

method

HIAB LOAD HANDLING MAGAZINE 1.2008 English



Efficiency
produces success



HIAB

IN FOCUS: Growing XS family – Good ergonomics – Emission savings

Close to you



We have stated in our strategy that we want to be close to our customers. Hiab's President Pekka Vartiainen will explain this ambitious statement and tell you how Hiab has put it into practice. He will also explain what we have done to execute another strong strategic aim: to increase the installation and servicing business.

Looking back at 2007, all major acquisitions – sales companies in Australia, Croatia, Slovakia, Hungary and the Czech Republic, a components manufacturer in Estonia and a service company in the USA – aimed for the same goal: to implement Hiab's strategy in practise.

This year we will continue getting closer to you. On page 17 you can read how we did this last year in northern Finland with one of our new customers, Havator, receiving their new truck with a loader crane in just over two weeks.

I wish you a successful 2008 with plenty of new and interesting load handling challenges to tackle!

Taina Luoto
Editor-in-chief

BEHIND THE COVER



Gas in the blood

The World Rally Championship's driver and co-driver team with the longest history – two-time world champions from Finland, driver **Marcus Grönholm** and co-driver **Timo Rautiainen** (photo on the right) – ended their career at the top after taking second place in this year's drivers' championship.

Ford Focus RS WRC '07

It takes endurance both from the drivers and the cars. The technology has not let the drivers down.

Specifications:

Length: 4,362 mm. Width: 1,800 mm. Wheelbase: 2,630 mm. Minimum weight: 1,230 kg

- Engine: Ford 1998 cc Pipo-built I4 Duratec WRC
- Four cylinders, 16 valves
- Bore: 85 mm, Stroke: 85 mm
- Pi electronic engine management system
- Turbo: Garrett (with FIA-required 34 mm inlet restrictor)
- Power: 300 hp at 6,000 rpm
- Torque: 550 Nm at 4,000 rpm

Fuel tank: FIA FT3 tank

in Wales, GB, as well as in the World Rally Championships in Norway and Japan. Now that Grönholm and Rautiainen have left the rally circuits, there are plenty of expectations for Hirvonen and Lehtinen. And rightly so, based on their success in 2007.

Read more about the background work behind Ford's rally success on pages 14–16.

The two men teamed up back in 1995 and have risen to the top while driving for different teams. The last two seasons they drove for the winning Ford team.

Competing requires skill and nerves of steel, but humour also comes into play in difficult situations. In 2003, when the team drove to the service area between stages in Argentina on only three wheels, Grönholm shocked the journalist who pointed it out: With a straight face, Grönholm said: "What? Has someone stolen a wheel from us?"

Fellow countrymen, **Mikko Hirvonen** and co-driver **Jarmo Lehtinen** (photo on the left), continue their successful career in the Ford team. The pair drove to a win in the last rally of the year

Trade shows

Come and meet us at trade shows. For more information, please visit www.hiab.com.

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MOFFETT offers freedom and efficiency



METHOD – LOAD HANDLING MAGAZINE

is Hiab's customer magazine with a circulation of approx. 70,000.

The Hiab company's product brands are HIAB loader cranes, MULTILIFT demountables, LOGLIFT and JONSERED forestry and recycling cranes, ZEPRO, AMA, WALTCO and FOCOLIFT tail lifts, and MOFFETT and PRINCETON PIGGY BACK® truck-mounted forklifts.

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the XS family

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Printing house Lönnberg Print **ISSN** 1459-9554 **Subscriptions and address changes** Hiab Oy, Central Marketing, Sörmäisten rantatie 23, P.O. Box 61, FIN-00501 Helsinki, Finland. tel. +358 204 55 4401, fax +358 204 55 4511, www.hiab.com/feedback

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Remote-controlled hole cutter performs

RISKY WORK for firemen

A remote-controlled crane with a tine grab. This is the solution to one of the most dangerous tasks facing firemen. "Making holes in a roof to release the hot combustion gases from a burning building is a dangerous and difficult job", says Sven-Olov Hansson, assistant head of rescue operations at the emergency services in Sundsvall-Timrå in Sweden. "Now we can accomplish this much more safely."

RK

The new solution is the result of cooperation between Sundsvall-Timrå emergency services and Hiab. "It was **Bo Elgenström** at the emergency services and I who contributed our viewpoints and ideas in a cooperation effort with Hiab", explains **Sven-Olov Hansson**. "Then Laxo Mekan constructed our solution." The result was a radio-controlled HIAB XS 477 with six hydraulic arms and a Jib 100 mounted on a demountable platform.

"We already had three demountable vehicles that could carry the new platform, so we did not need to invest

in an additional vehicle", explains Sven-Olov Hansson. "This kept the cost down."

The importance of being able to quickly make holes and release combustion gases was accentuated in the spring of 2005 when an entire block of old buildings in central Sundsvall burned down. "In that case, we were unable to release the combustion gases quickly enough, with unfortunate consequences in terms of spreading of the fire."

On that occasion, the fire spread rapidly through the old buildings via recesses in walls with additional insulation and attic spaces. If the new crane had already been in use, the damage could probably have been significantly limited.

In the future, holes will be made right from the start when fighting fires, as a matter of course and as a preventative measure. "Even if only the bottom floor is burning. Our experience is that a fire can spread very quickly once it has established itself."

Quick evacuation of combustion gases also improves visibility inside a burning building and simplifies the job of extinguishing the fire by making it easier to find the source of the fire. Accordingly, firefighting is made quicker and easier.

No limitations on use

The new crane can be manoeuvred via radio control by one person in a crane basket. From this safe distance, the crane can be precisely manoeuvred to crush roofing material with the tine grab and to create holes through which uncombusted combustion gases can be released. The crane extends 30 metres straight up or 26 metres sideways. Thanks to the eight-metre-long jib, it is even possible to reach some distance in over flat roofs. "Because of the size of the crane, it easily reaches onto the roofs of eight-story buildings," explains Sven-Olov Hansson.

Previously, this work needed to be performed manually by the firemen. In addition to the risks connected with chopping holes in roofs above the seats of fires, the task often involved balancing on snowy, slippery roofs high above the ground. That in itself made it clear that the operation was extremely dangerous.

The crane will also be used in many other situations. "Only our imaginations set the boundaries", says Sven-Olov Hansson. "We will be able to use it during storms to deal with roofing panels about to be blown away, large road signs that have blown down or trees that have fallen over, among other situations."

Even now, as three men per shift are being trained to operate the crane, other hydraulic tools are being considered to equip it for other tasks. Clearly, the new addition entails an enhancement of both safety and efficiency for the emergency services in Sundsvall-Timrå. ■

Text: Ulf C. Nilsson
Photos: Per Trané

The only way to get first-hand information on the true load-handling needs of customers in different markets is through close collaboration with those customers.

Closer to customers



"Market leadership requires technology leadership", notes Pekka Vartiainen.

Hiab's strategy is to be close to customers. Hiab's President **Pekka Vartiainen** acknowledges that many other companies have expressed the same goal, but, in many cases, the words have remained just words.

