



Arvid Bergli with his HIAB
in Lofoten, Norway

BUILT TO PERFORM

We deliver on our promise. So that you can deliver on yours.

Our passion for performance is the DNA of every HIAB product. For 70 years we've built our cranes rugged and ready, from the boom to the bolts. For their owners and operators, it means safety, comfort and confidence in getting the job done – day in and day out.

The tradition continues with a whole family of new HIAB cranes in 2015, including a powerful series of big cranes.

Discover all our new cranes at hiab.com



Hiab goes back to black

After a few relatively challenging years, Hiab is making a concerted effort to regain market share and even its position as market leader. One of the countries where it has made a good deal of progress towards achieving that aim is the UK which is now one of its best performing markets. Cranes & Access travelled to Ellesmere in Shropshire to talk to Alastair Evans, head of Hiab sales at Cargotec UK group headquarters.



Alastair Evans

A generic name that slipped

It must annoy other loader crane manufacturers when their products are referred to as Hiabs - the often-used generic term for a loader crane in several countries, including the UK. Like Hoover and JCB it is derived from the originator or leading/dominant producer. Hiab - short for Hydrauliska Industri AB - was founded in Hudiksvall, Sweden in 1944 by Eric Sundin, a ski manufacturer. In recent years Hiab

has however undergone several periods of restructuring which has resulted in it losing its position as market leader to Palfinger both globally and in the UK where currently it has slipped to probably second place with Fassi and HMF close on its heels.

Several factors have contributed to this including a chequered company ownership over the past decade or so. The brand first appeared in the UK in 1974 when the George Cohen 600 Group imported the products from Sweden but numerous corporate changes within Cargotec in recent years have made it difficult for the company to focus - particularly on the marketing side of the business. However this is now being addressed with new websites and a consistent global and regional corporate branding.

"The company has gone through quite a few restructurings but now we are focussed behind the

The smallest of the three new models in its capacity range is the X-HiPro 548



C&A

loader cranes

More installations going through Hiab's UK head office in Ellesmere, Shropshire



A Hiab X-HiPro 638

Hiab brand name," said Evans. "From 1st January next year we will be known as Hiab UK, rather than Cargotec UK - which includes Kalmar and Hiab. From next year Hiab and Kalmar will also be two separate companies, but still part of the Cargotec organisation. The Hiab brand strategy is 'back to black' and 'built to perform' and there will be a much greater focus on marketing and re-establishing the brand."

New products galore

From a product point of view, the company has been very busy recently. Last month it launched three new models in its high capacity range - the X-HiPro 548, the X-HiPro 638 and the X-HiPro 658 - said to be part of the company's efforts to improve quality, performance and economy across its new heavy lift range. These form part of its 'Big Five' range of cranes with load moments from 50 to 90 tonne/metres which also include the X-HiPro 858 and X-HiPro 1058 launched last year.

Safety innovations include auxiliary stabilisers that are fully integrated into the hydraulic and electronic systems, 'Variable Stability Limit Plus' which automatically regulates lift capacity in relation to stability

and the Load Stability System which dampens jerky lifting movements.

Quickly scanning the larger crane range there is a clear gap around 70 tonne/metres previously covered by the old 700 series which was lost when the range was consolidated. "This gap has been noted by the company and we would hope that Hiab can fill this position," he said.

Market statistics

It is difficult to establish exact sales figures for the UK market, but the total sales are in the region of 2,000 units a year. For cranes over 30 tonne metres figures suggest a substantial 350 or so. Unlike continental Europe where contractors and cranes are more often applied to wide variety of different tasks across various sectors, the UK crane market tends to fall into three main segments - big cranes, 'muck-away' applications with clamshell attachments etc... and the brick/block hauliers and builders merchants.

