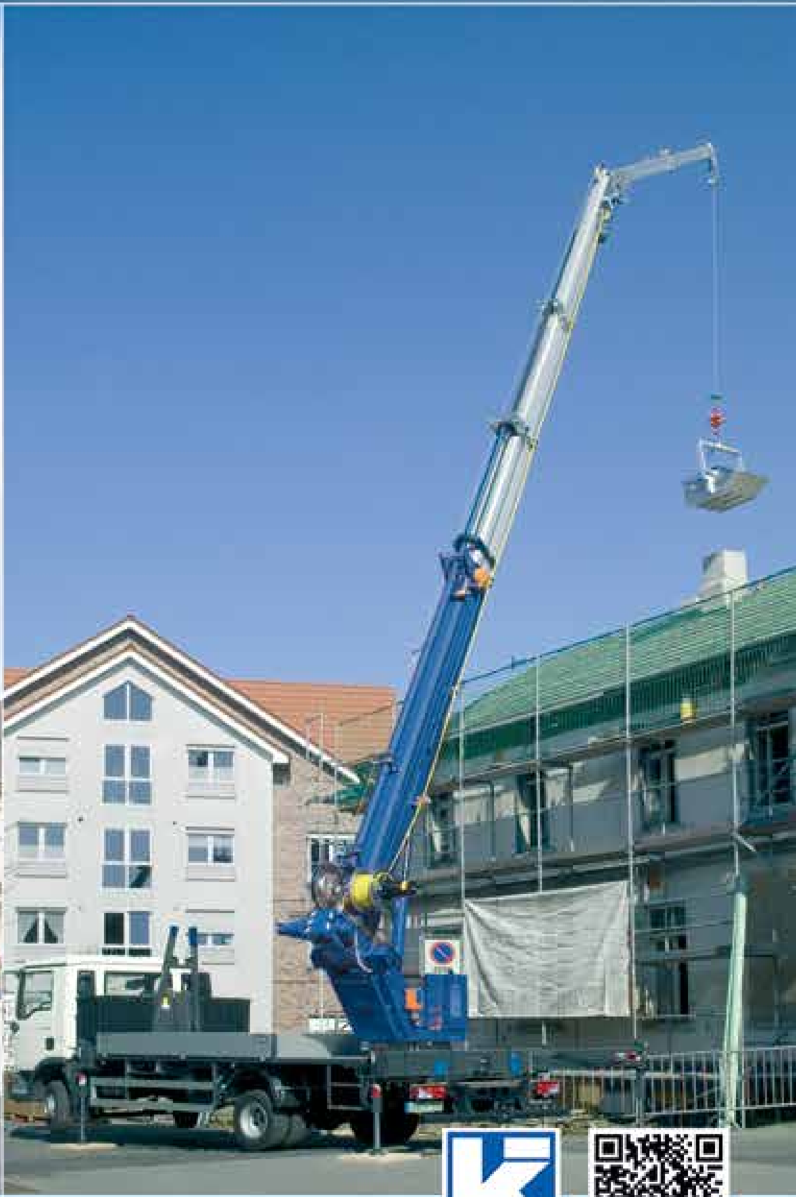

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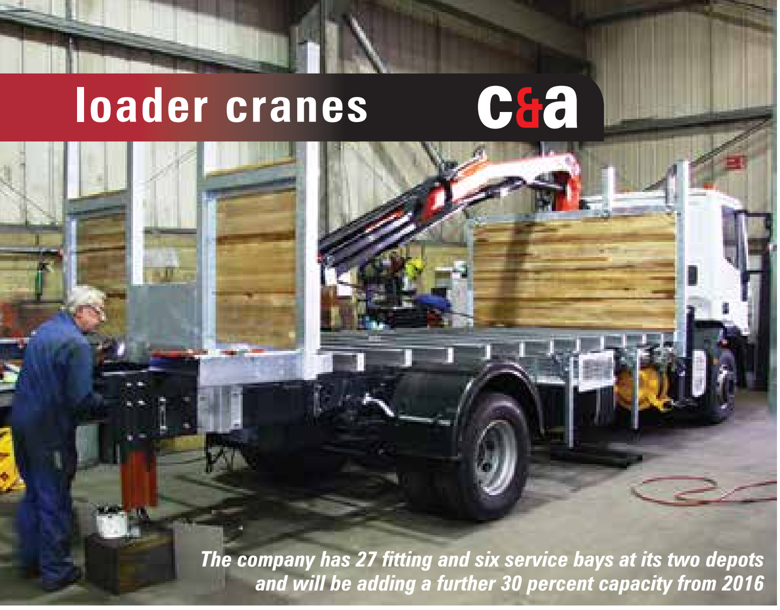