So how is something that is decided on at the Hiab Head Office in Helsinki, Finland, implemented into tangible actions visible to the company's customers in the Czech Republic, Australia, Canada and all the other countries where Hiab's products are seen on the streets?

"Unlike our main competitors, Hiab's organisational structure aspires to sell products and services directly through our own sales companies. That enables us to have better contact with customers", Vartiainen explains.

He goes on to say that it's a policy that has already been put into practice and has visible results in, for example, Australia, where Hiab has acquired its long-time importer BG Crane Pty. Ltd. The new Hiab Australia holds a solid position in the country's load-handling market. The company has good geographical coverage, and its portfolio of load-handling equipment covers Hiab's entire offering. In general, the company installs and services the equipment it sells.

the load-handling solutions for trucks. This makes it possible for us to listen to the customer first instead of offering them a specific, predetermined product. Then we can sit down together with the customer and figure out the most efficient load-handling solution for their specific need."

Vartiainen admits that while the model sounds straight-forward, it is easier said than done. Nor is he saying that the company has already reached the goal and that the operating model has already been honed to support it. Implementing the mindset throughout the organisation is a big transformation process and there is still plenty of work to be done.

"We have made progress, but we are not finished. I like to emphasise to Hiab employees the fact that people have two ears and one mouth so they can listen more than they talk. We, too, must listen more carefully to our customers."

By doing so, Hiab will gain first-hand information about customers' needs in different geographical areas and user groups. And the markets are very different; for example, the demand for different load-handling solutions in Western Europe and North America is different than in the Middle East or Asia's growing markets. It is important that the latest information from the field is communicated to Hiab's product development.

The issue is also touched upon in the company's annual report, which states that Hiab is examining opportunities to increase its presence in growing markets by expanding its product range to simpler-technology load-handling equipment.

Adapting the product offering to local conditions is a big challenge for Hiab.



"This is a good, practical example of what it means to be close to customers. The company owned by Hiab is on good footing to develop its operations further, and our customers in Australia are experiencing this as better service."

Hiab has taken similar steps this year also in Croatia, the Czech Republic, Hungary and Slovakia.

"By acquiring our importer we gain the opportunity to be in direct contact with our customers. This way we also have the opportunity to develop our business in these countries", Vartiainen says and notes that a stronger local presence also supports Hiab's strategy to significantly increase the installation and servicing business.

Solutions to real needs

Direct contacts help to better understand customer needs. The importance of this will be accentuated as Hiab evolves from a product line-based organisation to a provider of solutions.

"Also this aspiration isn't very unique; many other companies have visions repeating this same theme", Vartiainen notes, but, he emphasises, the change in Hiab's business philosophy is visible in the practical operations.

"Our four product lines offer about 90 per cent of

"Adapting the product offering to local conditions is a big challenge for Hiab, as it is for other Western companies. In this respect, 'closer to customers' is a very big mental challenge for product development. It is also a challenge in terms of how and where these products are assembled and manufactured to achieve also a local price level", Vartiainen adds.

More investments in product development

Hiab is already the global market leader in its own sector with a market share of some 20-25 per cent. However, the bar has been set higher: Hiab wants to achieve market leadership in all its selected product groups in all geographical regions.

"Our goal is to be the market leader in significant markets also locally. A lofty goal indeed considering there are so many markets in this world", Vartiainen chuckles.

He points out that market leadership requires Hiab to also be the technology leader in the sector. That's why the company is increasing the share of research and product development.

"The investments will ensure that we are the frontrunner in important, new technologies. In product development, it is crucial to understand customers' needs today, but also have the ability to anticipate needs a few years down the road. In the future, product development will be weighted increasingly towards specific geographical areas – so, here too, we will move closer to the customer." ■

Text: Compositor/Sami Laakso

Photo: Tomi Parkkonen

The HIAB XS 211 is one of the largest cranes that can be mounted on a two-axle truck without extra support leg equipment.



XS family grows by two sizes

HIAB loader cranes XS family's newest members, the long-awaited HIAB XS 211 and HIAB XS 1055, were launched on a broad scale in 2007.

Hiab's new loader cranes products were introduced internally in June in Saltjöbaden in Sweden. In addition to the actual launch, the event also focused on presenting and discussing the company's plans and processes for the future.

"The principal message that we wanted to communicate at this event was that Hiab today is no longer a supplier of products. Instead, we now want to provide turnkey solutions that meet all customer requirements, with the crane included as just one

component", says **Harri Ahola**, Senior Vice President, Cranes.

Long-awaited news

With the new additions to Hiab's loader cranes family, the crane portfolio has been further expanded. "Our customers have been waiting for Hiab solutions in this segment, and now we can meet their requirements", says Eduardo Calejero, Vice President, Sales & Marketing, Loader Cranes.

The applause when the new products were presented was resounding. During the autumn,

local market launches were conducted in which the focus was on local customers and the special conditions prevailing in each market.

Largest loader crane to date

There are now 28 loader crane sizes in the HIAB XS segment, as well as several jibs. The new HIAB XS 1055 is Hiab's largest loader crane to date, and with a jib, it can reach a height of nearly 32 metres. The crane itself can be fitted with up to ten hydraulic extensions and has an outreach of almost 24 metres, at which it can handle loads of up to 2.5 tonnes.

Thanks to Hiab's unique control system, in combination with a variable pump, fuel consumption is reduced, thus saving both mon-

ey and the environment. Naturally, the XS 1055 is equipped with the most advanced HiPro control system. The electronics ensure that the crane's movements are smooth and fast and provide extra lifting power when required.

An additional electronic feature will become available in the future for all models equipped with electronics. This feature, called Boom Deployment Assistant (BDA), monitors all movements when the crane is put into and taken out of the parking position. It is a function that minimises the risk of costly errors.

All-purpose crane with up to 8 hydraulic extensions

The other new model is the XS 211, which is now one of





Strong in France

– JONSERED contributes to waste management on the Atlantic coast

Many holiday resorts have up to ten times more inhabitants in the summer than in the winter. This is true also for a district consisting of five small towns on the French Atlantic coast. Method was present at the unveiling of a new waste disposal vehicle equipped with a JONSERED crane for use by the local councils.

The Côte de Lumière lies south of Nantes in the Vendée region. It is here that the five districts of Brem-Sur-Mer, Brétignolles-Sur-Mer, Le Fenouiller, Sainte-Croix-de-Vie and Saint-Hilaire-de-Riez have joined forces as a partnership known as the “Communauté de Communes Côte de Lumière”, with the aim of organising the services they provide for local residents more effectively and cost-efficiently.

The problem of this and other holiday resorts is the extreme difference in population between high-season and off-season. **Jacques Fraisse**, President of the Environmental Commission of the Town Councils: “We must all provide public utilities and

waste management facilities for 270,000 residents, but we have only 27,000 inhabitants in the winter – in other words, one tenth of this figure. This means that we have very high costs for every acquisition required to cope with peak periods.” The local waste collection vehicles are usually out on the roads during the morning and afternoon on Sundays and public holidays during high season.