Palfinger is said to dominate the muck-away sector with as much as 60 percent of the market. Hiab - without a decent muck-away crane - concentrates on the brick/block and builders' merchants market. Also with its largest crane having



ORMIG
PICK and CARRY



ORMIG S.p.A. PIAZZALE ORMIG
 15076 OVADA (AL) ITALY
 TEL. (+39) 0143.80051 r.a. - FAX (+39) 0143.86568
 E-mail: mktg@ormigspa.com - sales@ormigspa.com
 www.ormig.com - www.pickandcarry.com



An XS 166 HiPro

a load moment of around the 90 tonne metres Hiab is also unable to compete in the very big crane sector from 100 to 200 tonne/metres.

Again it is hoped that Hiab could in the future have a range greater than 100 tonne/metres.

"The main players in the brick/block and builders' merchant sector are companies such as Marshalls, Wincanton, Keedwell and the Canute Group which generally renew equipment every six years," said Evans. "However the almost zero spend on new equipment during the last recession means there is a lot of older equipment still in operation resulting in a large influx of major replacement programmes by the main companies at the end of last year and we are seeing a lot of this business."

Roller cranes

Hiab developed a new roller crane - initially for Marshalls - at the end of 2010, hoping to supply around 70 units a year, but is currently it is producing nearer 200 cranes, as the roller crane mounted on a semi-trailer sector has grown far quicker than originally anticipated.

"It is a very good product however the introduction of the Machinery Directive means that the outrigger or stabiliser monitoring is a little bit difficult, as the crane moves up and down the trailer, so we are looking at stability systems on the crane capacity and also monitoring the

tilt of the trailer," he said. "Currently we have about 30 to 40 units for Wincanton going through our bodyshop at head office."

"Because the roller crane moves along the trailer it can get closer to the load, reducing the lift radius required and resulting in a smaller capacity crane - say nine to ten tonne/metres rather than the usual 12 or 13 tonne/metres. Trailers arrive in our installation workshop area ready to accept the roller crane, so installation time and testing is less than a week, helping keep installation costs to a minimum."

But why so many roller cranes at the moment?

"Roller products in the UK are generally purchased on a six to seven year replacement cycle, but it seems that all the main users are coinciding with them replacing units in the same 18 month to two year window. This type of crane was widely used in other countries, particularly the Netherlands, but numbers have dwindled over the past few years with only a handful of orders being placed compared to the UK. Roller cranes in the Netherlands tend to have larger capacities - from 15 to 30 tonne/metres - whereas the UK generally uses nine and 10 tonne/metres or in some cases 11 tonne/metres."

On the up and up

Hiab's financial performance has



Installation time and testing of a roller crane is less than a week, helping keep installation costs to a minimum



Largest high capacity crane is the X-HiPro 1058

improved significantly over the past two years or so. Parent group Cargotec - which also includes Kalmar and MacGregor - reported a strong third quarter for all three operations, including a doubling of profits at Hiab. Its revenues for the nine months to the end of September were €679 million, up eight percent on last year, with order intake increasing six percent to €717 million. Operating profits for the period more than doubled, from €30.1 million to €68.6 million.

This year Hiab UK has seen its orders increase by 30 percent, helped by large orders from the likes of Travis Perkins at the end of last year for delivery this year and in 2016. The UK is the currently the best performing division for Hiab

in terms of units sold and growth over the past two years. Historically the best performing countries have been Germany, France and the Netherlands. The UK though is also boosted by other divisions - as well as loader cranes it has the truck mounting business, Truck Mounted Forklifts (Moffett), Multilift, Loglift and Jonsered - all contributing to its revenues.

Hiab UK has direct sales team of 10, selling Hiab, Multilift and Moffett across the whole of the UK, while a separate importer handles Southern Ireland. It mounts a high percentage of the cranes it sells - around 250 to 300 a year - at its head office facility in Shropshire, a figure that is expected to increase with demand. It also has a number of dealers

based in Scotland, the North East and South Wales for customers with preferred body builders. This strategy can also save costs by reducing vehicle movements.