The company has 27 fitting and six service bays at its two depots and will be adding a further 30 percent capacity from 2016

TH White has a huge share of the grab/tipper market with its Epsilon crane

Agents to direct

In the late 1990s TH White used agents to provide a national sales and service network, however during the recession of 1993/4 TH White lost ground because these agents looked after their own work rather than that of Palfinger. When Rigby joined the company in 1998 he realised that in the long-term, everything had to be on a direct basis. Gradually the number of salesmen and service engineers increased, reducing the reliance on service agents. By 2002 it had a complete national sales force and network of service engineers with no agents. And to increase its presence in the North, the Bradford depot was added in 2002 and extended in 2003. There is some office space in Bradford that was part of the original build that we plan to convert to extra work bays in the near future. There are currently 12 crane fitting bays in Bradford, plus three service bays and 15 fitting bays plus three service bays in Devizes.

Another Buildbase vehicle ready to leave Devizes

Market developments

The big capacity articulated crane market - over 40 tonne/metres - is increasing in the UK. The use of radio remote controls has trebled, mainly on the back of builders merchants specifying them, as well as the growth of the big crane market which is all remote controlled. Over the past five to 10 years even the size of the builders' merchant cranes has increased from 10 to 12 tonne/metres and they are now moving towards 16 tonne/metre and perhaps 18 tonne/metres after that. This is driven by increasingly large pack sizes as well as a drive for increased safety and durability.

Reduces warranty costs

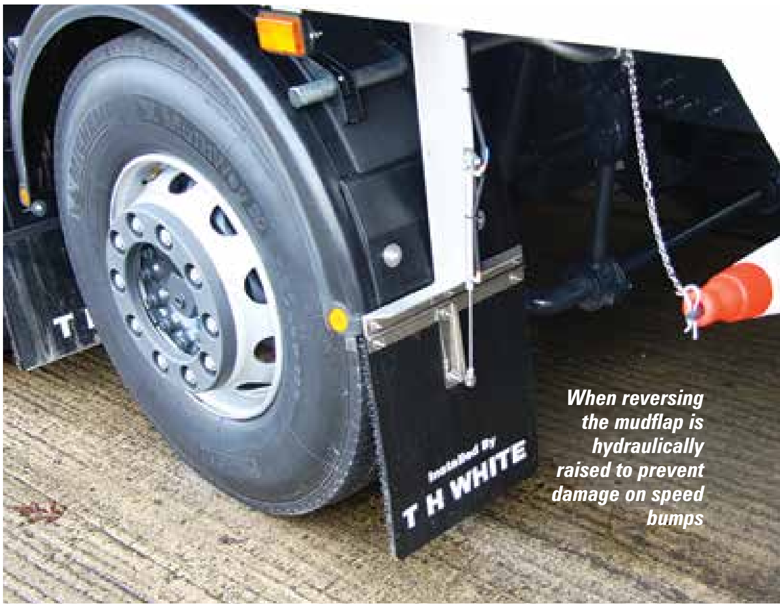
Palfinger now has 36 manufacturing sites around the world which utilise sophisticated robotics, which has helped improve quality and consistency, reducing in field problems. In a recent survey results show that over 80 percent of Palfinger cranes delivered across Europe did not have a single issue during first three months of operation, according to the company.