In fact, household waste management alone presents the five municipalities with major challenges. Adequate waste management facilities must be available so that residents do not throw their waste into the countryside or next to over-flowing containers. Waste separation must also function, including for the “waste containers” allocated to every house. For this to work, the district council publishes a magazine featuring general and special information. In addition, carefully prepared leaflets including the times and routes of the waste disposal vehicles are available for all five local districts.

But this was not enough. **Marc Bonnion**, Manager of the Environment Department: “Our experts walk the streets repeatedly before waste containers are emptied in order to check the content of the bins. If substances have been placed in the wrong containers, the bins are labelled and not emptied. In the afternoon, advisers go to these households, explain why the bins have not been emptied and give advice to help solve the problem. The error rate has become comparatively low at approximately 20%.” The materials collected are recycled as far as possible. Marc Bonnion: “This enables us to ▶

The HIAB XS 1055 is Hiab's largest loader crane to date.

the largest cranes that can be mounted on a two-axle truck without requiring extra support leg equipment. This all-purpose crane can be delivered with up to eight hydraulic extensions and ordered with either the manual Duo or Pro control system or the radio-controlled HiDuo or HiPro system.

The two latest new additions to the Hiab family naturally bear the special hallmarks of the XS series. They are very compact and light in relation to the performance they deliver. ■

Text: Ulf C Nilsson

Photos: Boman Communication

The driver accesses the platform using an elevator built in compliance with EU standards. This platform gives the operator an excellent overview while operating the JONSERED 1620 Z.

► compensate for some of our costs and to provide residents with a more cost-effective service.”

Easily accessible facilities are provided for four different waste categories in all five local districts (paper/cardboard, plastics/packaging, glass and plant waste). While some of the facilities are still located at road junctions protected by tubular frames, in other places, for example adjacent to beaches, river banks or village centres, they are sunk into the ground and only recognisable from the stainless steel pipes where waste can be deposited.

The waste collection vehicle park of the five districts consists of 13 vehicles. In total, the facility takes care of 900 waste disposal containers. At the beginning of May, the vehicle park put a new waste collection vehicle into service. In relation to the official number of inhabitants, its dimensions are impressive. It is an Mercedes-Benz Actros 2541 (8x2) Euro 5 with steerable pusher and tag axles.

Across five regions

This development was initiated by the regionally influential vehicle manufacturer Blanchard SAS (www.groupe-blanchard.com), which has its head office in Changé near Le Mans and major subsidiaries in both Nantes and Cholet. For 30 years, Blanchard SAS has been a major Hiab partner in France, distributing and assembling cranes of the HIAB and JONSERED brands, as well as MULTILIFT hooklifts and MOFFETT truck-mounted forklifts in the regions of Mayenne, Maine et Loire, Sarthe, Vendée and Deux-Sèvres. It is not a coincidence that the ‘Communauté des Communes’ requested that the new vehicle be equipped with a JONSERED 1620 Z recycling crane. Since the beginning of 1989, Blanchard has been an exclusive agent for Hiab France, already selling approximately 200 units in its territory by May 2007 (HIAB and JONSERED cranes, MULTILIFT hooklifts). While in 2006

Blanchard Carrosserie Industrielle SAS sold 185 JONSERED cranes from its three locations, by May 2007 the order balance already included 120 Hiab product units.

Overall, JONSERED has a strong market presence in France. According to Sales Director Michel Poirson, responsible for the JONSERED product range at Hiab France, 45% of the cranes are used in the forestry/wood industry and 55% in recycling. Hiab France has 20 exclusive agents in the country, which guarantee rapid service across several regions with subsidiaries and authorised repairers. In the Paris region, Hiab France provides this facility by means of its own service centres.

Strong position in the Vendée

The Hiab France partner Blanchard SAS has specialised in the construction of skips, dumper trucks and waste collection vehicles



**The JONSERED
crane is very
user-friendly in
a very precise
manner.**



"I especially like the direct reaction of the hydraulics", says operator Denis Leroy (left). Hiab's Michel Poirson on the right.

and operates its own paint shop at its headquarters in Le Mans. The group of companies is directed by Jean-Philippe Galand and has a total of 30 extremely well trained employees. The strong position enjoyed by Blanchard in the regional market and modern workshop facilities contributed decisively to the company being awarded the contract for the new waste collection truck of the partnership of town councils. This is combined with the fact that the company builds on the chassis of all vehicle manufacturers and, as a hydraulics specialist, it also provides maintenance and repairs for all types and makes of cranes, loaders and dumper trucks at the customer's location.

The new truck was assembled at the Blanchard plant in Cholet, where the Director Didier Briand, who is also responsible for sales, has gained the confidence of a wide range of customers within his sales territory.

The ready-for-use Mercedes-Benz Actros 3541 (8x2) represents an investment of 192,320 euros. The dual-chamber construction (2/3 - 1/3 split) can be tilted to the rear and has two covers that can be folded to the side by 270° hydraulically. The driver accesses the platform using an elevator built in compliance with EU standards. This platform gives the operator an excellent overview while operating the JONSERED 1620 Z. The JONSERED 1620 Z was specially developed for waste management plants. A Kinshofer System KM 921 is fitted to the crane for lifting, opening and closing waste containers.

Vehicle demonstration

Didier Briand (for Blanchard SAS) and Michel Poirson (for Hiab France) were present at the official handover of the new waste collection vehicle. Representatives from the partnership of town councils included Patrick Nayl, Mayor of St. Hilaire, Jacques Fraisse, Deputy Mayor with responsibility for environmental affairs, Marc Bonnion, deputy manager of the waste management plants, and other specialists from the local waste management plant.

Method was present at the handover presentation and had the opportunity to accompany the new vehicle on its route. Driver **Denis Leroy** (34) was enthusiastic about the

vehicle: "It is very easy to manoeuvre with its pusher and tag axle, as well as its compact design, and is very pleasant to work in." He praised Blanchard's design and the easily accessible crane platform: "I no longer have to climb up; now I can get up to the working platform safely using the lift. I get a very good overview from up there." Concerning the JONSERED crane: "The controls are logical and straightforward. I especially like the direct reaction of the hydraulics."

When entering the waste management facilities, Leroy must exercise great care: "The spaces are often blocked by cars. This is where the high load bearing capacity of the crane helps, which is able to lift loads of up to 2,100 kg over distances of eight metres. This even enables me to lift the containers over the driver's cab. The JONSERED crane is very user-friendly and operates in a very precise manner." The 1620 Z type is hydraulically extendable. These welcome additions proved to be very useful for the recycling coordinator, as he was only able to reach one waste collection centre by driving through a no-entry sign and a car was blocking access to the next facility. ■

Text and photos: Gerlach Fronemann

Loglift Jonsered's Salo factory in western Finland has experience with forestry cranes that dates back to 1965. Ergonomics have been developed for just as long.

"We have our own research and development department, but ergonomics are developed by everyone – including customers with their wishes and requirements", says Loglift Jonsered's **Kalevi Sjöholm**, OEM, Business Development Director for Loglift Jonsered.

About 80 per cent of the truck-mounted

can be moved aside to make it easier to get in and out of the operator's seat. And with two doors, one on the front and one on the side, the operator can choose which one is most convenient for the situation.