This direct sales and mounting strategy is only shared with the Netherlands which also has a large in-house installation capacity. Hiab France for example has direct sales only in Paris region, with the rest of the country handled through an extensive dealer network. Germany has a similar model.

UK market

Currently Hiab is probably number two in the UK, behind market leader Palfinger, (with Fassi and HMF not far behind). As we have mentioned the lack of a dedicated muck-away crane means that it misses out on much of the 600 or so cranes said to go into that sector each year. Countries such as France, the Netherlands and Belgium prefer to use a Z type crane that folds away completely behind the cab, so Hiab recently launched the 17 and 19 tonne/metre Z-Pro 171 and Z-Pro 191 which folds

completely behind the cab with the clamshell attachment still in place. The new cranes are aimed at applications where speed, efficiency and a high number of load cycles are required such as digging, filling, waste handling and other light tool operations. The new design also allows the driver to fully cover the load during transportation to comply with the latest legislation.

Unfortunately this is not a crane that will sell in the UK. It is too big - the UK customer wants 12 or 13 tonne/metre capacity - and there is a general preference for a straight rather than Z folding boom, leaving the boom down the body with the bucket to cover the last three



Countries such as France, the Netherlands and Belgium prefer to use a Z type crane that folds away completely behind the cab

www.fassi.com

FIFTY YEARS OF FASSI CRANES

Being Fassi means partnership; working together to build the team spirit that will grow your business now and in the future.

Together, we are FASSI.

th

1965 - 2015

FASSI

LEADER IN INNOVATION



quarters of the load.

“The UK market was always thought of as a nation that prefers direct hydraulic controls, however we are now seeing 50 to 60 percent of all cranes being ordered with remote controls compared to around 20 percent in 2000. Now every builders’ merchants’ crane has remote controls, primarily for increased safety by moving the operator away from the lift, where he also has greater visibility.”

Big cranes

Hiab’s largest crane is the 94 tonne metre X-HiPro 1058 crane which for the UK market is generally big enough. However Evans hopes that one day Hiab will extend the range possibly to 150 and even 200 tonne/metres.

“The market sector for very big cranes is very small and the cost of developing a large crane has

not generally been worth the investment,” he said. “When you get to 200 tonne/metres the challenge is finding the right truck to mount it to. In the UK we have an axle weight of 32 tonnes for a four wheeler, the Netherlands it is 37 tonnes, so cranes of 200 tonne/metres and above is a dream. Up to 150 tonne metres would be more feasible and would cover the majority of sales. Core markets for big cranes are Germany, France, Benelux and Scandinavia. Spain was once one of the leaders and is beginning to come back, there are good signs of growth from Hiab Spain.”

Surprisingly Cargotec’s main market for its forestry cranes is Japan, with the Middle East, Far East and Asia also strong markets for various types of crane.

“Price is a large purchasing factor and we are perceived to be at the top end of the scale. Our big cranes only come with one control system, the premium HiPro system with the advanced V200 variable pump. While it is more costly, it is a superior control system. To gain market share we need to look at the price difference between us and the competition. We are closer to Palfinger but some percentage points higher than Fassi. By closing the gap we can hopefully gain some market share. In the 30 to 50 tonne/metre range we offer two control systems so by offering the simpler, less expensive system - the HiDuo - it helps us compete.”

Product support critical

Service is critical for loader cranes, due to the huge fleets which are highly utilised with uptime absolutely critical. Hiab has 12 of its own service engineers as well as 23 service agents at approved centres around the country, which gives more than 80 additional engineers if and when required. Many of the larger fleets demand after hours’ service provision, bringing equipment in at weekends

for routine servicing and repair. This side of the business is a key to the success in this market, and has grown steadily over the years.

“A lot of customers are moving towards the longer seven, eight and nine year contracts, whereas previously this was three, four or five year contracts,” he said. “10 to 12 years is a normal loader life span for a crane in this type of application, although many run the cranes between five to seven years before replacing both the crane and truck at the same time. Customers

any given time.