We continually invest in plant/equipment for our workshops, to deliver a high quality fit. When we fit a rear mounted crane with hydraulic tank at the front we use all steel pipes from front to back which is more expensive per chassis, but we pride ourselves on quality and it pays off because customers come back for more. How we fit things and look after it has to be top notch - even if we have to use an external hose repairer in an emergency. We make sure that within a few days our engineers will have replaced a flexi hose with steel if steel was originally fitted. We don't scrimp on servicing and look after the customer."

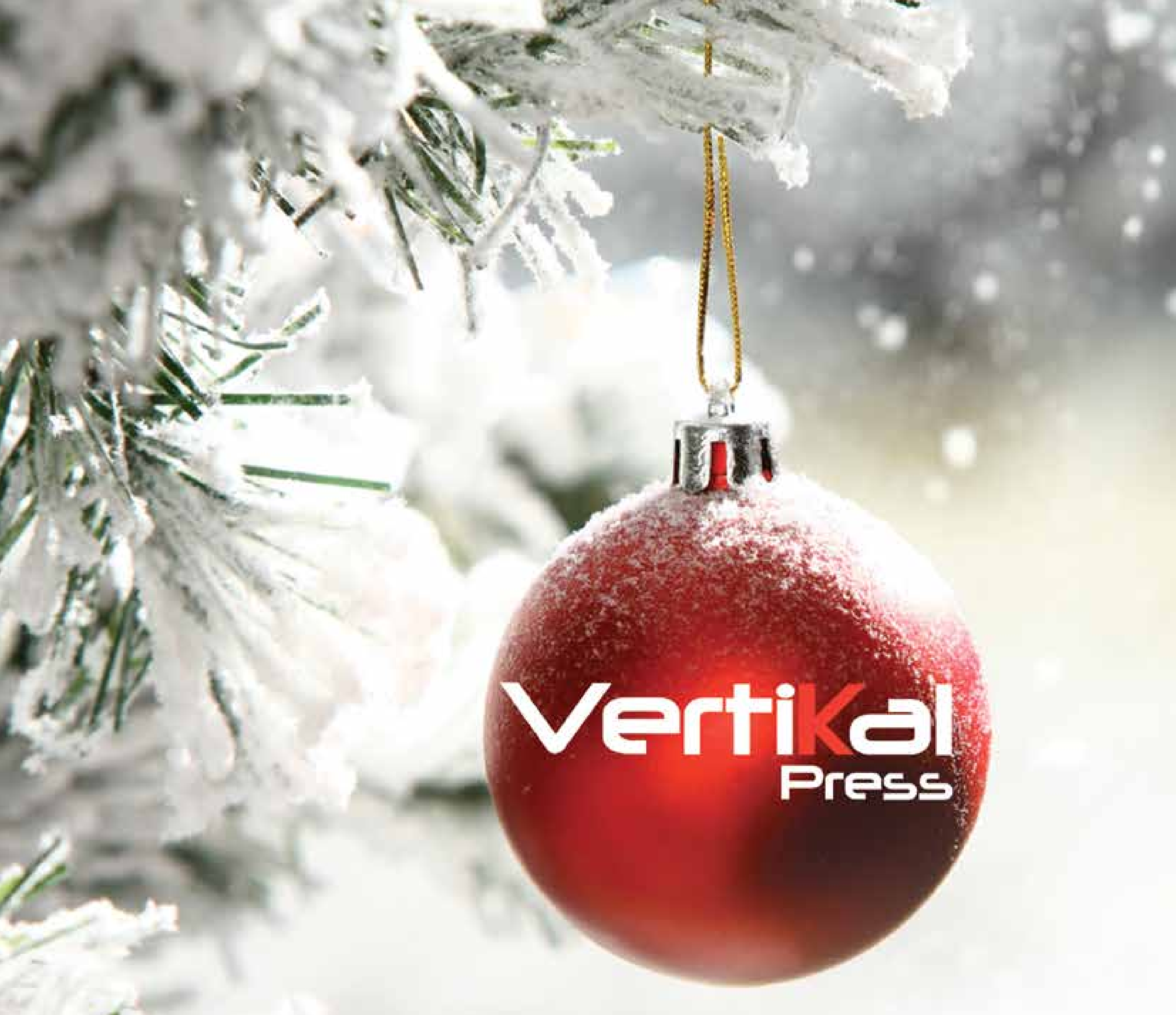
Palfinger developments

Palfinger is constantly developing its loader cranes," says Rigby. "Over the next 18-24 months the SH cranes using Paltronic 150 software that have fully variable leg deployment systems, will be available down through the range. There is also the new boom profile - the new P boom - which is formed by making between nine or 13 folds (dependent on boom size) to produce a tear drop shape, with a single internal topside weld. The main advantage is a stiffer but lighter boom system. When coupled with the AOS - Anti Oscillation Suppression - which eliminates boom movement when lowering loads, the boom and load is absolutely steady. This system is already in place on the very large PK 200002 and will be available on more cranes in the range over the next couple of years. TH White will have a prototype with the new system on the next crane model down the range in early 2015.