About 80 per cent of accidents involving forestry cranes happen when an operator slips as he climbs up to or descends from the operator's seat. The crane's roughed steps and sturdy grip bars reduce the risk of falling. They help the operator pull himself up and also improve safety when

warm and doesn't get as wet.

"The seat can be easily adjusted forward and back and up and down. Loglift Jonsered has patented this mechanism. Also the positioning and angle of the pedals and levers can be adjusted, and because the lever motion and the actuating force of the valves have been optimised, several levers can be used at the same time manually with ease. The cabs of the cranes come equipped with our patented mechanical controls, and digital electronic controls are optional. They take even less force to control the crane, so it is really effortless, and the movement speeds can be adjusted to suit the operator's preferences", Sjöholm says.

"In every detail, we have taken into account the fact that operators come in different sizes and heights", he adds.

The operator's seat can be moved partially to the side so that it is not directly behind the boom; this expands the operator's field of vision in the desired direction. The booms in LOGLIFT and

Good ergonomics work

Loading timber isn't always a walk in the park: A work shift in the cab of a forestry crane can be numbing, just as any sit-down job, and foul, rainy weather makes conditions worse. Ergonomics can help.

LOGLIFT and JONSERED forestry cranes are equipped with an operator's seat located behind the boom or next to it in the open air. However, an increasing number of forestry cranes are being equipped with a cab.

"The cab is a Scandinavian phenomenon, but it is becoming increasingly popular also in the United States and Central Europe – generally in areas where you need shelter from the cold and rain", Sjöholm says and launches into a review of the ergonomics of LOGLIFT and JONSERED forestry cranes.

Adjustments for operator comfort

"If we start from the ground up, the first thing is the ladder; it is designed to facilitate the operator's ascent from the ground to the operator's seat. The ladder has wider steps, a short rise and a rough surface that doesn't accumulate ice or snow", Kalevi Sjöholm explains.

In the cab-equipped cranes, the control levers

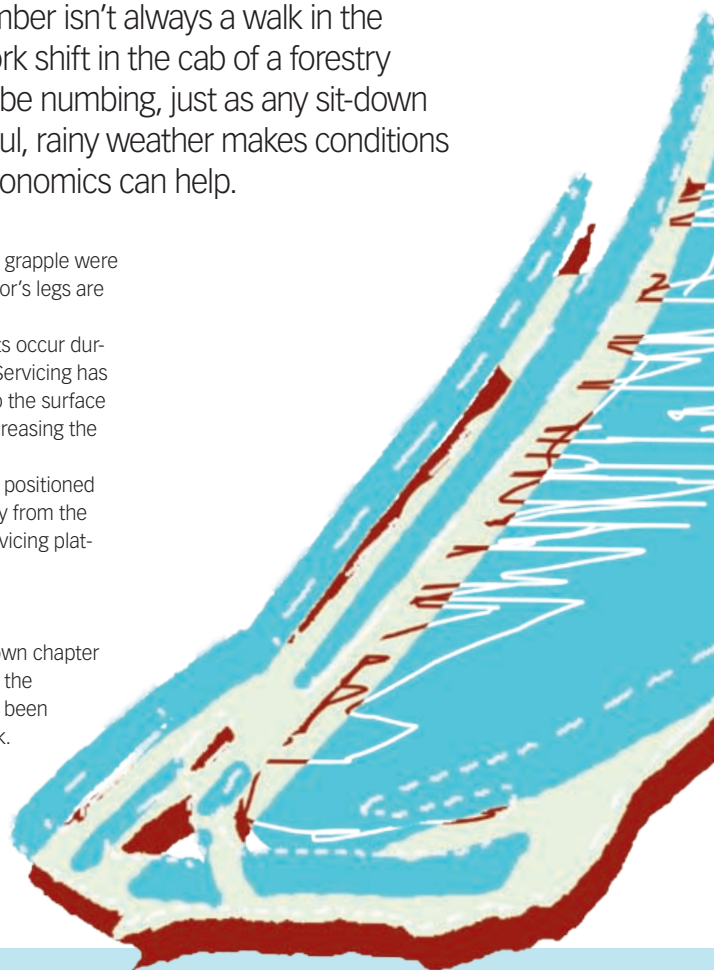
timber is being loaded: If a log in the grapple were to swing toward the seat, the operator's legs are protected by the bars.

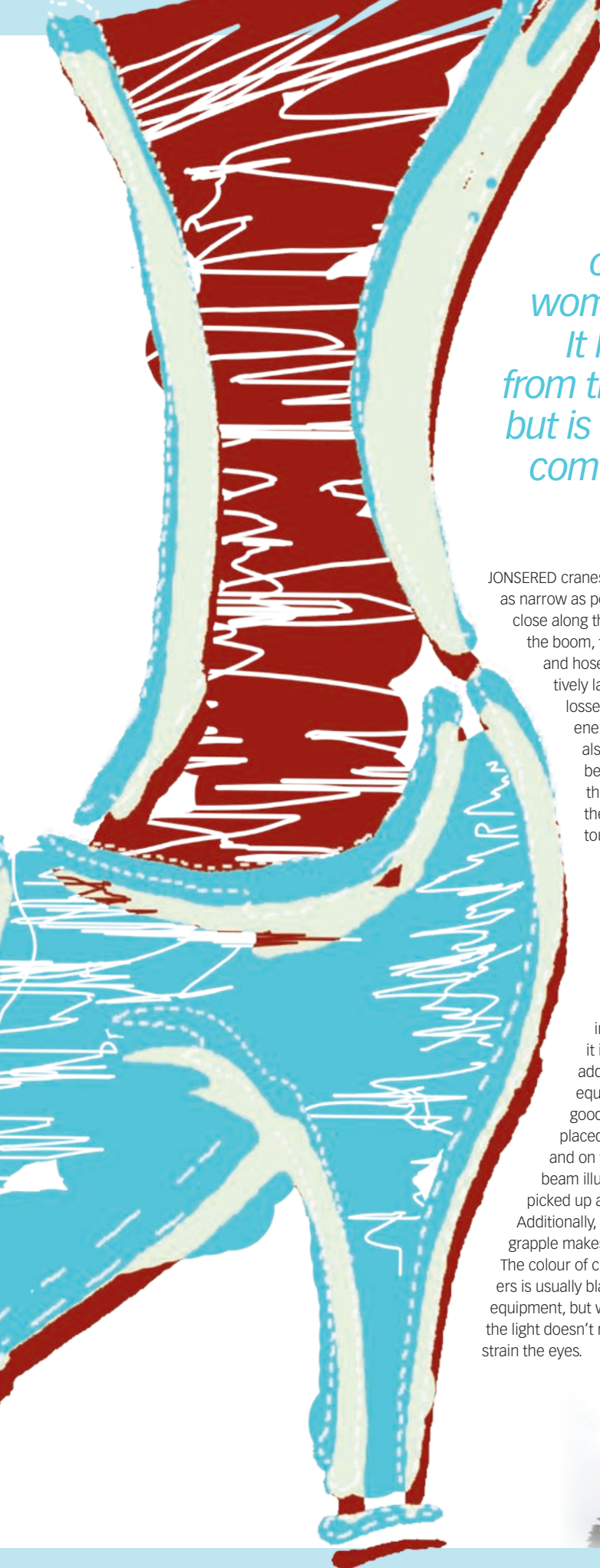
The next most common accidents occur during the servicing of forestry cranes. Servicing has been made safer by roughening also the surface of the servicing platforms and by increasing the surface area of them.