The latest system - VSL+ - automatically regulates the crane’s capacity in relation to the vehicle’s actual stability, by sensing the position of each stabiliser leg/outrigger and whether there is a load on the truck. Three of the four legs have to be in full contact with the ground.

“There can be problems caused when an operator working at height brings the load down at speed which can have a dynamic effect, increasing the load moment



The 17 tonne/metre Z-Pro 171

focus on whole life running costs and want fixed costs for the period.”

But what is the true life-span of a crane?

“Only on the newer cranes with computer systems can we tell if the crane has exceeded its life expectancy which is based on lift cycles and how the operator works the crane,” he said. “We have seen customers with two identical cranes carrying out the same work, where one has a short life and the other possibly double the lifespan purely because of the skill or lack of from the operator. Jerky movements can reduce a crane’s life by half or more.”

“One of our features - LSS (Load Stabilisation System) smooths out the vertical movements so is certainly worth specifying as it speeds up operations as well as prolonging the life of the crane, particularly if the company has a large fleet and a mixed bag of operators.”

Hiab also offers the Variable Stability Limit (VSL) which measures how far each individual leg or outrigger is extended and whether it is in contact with the ground. The analogue sensor in the slew mechanism, knows exactly the position of the crane and via the pressure in the main outrigger cylinder it works out the stability at

and therefore the stability of the crane. We now have high boom logic where the crane reduces the function speed when the boom is lowered too rapidly to maintain stability.”

Refuse collector

Other new products include Hiab S-HiPro 130 refuse collector aimed at underground waste container systems which are popular in many European cities. The system keeps waste out of sight, prevents litter blowing around and reduces possible smells. Increased capacity bins - up to six times the normal 1,100 litre bins - also minimise collections and therefore helps ease road congestion.

The crane is mounted on top of the compactor rather than behind the cab, saving space and allowing room for a larger capacity compactor. The system is currently used extensively in continental Europe but at the moment only one County Council is looking like specifying a system in the UK.

“Single lever, semi-automatic controls result in fast and accurate cycles which lift the bin, then one lever automatically replaces it and one button to fold back up. This type of system needs a different mentality and a change in the philosophy of councils to put in the correct infrastructure,” he said.



Hiab’s largest crane is the 94 tonne metre X-HiPro 1058

PALFINGER

LIFETIME EXCELLENCE

JEFF KOSCHINSKI
SALES REPRESENTATIVE

**„INNOVATION MEANS
TO MAKE GROUND-BREAKING,
MARKET-READY TECHNOLOGY.”**

Big tasks need a strong partner: PALFINGER products prove their strength every day, without exception. They deliver the very highest reliability regarding performance, quality and service – for the lifetime of the product. “Lifetime Excellence” – Our promise toward the utmost success for your company. WWW.PALFINGER.COM



Global domination?

Globally Hiab claims to be number two behind Palfinger, however its strategy is to regain global market leadership over the next couple of years or so.

"We have the brand name and the products to be number one," he said. "In truck mounted forklifts we are clearly number one, but number two to Palfinger in cranes, but we do need a full product line to move back into the top spot."

"We see some growth in the UK for next year in the loader crane market, particularly in the first six months but we are not so sure about the second half of 2016. Customers are looking to purchase new cranes and are placing orders for March/April next year. Growth for Hiab may not be quite as much as we saw between 2012 and 2015, although we can maintain these levels if we

succeed in taking more market share in specific sectors where we have been weak in the past."

If Hiab can continue to regain its focus and expand its product line as it has done over the past two years, it looks set to at the very least give Palfinger a good run for global market supremacy.