"We have built the TH White loader crane division on the Palfinger brand and our history of service excellence - which I think everyone recognises as the best combination in the market. We are not the cheapest, but we have market leading volume so we must be doing something right."

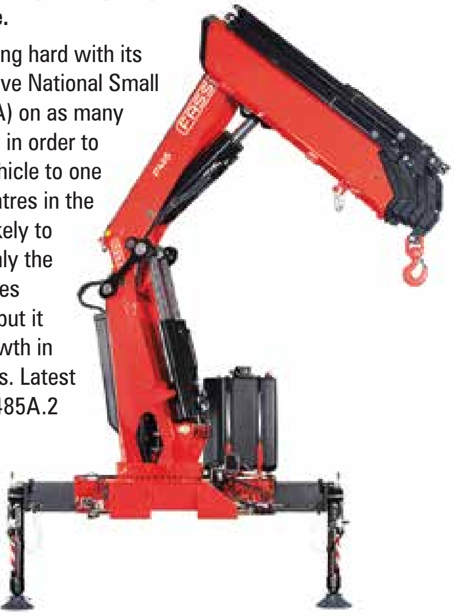


When reversing the mudflap is hydraulically raised to prevent damage on speed bumps


Vertikal
Press

Fassi buoyant

Fassi is another loader crane company that has seen UK become a major market, with orders this year up nearly 40 percent, which it believes is down to market confidence.



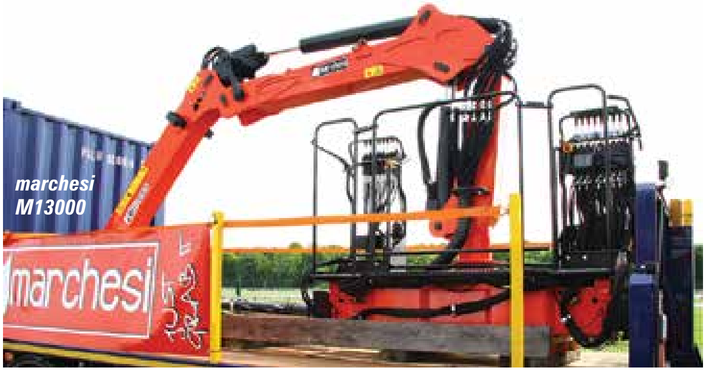
Fassi UK says that it is working hard with its dealers and the VCA to achieve National Small Series Type Approval (NSSTA) on as many different vehicles as possible in order to avoid having to take each vehicle to one of the five IVA inspection centres in the UK and the delays that are likely to result. Fassi is almost certainly the market leader for loader cranes larger than 40 tonne/metres but it has also seen significant growth in the sales of its smaller cranes. Latest products include the Fassi F485A.2 and F485RA.2 xe-dynamic - an evolution of the F455A.2 and the F455RA.2.
The new cranes from the xe-dynamic range maximise the performance potential granted by the HD5 design class. The F485RA.2.22 has a maximum capacity of 48.42 tonne/metes, nine percent more than its predecessor. This increased performance is achieved with no increase in weight and with a price differential of less than five percent.