"Moreover, the valves have been positioned so that they can be accessed directly from the ground or conveniently from the servicing platform", Sjöholm explains.

Patented seat mechanism

The seat of the forestry crane is its own chapter in ergonomics; in both the open and the cab-equipped versions, the seat has been designed to support the lumbar back. The seat is also heated, which is especially important when working in cold temperatures. It stays





*A crane
cab is like a
woman's shoe:
It looks small
from the outside,
but is roomy and
comfortable on
the inside.*

JONSERED cranes have been designed to be as narrow as possible, and the piping runs close along the side of the boom. Unlike the boom, the diameter of the pipes and hoses has been kept relatively large to minimise pressure losses. This not only prevents energy from being wasted, it also prevents the pipes from becoming too hot, reducing the risk of operators burning themselves if they accidentally touch them.

Xenon lights for better visibility

The optional xenon lights take visibility to a completely new level:

"With the xenons it is almost as if you are loading in the daylight, even though it is night", Sjöholm says and adds that also the standard equipment halogen lights have good illumination. They are placed above the operator's seat and on the boom so that the light beam illuminates the target to be picked up and the surrounding area. Additionally, the yellow colour of the grapple makes it more visible in the dark. The colour of cranes installed on forwarders is usually black, as in many other Hial equipment, but with a matte finish so that the light doesn't reflect off it in the dark and strain the eyes.

Another attribute facilitating the operator's work is the fact that with LOGLIFT and JONSERED equipment the operator can control the crane's stabilisers from the operator's seat. Well-functioning hydraulics also add to operational ease; soft and precise movements make the crane more comfortable to operate and the work less taxing on both the crane and the operator.

The cab is like a woman's shoe

A timber crane with an open operator's seat can be equipped with an optional weather shelter, which comes up behind the operator's back and covers his head. It offers protection from rain and wind. Weather is not a problem with cab-equipped cranes.

"Cabs have a heater and fresh air fan as standard equipment, and air conditioning for hot summer weather is an available option", Kalevi Sjöholm says.

He compares the cab to a woman's shoe: It looks small from the outside, but is roomy and comfortable on the inside.

"In the cranes that have a cab, the valves have been placed outside the cab so the smells, noise and heat don't carry into the cab. Additionally, noise-suppressing materials have been used in the walls and roof of the cab. When selecting the materials for the foot area the number-one criteria has been the ability to keep it clean", Sjöholm notes.

The list goes on: "Levers and push-buttons have been placed within easy reach of the seat. A hydraulic cylinder diagonally lifts and lowers the entire cabin; in the diagonally back position, the swaying motion caused by the slack is decreased and thus reduces the load experienced by the operator."

And, just as with shoes, attention has also been given to the design. For example, the wind-shield of the cabin is curved – and not just for the looks.

"The curved polycarbonate glass doesn't cause reflections, it adds space and visibility and it's shock-resistant", Sjöholm reports. ■

Text: Compositor/Tiia Teronen

Illustration: Topi Saari





John Millington, Logistics Manager: "Most important in logistics is anticipating and understanding the logistical needs of the entire operations. It's a great feeling when everything runs smoothly."



John Godber, Parts Controller: "It's great to see how your own efforts contribute to the entire team's operations. I am proud to be responsible for spare parts."

Behind the curtains of the most dynamic rally house

Ford's rally team is backed by an organisation of 120 people, each of them credited with the glory of victory.

They won the manufacturers' title in the World Rally Championship in 1979 for the last time – years 2006 and 2007 were glorious for them again, as they won the manufacturers' title. The team was also on the verge of winning the first prize of the drivers in 2007, but lost after a tight battle.

The Ford rally team's competence and professional skills that are put to the test in every race boil down to one thing: Will everything work like it should for the entire race. The drivers do their part with professionalism, but the rest depends on the background work and the preparations that have been done. A win is the crowning glory for the work done throughout the year and during the rally.

All team members take their work seriously and are extremely dedicated. They all

have their own duties to attend to, but are ready to help out in other areas as needed. A rally team needs a diverse range of know-how, so that's why it helps having people with different backgrounds on the team.

When one round is over, it's time to move on to the next rally location. But what happens in between races? What kind of work does the team do day in and day out to make the wins possible?

Rally Event Manager **David Simpson** from M-Sport Ltd is responsible for the operations of Ford's rally team 24/7 and from one race to the next. His area of responsibility not only includes the equipment and personnel, but also catering and the look of the team's rally area. It is Simpson's job to make sure that the right people are doing the right things at the right time, and that the team is



Alex Mottram, Rally Technician: "Communicating directly and clearly is the number one thing in the technician's and the entire team's work. Information has to be communicated quickly."



M-Sport acquired its first MOFFETT truck-mounted forklift a couple of years ago.



David Simpson, Rally Event Manager: "Being organised and quick are most important in my work. You have to be able to make decisions efficiently."

Milly, George and Malcolm travel around the world with the Ford team.



adequately prepared for problem situations.

The work is very hectic at times, but Simpson says he can't think of a better job.

"This job is perfect for someone who likes doing something different every work day and enjoys giving a one-hundred per cent effort. That's the only way to make sure there is enough motivation all the time, because the work is not only long-term in nature but the situations are constantly changing."

Simpson arrives on site a couple of days before the start of the rally to make sure that everything is according to plan.

"It all depends on good basic planning; scheduling and work checklists are important tools because the work is done all year long", Simpson emphasises.

The most efficient team member

With so many goods to be transported, and the majority of them heavy, the team puts a lot of muscle into moving and carrying things around. The trailers used to be loaded and unloaded manually and with leased equipment until M-Sport finally bought its first MOFFETT truck-mounted forklift a couple of years ago.

According to Simpson, the truck-mounted forklift makes the team's work easier and faster. The team members can focus more on their own areas of responsibility. This year the team is using the newest M5 25.3LT model.

Setup Technician Team Leader **Tom Lindsay** says the new MOFFETT is great support because it can unload and load the trailers also from the side, and the extendable fork ▶



Keith Adlard, Mikko Hirvonen's Car Controller: "Honesty and proactiveness, with drivers and with colleagues, are critical factors in team work."

► allows the equipment to be loaded from wall-to-wall.

M-Sport uses an older model on the longer trips and the new model on European tour when more equipment is being transported.

"A truck-mounted forklift is very handy for this work. And since it can be loaded coming and going, it can be used right away when it's needed."

The work of Lindsay's team gets under way about one week before each race with the measuring of the paddock area and the unloading of the goods. The first things to be placed into position are the basic elements, like the tents and servicing trailers. Then the unloading of the actual goods begins. The team is also responsible for ensuring that all the structural components are correctly and securely in place.