The Hiab S-HiPro 130 refuse collector is aimed at underground waste container systems which are popular in many European cities



Hiab's trials and tribulations

Hydrauliska Industri AB, was founded in Hudiksvall, Sweden 1944 by Eric Sundin, a ski manufacturer who realised that he could use the PTO of a timber truck to power a hydraulic crane to load and unload wood for his works. In 1985 Finland's Partek Corporation - which already owned Multilift - acquired Hiab and started rebranding it. Then in 2002 Partek was acquired by Kone Corporation which in 2004 rebranded the entire load handling business as Hiab, given that it was its most valuable brand name and product line. In 2005 Kone spun off Hiab and some of its other transport/shipping related businesses into a new publicly quoted Finnish corporation, Cargotec, which today comprises Hiab along with Kalmar and MacGregor marine cargo handling solutions.

In recent years the business has undergone constant back and forth restructuring with a

major centralisation programme, a rebranding with the Hiab name changing to Cargotec, followed by a merger of Hiab and Kalmar at the operating level. And then then even before the paint was dry on the new strategy and structure it reverted to Hiab again and a major decentralisation programme launched!

The almost constant restructuring has clearly caused a distractions and a lack of continuity, disrupting the company and its staff from normal everyday business activities and customer focus. Thankfully the past few years have seen a stable, more logical approach, with the benefits of that stability really beginning to kick in over the last year or two. The challenge now is to build on that momentum with the aim to win back market leadership after several years in second or third place.



EVS - the unique safety system - use the load; reach longer, lift more



- power to lift.

EVS from HMF is the only active stability safety system in the world. Active means that EVS at all times calculates the stability based on current conditions - including the load.

www.hmf.dk

New lightweight Fassi

Fassi has launched its latest addition to the XE range - the F545RA - a completely new crane which completes the line between the F485RA and F560RA xe-dynamic. The 53 tonne/metre crane offers a 10 percent greater lifting capacity over the smaller F485RA with only a three percent weight increase thanks partly to the increased outrigger spread of 7.8 metres. Fassi says the crane is light enough to be installed on a three axle chassis. The installation width is just 85mm wider than the F485RA maintaining its compact dimensions.

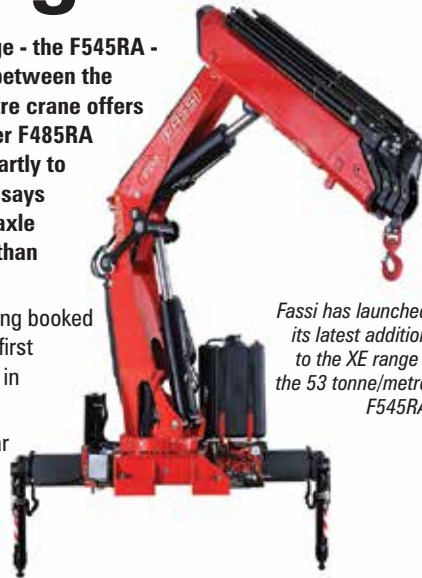
A continuous slew crane it has an optional dual motor drive and uses the tried and tested FX500 control system, D850 hydraulic distributor, Scanreco RCS radio control and FSC-S stability control. It will be offered with up to eight hydraulic extensions and a full range of jib and hoist options.

In the UK, Fassi's Leigh Carter said: "This is the crane that the UK market has been eagerly awaiting. With the availability of 10 tonne front axles, the F545RA maximises the possibilities offered by the latest generation of three axle chassis.

Orders are being booked now with the first deliveries due in March 2016."

In its 50th year in business Fassi UK has exceeded the previous

record for crane sales set in 2007 by 18 percent. It has also been expanding its authorised dealer network with new additions, including APM Hydraulics covering Hertfordshire, Bedfordshire and Buckinghamshire and Bristol's Avon Crane & Commercial Repairs which become official Fassi main dealers from January 2016.



Fassi has launched its latest addition to the XE range - the 53 tonne/metre F545RA

PM launches heavy duty range

PM has launched three heavy duty loader cranes - the PM 210SP, the PM 150SP and the PM 100SP - with load moments of 150, 108 and 84 tonne/metres respectively.