Fassi is also offering the FX900 control system for the larger - F510RA to F1950RA - cranes. FX900 uses the new generation of electronic components and software to achieve enhanced crane performance. Fassi says that the can-bus architecture has been updated to reduce the amount of wiring and to enhance the fault self-diagnosis capability. It also has new functions including a seven inch touch screen colour display showing the crane capacity at any given stabiliser configuration and FSC-SII stability control which features a faster inclination sensor, maximising the available stability that can be converted into usable lifting capacity.

Big Effer for Collett

As we reported last month Collett Transport recently added a 205 tonne/metre Effer 2055 crane - the largest of its type in Europe - to its fleet.

Mounted on an 8x4 Mercedes 4155 tractor unit it has six boom extensions giving a maximum reach and lift capacity of 30,000kg at 4.51metres and 8,550kg at 15.25 metres. The Effer's primary use will be in the handling of blades, hubs and towers for the wind industry, allowing Collett to self-load and offload components at port and site locations.



marchesi M13000

Marchesi expanding

Parma, Italy-based loader crane manufacturer Marchesi is making in-roads into new markets with its new B4 rated cranes. The company exhibited its latest product - the M13000 RS - at Vertikal Days earlier this year, aimed at the muck away sector.

Thanks to its partnership with UK loader crane body builders Tip N Lift, Marchesi is able to offer its cranes with additional locally orientated features. Marchesi says that it booked six orders at Vertikal Days - two cranes with augers and four for the 'muck-away' sector - one equipped with radio remote controls. Currently its most popular model is the M13000RS which is a 13 tonne/metre crane with a capacity of 1,500kg at 8.3 metres.

"Our production is focused on cranes rated in B4, which means that the crane is designed to work for 600,000 average load cycles at maximum capacity at maximum outreach, compared to the 200,000 cycles of the B3 rated cranes," says Pietro Medici Marchesi export area manager. "For stationary installations we also produce cranes rated in B5, which means that the crane is designed to work for a million cycles. We noticed that in some advanced markets, such as UK, the demand for B4 is increasing. A long lasting crane like Marchesi is the right choice for many applications, such as the 'muck-away' which is quite popular in the UK, but also for other applications, for example with auger where the solid construction of the crane allows better durability compared to standard loader cranes that are purely intended for lifting."

Marchesi Gru, a private family owned business formed in 1968 still sells most of its production in Italy where it claims to be among the top three manufacturers. Over the past 10 years though it has gradually expanded its export sales through a network of European dealers.

Manitex to complete PM acquisition

US-based boom truck, crane and port handling equipment manufacturer Manitex is expected to complete the acquisition of the PM Group, the owner of PM loader cranes and Oil & Steel work platforms within the next few weeks.