John Godber is responsible for spare parts and their meticulous organisation. A separate trailer has been reserved for spare parts, and it has floor-to-ceiling shelves filled with boxes. Godber's work starts as soon as the truck gets to town, and the work goes on until everything is repacked in exactly the same spot every time.

"We have to be able to find every part right away. We can't waste time, especially during a race; that's why we always keep the parts in the same place."

The importance of spare parts is visible also in the fact that at least two of each part, including the bigger ones, are kept in stock. When the first one is used, there is still a back-up available – just in case.

Essential know-how

Before the start of the rally and during the

IN 2007 THE FIA WORLD RALLY CHAMPIONSHIP

comprised 16 rallies across five continents during 12 months. Each three-day rally covered up to 1,200 km, with 350 km of flat-out driving on roads ranging from smooth asphalt to snow and ice and rutted, boulder-strewn tracks.

Through the BP-Ford World Rally Team, Ford entered two Focus RS World Rally Cars on all 16 rounds of the series, driven by double world champions Marcus Grönholm and Timo Rautiainen and fellow Finns Mikko Hirvonen and Jarmo Lehtinen. The programme was operated on Ford's behalf by long-term partner M-Sport, the home of the Blue Oval's international rally projects. BP-Ford World Rally Team is based at M-Sport's Dovenby Hall premises in north-west England and has been working for Ford Motor Company since 1997.

www.ford.co.uk/ie/wrc
www.m-sport.co.uk

rally there are 12 technicians working with the cars. One of them, **Alex Mottram**, joined the company as a trainee right after graduating from school, and this is his sixth year with the Ford team.

"The best way to become a professional is to start as a trainee. As technology evolves, the ideal way to keep up is by being involved in the hands-on technical work."

Mottram says the biggest challenge is the rapidly evolving technical side. But challenges are meant to be overcome, and he says that he enjoys the daily work with the cars. When the race starts Mottram is at the paddock area just for the cars. The time in between rallies is also spent with the cars; there is always something to repair and tweak.

Keith Adlard, the one responsible for Mikko Hirvonen's car, works closely with the other technicians and drivers. His main responsibility is to take care of Hirvonen's car and the related technical work. So Adlard knows Mikko's car – and all its parts – like the palm of his hand.

"I am responsible for having everything ready when the mechanics arrive. They can jump into their overalls right away and get down to business. In this work, just as in the other work of the rally team, you can't waste time."

Details that count

The organisational efforts at the rally site are non-stop. **John Millington**, the rally team's logistics manager, says he makes the following year's hotel reservations and the paddock reservations as soon as the ongoing race has ended.

"Time can't be wasted because everything has to be ready for next year's race. After all, a year is a relatively short time when you consider that the team takes part in 16 World Rally Championship races on five different continents."

Logistically, every country is unique. According to Millington, operating in the Nordic countries is easy compared to some



Tom Lindsay, Setup Technician Team Leader: "The fact that you can trust everyone and that every link in the chain is strong is something I value in a team. Keeping your feet firmly on the ground is one of the most important characteristics in this work."

European countries where more communication and verification is necessary.

It is Millington's responsibility to integrate all the minor details into a functional logistics package in collaboration with four other members of the logistics team. The work also includes taking care of the bills and responsibility for the fuel for the cars as well as the communication with local collaboration partners. The team has its own weather watchers to monitor and communicate race-day weather conditions to the drivers and technicians. The work goes on 12 months a year.

"It never stops, but I like that. It keeps me fit for the job." ■

Text: Compositor/Kirsi Paloheimo
Photos: Jyrki Vesa

Fast track to cooperation

Quick response convinced Havator to select a new crane partner.

Havator Group President **Erkki Hanhirova** says the company ran into a surprising situation that left it in need of a crane: The agreed delivery of a new crane fell through after it had already been scheduled for a job.

They were in a tight spot, and help was nearby. "Fortunately, we were advised to ask Hiab if they could help. As a result, we took delivery of a truck with a crane just two weeks later."

The fast crane delivery was the start of partnership between Havator and Hiab. Hiab's reputation as a prompt crane supplier factored into the purchase decision. Hanhirova emphasises the importance of transparency; price, too, is a deciding factor, but, above all, you have to be able to trust your partner.

The collaboration is in its infancy, and expectations are high. Havator wants to invest in the long-term partnership by participating in development work. "Our own business is constantly developing – it makes sense to talk about the changes with Hiab, which can then

take them into consideration in their own product development. This way, it is a win-win situation."

The Hiab crane is a good addition to Havator's fleet and scope of operations. The equipment is used primarily to move

lattice boom crane sections and counterweights of its own machinery. About half of the jobs are done for others, for instance, moving crushing plants.

"We have had the crane for just a few months, and the utilisation rate has been about 80 percent, but we already know that we made the right purchase decision", Hanhirova says.

He believes the partnership will deepen in the future because the most important fundamental is in order. Reliability. It's the key to all collaboration. ■

Text: Compositor/Kirsi Paloheimo
Photos: Jyrki Vesa

Number one in lifting services

With its headquarters in Tornio, a municipality in Finnish Lapland, Havator Group is one of the largest providers of lifting services, special transportation services and harbour crane services in the Nordic countries. The company has more than 400 employees and it operates in Scandinavia, the Baltic countries and Russia. Havator's crane fleet includes assembly cranes for use in industry, truck-mounted hydraulic boom cranes used in industry and urban areas, rough terrain hydraulic boom cranes, as well as crawler- and truck-mounted lattice boom cranes and mobile harbour cranes.

Operator Hannu Hyvärinen (left) from Havator praises the new HIAB XS 800 crane: The equipment is easy to manoeuvre and the availability of 24-hour service ensures that downtime isn't long. Jussi Sukuvaara agrees.



Climate change and fuel consumption are daily issues. They go hand-in-hand – decreasing fuel consumption not only saves costs, it also decreases carbon dioxide emissions and saves our environment. So a crane control system that reduces the load on the environment while boosting the lifting capacity and cost efficiency of the crane is really good news.

Savings in fuel and EMISSIONS

Hiab's latest generation crane control system sets new industry benchmarks by not only increasing lifting capacity and efficiency but also by cutting fuel consumption to lessen the environmental impact.


When designing a crane its maximum rated load is calculated on the basis of the crane's weight and geometry and on the expected lifetime of the steel structures. Lightness can be achieved by design, by using high-strength steels and by using control systems to utilise the full capacity of the structure. Hiab has been in the forefront in design and use of high-strength steels for decades. The continuous development of the control systems has been the basis of

Hiab's success in developing productive and efficient cranes.

"It goes without saying that the customer benefits most from a crane that is as light as possible but with the biggest lifting capacity possible. When the crane is light, the truck bed can carry a bigger payload. The transportation of the crane's full weight also requires less fuel", notes **Lars Andersson**, R&D Manager Structure Mechanic Hiab Cranes.