Largest of the trio, the PM 210SP with jib has a maximum lift capacity of 21.84 tonnes, horizontal reach of 45.4 metres and a 49 metre maximum tip height. On the main boom only the maximum height is 30 metres. PM says that the crane's integrated structural frame has been designed to be installed directly onto the truck chassis, providing a significant weight reduction, compact dimensions and good stability thanks to a lower centre of gravity. Features include E-soft Stop and the Hydraulic Brake Soft Stop.

The mid-sized PM 150SP has a greater lift capacity at 24.5 tonnes but has a maximum vertical and horizontal reach of 42.15 and 38.4 metres. Available with up to nine hydraulic extensions and up to six jib extensions with 25 degrees above horizontal luffing angle.

Smallest in the range, the PM 100SP has a 19.150 tonne maximum capacity and 37.35



The smallest of PM's three heavy duty loader cranes - the 84 tonne/metre PM 100SP

metre tip height, but features a new compact design with reduced stowed height and width even when fitted with a jib. The basic crane is available with four, six, eight and nine extensions with either a four or six extension jib. Its octagonal boom profile with thinner higher tensile steel adds to the performance, while reducing the overall weight.



The mid-sized PM 150SP has a capacity of 24.5 tonnes and a maximum vertical and horizontal reach of 42.15 and 38.4 metres



The 150 tonne/metre PM 210SP with jib has a maximum lift capacity of 21.84 tonnes, horizontal reach of 45.4 metres and a 49 metre maximum tip height



LIFT DIFFERENT



From 1 to 7,5 ton - up to 28 mt

SPB209



SPX312



THE ONLY ONE WITH BATTERY

SPX424



SPX527



THE ONLY ONE WITH HYDRAULIC JIB

SPX1040



SPX1275



THE ONLY ONE WITH 2 TON PICK & CARRY

MPK20



SPL17



MANIPULATOR



www.jekko.it
info@jekko.it
ORMET

A clear view

Frankfurt's futuristic-looking 'Main Triangel' building is considered an architectural highlight of the city's south bank. The triangular complex consists of two buildings, one high rise and one low rise with a glass and steel atrium roof between the two that spans the freely accessible courtyard. While architecturally stunning, replacing some of the glass panels can be a real challenge. The first time any replacement work was carried out all traffic on the road at the front of the building had to be diverted for one week. When another pane needed to be replaced in the atrium roof, such disruption was ruled out.

So an alternative method was found which allowed the pane - measuring 3.6 metres by 2.4 metres and weighing 450kg - to be installed in the atrium roof at a height of 38 metres by equipment working from inside the atrium itself, thus avoiding any traffic diversion issues at the front of the building. Dieburg-based crane and heavy-duty transport company Meister supplied a truck mounted Palfinger PK 200002 L SH loader crane which joined forces with a 53 metre Palfinger WT 530 truck mounted platform.

The company prepared the ground by laying heavy steel spreader plates to spread the load for the

PK 200002 L SH to drive in and work from, particularly as the basement car park was only one floor below.

After setting up the crane in its working position a multi-axis glass manipulator developed by Meister was attached. Climbers working on the outside of the building then loosened the old pane before the PK 200002 was extended 38 metres and using the vacuum lifter, removed the defective pane and set it down on the floor. It then lifted the new pane into position for installation. The WT 530 platform was used to raise the crane operator to a position close to the roof for a clearer view of the work.



The PK 200002 was extended 38 metres and using the vacuum lifter, removed the defective pane



Climbers working on the outside of the building loosened the old pane before being removed



Meister supplied a truck mounted Palfinger PK 200002 L SH loader crane which joined forces with a 53 metre Palfinger WT 530 truck mounted platform

Palfinger expands global leadership

After setting new sales records in 2014 - exceeding €1 billion for the first time - Palfinger is expecting to do even better this year, possibly reaching €1.2 billion. Claiming a global share of the loader crane market of more than 30 percent, the market leader credits its 'internationalisation strategy' and diverse array of new products for its success.