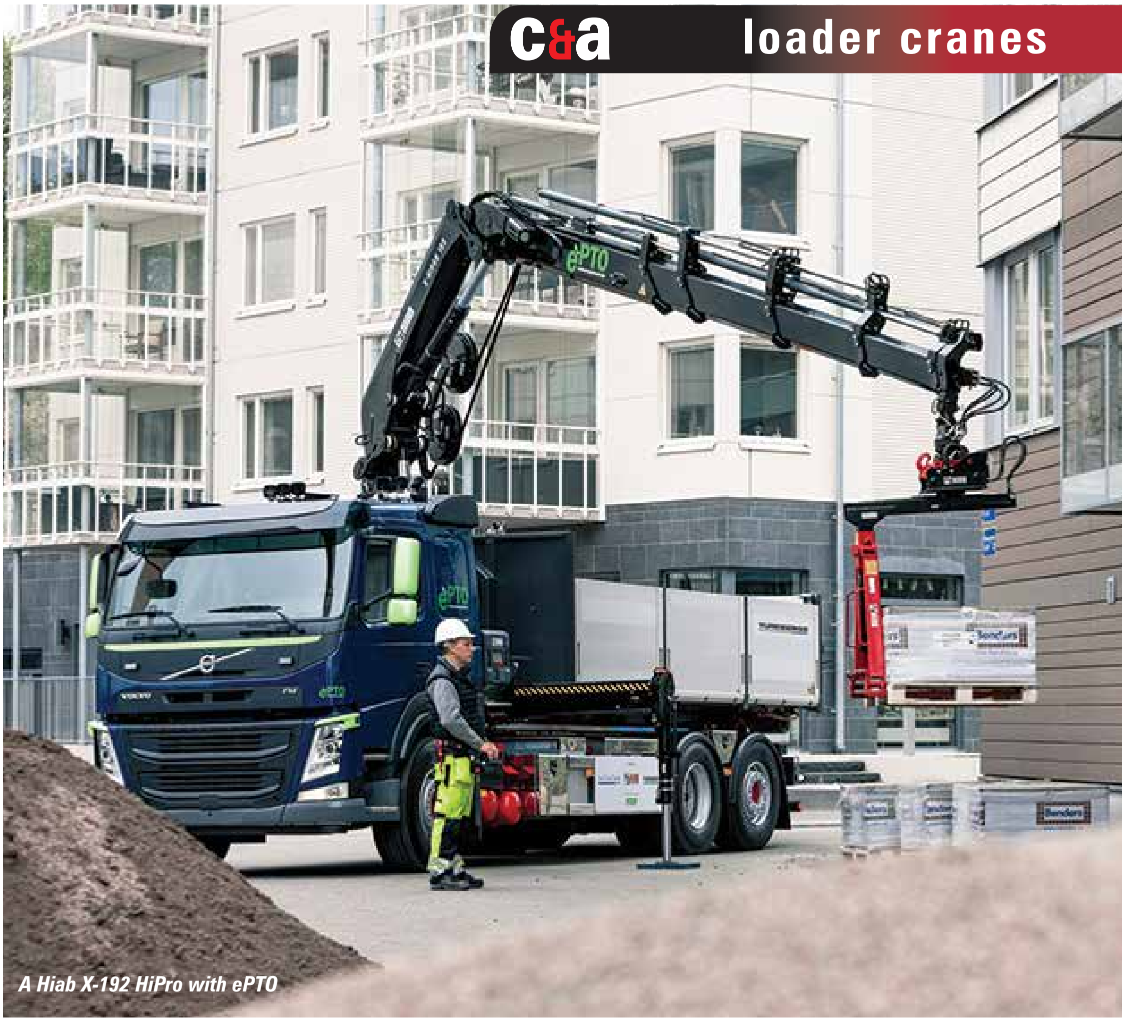
The business had run into difficulty and its purchase required Italian court approval of a debt restructuring plan. The company is keen to expand the PM loader crane business and to gain benefits from the new contacts from each company's distribution networks.

Hiab ePTO

Hiab is now shipping the new electric power take off (ePTO) system that it announced in August. According to Hiab electric power offers considerable benefits over a mechanical PTO, including improved energy efficiency and lower noise levels, making it possible to work indoors or in residential areas at night. Also the energy required to operate the crane is 60 to 70 percent less than for a conventional crane.

When the crane is not in use the electric pump of the ePTO is automatically switched off to save energy and battery capacity. The crane uses an advanced load stabilisation system, LSS, to enable quick and easy crane operation, as well as hydraulic system that reduces energy losses to a minimum. The new system was unveiled on a Hiab X-192 HiPro.

The company has also opened a new assembly plant in Stargard Szczecinski, Poland and introduced a new anti-corrosion treatment process for steel parts, which it is calling 'nDurance', an environmentally friendly pre-treatment and paint process based on nanotechnology and e-coating which offers a three-layer protection against corrosion and harsh working environments. *(see page 62).*



A Hiab X-192 HiPro with ePTO