Curbing climate change

Hiab's crane control systems Pro and HiPro were designed to meet customer needs for light cranes able to deliver the highest possible lifting capacity. The delivered payload can be increased by up to 20 per cent and



have the potential to reduce fuel consumption by up to 40 per cent.

“What’s remarkable is that benefits like greater capacity and lower fuel costs don’t just boost the customer’s profitability, they also make a real contribution to curbing climate change”, says Lars Andersson.

A crane needs energy in order to move itself and to lift loads. Most cranes today have a pump that delivers a fixed flow of oil – in many situations a large part of the oil circulates directly back into the tank.

If a customer chooses a fixed pump for a 166 HiPro crane, the oil flow in the hydraulic system is 70-90 litres per minute. This oil

flow requires the truck’s diesel engine to use three litres of fuel per hour. However, quite often the crane is not used at its full capacity. It may only be turned 90 degrees – from the loading dock to the truck’s bed and back – and with 60-per cent speed.

“This would need only 25 litres of oil per minute, so at least 50 litres of oil is circulating in the system in vain. The excess ▶



The greenhouse gas emissions of a HIAB 800 HiPro loader crane with a variable displacement pump are ten tonnes less per year than with a fixed displacement pump. Ten tonnes is the annual amount of carbon dioxide emissions of four cars.

► energy used converts to heat in the control system, and since the oil temperature must be kept below 70 degrees, an oil cooler is needed”, says Lars Andersson.

Hiab's Pro and HiPro control systems allow the use of variable displacement pumps instead of traditional fixed displacement pumps. A variable pump adjusts the needed oil flow in the hydraulic system based on the needed lifting/lowering or moving speed at any given time.

According to Lars Andersson, replacing the standard fixed displacement pump with a variable displacement pump in a truck with a HIAB XS 288 HiPro crane normally using about 7,000 litres of diesel oil per year would result in a 32-per cent fuel savings, or 2,200 litres. The savings would be even higher in an 800 HiPro crane using 10,000 litres per year with a potential 4,000-litre reduction.

“The greenhouse gas emissions of an 800 HiPro with a variable pump are ten tonnes less per year than with a fixed pump. Ten tonnes is the annual amount of carbon dioxide emissions of four cars,” says Lars Andersson.

Investment that pays for itself – soon

Although all Hiab HiPro series cranes have the technical prerequisite, just 15-20 per cent of them are currently equipped with a variable pump. Andersson says the reason is that people are more familiar with fixed pumps,

and many are not aware of the savings a variable pump can bring.

Installing a variable pump into a new Hiab crane or retrofitting an old crane requires an investment of EUR 1,000-2,000.

The bigger the crane, the more savings in fuel and CO₂ emissions a variable pump will bring.

However, Andersson says the investment soon pays for itself.

“If the price of a litre of diesel oil is around one euro, in a 288 HiPro crane a variable pump would pay for itself in less than 18 months and in the 800 HiPro in just half a year. After that, the annual savings with the smaller crane would be EUR 2,200 and as much as EUR 4,000 with the bigger one,” says Lars Andersson.

There are other major benefits too thanks to the ability of the variable pump to keep the oil temperature significantly lower, which means the hydraulic system remains at least 20 degrees Celsius cooler.

“In most cases there is not even a need to install an oil cooler, while the seals, hoses and other parts last longer due to the cooler temperatures”, Andersson adds.

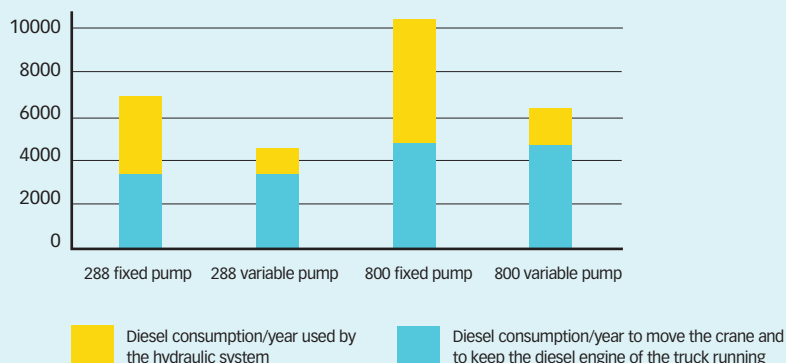
“In addition to the savings in fuel consumption a HiPro crane's rated load can be increased by up to 25 per cent, or even more on long outreaches, leading to enhanced productivity thanks to the innovative and intelligent control system”, notes Lars Andersson.

Andersson adds: “As a result of dedicated ongoing research and development for over two decades, the control systems of today's HIAB XS cranes automatically control the cranes' lifting capacity for enhanced performance, safety and operator comfort. Our new-generation crane control system raises the bar dramatically by not only increasing lifting capacity and cost efficiency, but also by lessening environmental impact by reducing fuel consumption.” ■

Text: Compositor/Tiia Teronen

Illustration: Topi Saari

Diesel consumption year for the average used Hiab 288 HiPro and Hiab 800 HiPro using a fixed or a variable LS compensated pump





HIAB MERGES ITS CRANE PRODUCT LINES

In order to support future growth and improve profitability, Hiab has merged its Loader Cranes and Forestry Cranes Product Lines into one Cranes Product Line from January 2008. The organisational change will improve and strengthen the use of common resources for developing, producing and marketing the crane programmes.

The new Cranes Product Line will develop and produce truck-mounted loader cranes, forestry cranes and recycling cranes on a global scale in its five production units in Sweden, the Netherlands, Spain, Finland and Korea. The merged Product Line will be headed by **Harri Ahola**, SVP, Cranes, who has earlier headed the Loader Cranes product line.

Hiab acquires a service company in the United States

Hiab has signed an agreement to acquire a service company in Tampa, Florida. Bay Equipment Repairs Inc., which offers maintenance services at its own shop and at customer sites, has been a Hiab partner since 1991. Most of the company's customers are also Florida area customers of Hiab's.

Bay Equipment Repairs will be integrated into Hiab's service organisation in the United States, thereby strengthening Hiab's offering of maintenance services in the important Florida market area. The company primarily offers services for MOFFETT truck-mounted forklifts and HIAB loader cranes.

Hiab secures an order for load handling equipment from Denmark and Germany

Hiab and SAWO – Hiab's importer in Denmark – have secured a significant order for 133 hooklifts and 22 loader cranes from MAN. The products will be installed by SAWO onto MAN trucks and supplied to the Danish army. The delivery of the hooklifts and the loader cranes has started in 2007 and will continue in 2008.

Hiab has also secured a significant order for 157 hooklifts from MAN Nutzfahrzeuge AG. The hooklifts will be installed onto MAN trucks and supplied to the German Defense Forces. The delivery of the hooklifts will start immediately and continue into 2012.

The high mobility trucks are designed for use by the military in extreme operating conditions and when equipped with MULTILIFT hooklifts the trucks are capable of loading, transporting and unloading both containers and military flatracks. In Denmark the HIAB loader cranes are swappable and trucks can be equipped with them within one hour. In Germany the hooklifts will also be utilised to transport fully armoured modules designed for the safe carriage of soldiers in hazardous regions.