The company's latest new product is the 125 tonne/metre PK 165.002 TEC 7 - a new

generation of heavy-duty crane - launched this summer. Designed for 32 tonne trucks, it is a tonne lighter than the model it replaces, the PK 150002, yet boasts 15 percent more lifting capacity and 20 percent on the jib. The new model has a maximum capacity with jib of 8.2 tonnes - up from the previous 6.5 tonnes - and a maximum lift height of 35 metres or 40 metres depending on which jib is selected. The over-centre linkage allows the jib articulate up to 15 degrees above the horizontal boom.





Effer introduced the E55 with mechanical foldable jib in 1966



The revolutionary C22LW truck side excavator launched in 1968 - some units are still in use today

Effer celebrates 50 years

Last month Italian loader crane manufacturer Effer celebrated 50 years at its headquarters in Minerbio near Bologna. Established in 1965 the company has been at the forefront of many loader crane developments and innovations since then.

The year after the company was formed it introduced the E55 with mechanical foldable jib and forks for carrying boards. This was followed a couple of years later by the revolutionary C22LW truck side excavator, some units of which are still in use today.

In 1972 the company introduced a 50 tonne/metre crane. With a three section main boom and hydraulically operated three section jib it could reach its 27 metre maximum height in just 28 seconds. In the early 1980's Effer made its debut in China, a market where it is still well established, particularly with its large loader crane range.

Over the years Effer has gained a reputation for producing special solutions to lifting challenges. In 1985 a large underbridge crane named 'America' was built for the USA which could move in its work position, using wheeled stabilisers. The company's marine division also introduced a 400 tonne/metre version completely certified for offshore applications in 1986.

Effer cranes have set many records for the largest loader cranes. When introduced in 1998 the 200 tonne/

metre model 2200 was the biggest loader type truck crane ever built and is still operating in Bologna today.

Technical developments have included decagonal profile boom sections with a single weld in 2001, the CroSStab stabilisation system in 2010, followed four years later by the V-Stub for maximum stability through a full 360 degrees and that same year, 2014, launched the 2055, the biggest truck crane in the world on a 32 tonne truck. Development continues with the introduction this year of the 20 tonne/metre Icon 215 which it claims is the next evolution of the traditional loader crane concept.

At the 50th anniversary celebrations several cranes were on show including the tracked 525 6s + 6s HD mounted on a crawler chassis by Italian partner Brennero Gru. The compact remote controlled machine can gain access to and work in areas with very little space.

As well as its main facility in Bologna, Effer also has a production plant in Taranto in the south of Italy. Opened in 2001 it produces the company's light and medium range cranes.

At the 50th anniversary celebrations Effer showed its new tracked 525 6s + 6s HD mounted on a crawler chassis by Italian partner Brennero Gru



In 1972 the company introduced a 50 tonne/metre crane. With a three section main boom and hydraulically operated three section jib it could reach its 27 metre maximum height in just 28 seconds

PM
truck mounted cranes

[150 SP]
MAKE IT BIG

- **MAX. LIFTING CAPACITY - 107.6 T**
- **MAX. HORIZONTAL OUT REACH - 35 M**
- **MAX. VERTIKAL OUTREACH - 38.85 M**

UK Sales Manager:
Deborah Bickford
Tel: 07726 870466

UK Service Manager:
Martyn Daykin
Tel: 07809 832579

www.pm-group.eu

Performance optimization is always the reward of Fassi technology

Innovation is having tomorrow's vision without ignoring the reality of today, while always staying true to the values of the Fassi brand.

MORE DETAILS ON FASSI CRANES: WWW.FASSI.CO.UK

50th ANNIVERSARY
1965 - 2015
FASSI