New Hiab websites published!

The new Hiab Internet pages have been launched. The new websites come with new features, such as a contact locator, a product finder and comparison tool, an image bank and much more. The websites also highlight the versatile range of services we offer globally, and how our customers have achieved success with the help of our products.

The www.hiab.com landing page will now be the portal for accessing local country websites, which are also accessible via the local country domains (e.g. www.hiab.de). Visit www.hiab.com or your local country site to learn more about the content and features of the new websites.

We would be glad to receive any feedback you might have about the new websites. You can send your comments via the website contact form at www.hiab.com/feedback.

Freedom

and efficiency with a truck-mounted forklift

"Even on jobs where there is no extra payment for loading or unloading, the forklift makes my business more economical. I simply save so much time by being able to handle everything myself without waiting for others.

I also do not have to depend on there being people on hand," says **Lars Lindblom**.

Previously he had a KOOI from 2002. It was far from worn out, so it is now being used by a colleague. At Lars Lindblom Åkeri AB, the new addition is a MOFFETT M4.

"This is the model with the wide forkcarrier. It also has the telescopic forks that my previous forklift lacked. That's a feature that I really appreciate, since I can unload much more easily than before.

"During the summer, I have been transporting a lot of pellet fuel in sacks on pallets. It is really convenient to be able to push them into the correct position on the loading platform," says Lars.

He expects to have much more use for the telescopic forks during the spring when much of his work involves delivering rolls of sod from Weibull's large grass cultivation facility in Österlen.

Haulage contractor Lars Lindblom is now using his second truck-mounted forklift. He not only appreciates the freedom the forklift gives him: It is also profitable.

"During the peak season, as much as 7,000 square metres of sod are delivered each day. Then there are six of us driving. Loading the truck is often difficult, since the sod loses its form and unrolls. Using the telescopic forks to push them back into place really helps," notes Lars.

"In blocks of newly built houses where space is tight, we usually cannot get in with a trailer. The forklift is very handy then for delivering sod directly to each lot."

Less dependency on others

During the rest of the year, there are many jobs for the Farmers Union. These jobs are received via GKF Frakt AB, which belongs to DSV Miljö A/S. In addition to routine transports of grain and feed, Lars Lindblom delivers seeds, fertilizer and other supplies over large parts of southern Sweden.

"In total, there will be between ten and 30 delivery stops per day, so we use the forklift a lot. It is a tremendous advantage that the forklift also makes me less dependent on others. I can take care of most things myself. If I have to, I can extend my working day and get everything finished without having to spend the night in the truck," concludes Lars Lindblom. ■

Text and photo: Ulf C Nilsson

Back to the *roots*

In the 1980s, Coverworld became one of the first companies in the UK to use truck-mounted forklifts from MOFFETT. Today, 20 years later, the company has returned to its roots and purchased six new MOFFETT M8 forklifts.

"Because MOFFETT is simply still the best on the market."

The fact that the company once again chose MOFFETT was not only because of performance and reliability. The high level of service and technical support that are always available played a significant role in the company's choice.

When Coverworld purchased its first forklift, the company primarily worked with delivery of agricultural supplies, and MOFFETT offered the best custom solution at that time. MOFFETT's solution was ideal for materials

handling on muddy ground and in tight spaces.

Today, Coverworld is the UK's market leader in the production and delivery of finished sheet metal for roofs and facades. In this business, the MOFFETT M8 is perfect.

With a modern vehicle fleet, the company makes deliveries all over the country, with typical loads consisting of sheet metal sections with lengths up to six metres. Such large sections are naturally difficult to unload and deliver to construction sites where space is tight. The new forklifts handle the task easily, however.

"We have all of the qualities that we appreciated with the old machines, plus a number of excellent new features, not least the small turning radius, which allows our drivers to drive safely even in very tight spaces", says Coverworld's production manager **Ian Hawkins**.

Because the M8 forklifts have a load capacity of up to 2.5 tonnes, drivers are able to handle all unloading themselves and are not dependent on help. This speeds up all work and allows them to make more deliveries each day. The ability to drive the forklift sideways means that

they can even handle the largest packages in small areas, which is a very great advantage in this business.

"The truck-mounted forklifts from MOFFETT have always been exceptional machines. We were already impressed 20 years ago, but today we can see that the technology has come a long way since then. I am convinced that this investment will result in a significant increase in both deliveries and profits, while satisfying our customers even more", says Ian Hawkins.

Text: Ulf C Nilsson
Photo: Chris Bailey



LARS LINDBLOM OF TOMELILLA, Sweden, was the first in Sweden to own a MOFFETT M4. His forklift is a completely new model that was developed through a partnership between two Hiab companies: Moffett in Ireland and KooiAap in the Netherlands.

New features include:

- Directly coupled hydraulic pump without belts
- All service points easily accessible, making it easy to replace tubes
- Removable hydraulic tank for easy cleaning
- Fuel tank and engine cover in plastic instead of metal
- ISO-approved safety cage with protective gate
- New lever placement for improved operator ergonomics
- Lower noise level
- Improved rain protection and option of enclosed cab



Getting things right from the start

At the foot of one of the world's longest mountain ranges, Bussbygg produces all components for every loading requirement.

Geiranger Fjord is one of Norway's foremost tourist attractions. Offering breathtaking views, it attracts thousands of tourists and passengers on cruise ships from all over the world each year. Less well known is that the surrounding coast is full of successful companies. Most of them are naturally involved with fishing and shipbuilding, but there are also companies that make furniture and truck bodies.

The limited company Bussbygg A/S is located north of Geiranger and has been in business since 1947. Initially, the company built busses, but over time its business increasingly shifted to truck bodies and trailers. The last bus was delivered by the company in the 1970s, after which the company focused entirely on truck bodies. Fish transport, which has always been big business in Norway, demanded special solutions.

"Above all, flexibility in loading was required. In Finnmark, for example, a driver might have to drive 500 kilometres to various small harbours to fill the truck before heading off to Oslo or down to Europe," says Marketing Manager **Roar Berg**.

Bussbygg A/S delivered the solutions and became somewhat of a preferred supplier to the industry. Its bodies could be opened both from the sides and the back. Today, with 170 employees, the company is number one in the Norwegian market for truck bodies.

"We are the only supplier that builds all the components ourselves, right from scratch, in our production plant," says Roar Berg.

Adapted to customer requirements

The focus on delivery precision, and above all quality, means repeat business. Because the company also builds everything itself, it can offer flexible body solutions exactly matched to customer requirements.



Today Bussbygg is number one in the Norwegian market for truck bodies.

Since tail lifts are a feature requested by many customers, Bussbygg has become Norway's largest purchaser of ZEPRO tail lifts.

ZEPRO tail lifts ensure secure load handling also in humid and harsh conditions because they have been tested to work well in different climate conditions.

Hiab delivers more than 200 tail lifts to Bussbygg A/S in Norway every year. In addition to meeting Bussbygg's quality specifications, spare parts for these tail lifts can be obtained easily and quickly all over Norway. ■

Text: Ulf C Nilsson

Photos: Crestock & Bussbygg