

A New Era is Dawning at Hiab

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#### **HIAB SETTING NEW STANDARDS**

The HIAB 085 L has set new standards when it comes to delivering power for different purposes. Its extra long inner boom gives it the muscle where it's needed most e.g. when delivering heavy building materials. It has the same flexible design as the HIAB 085, which enables it to be tailor-made to individual requirements.

#### HIAB IN ANTARCTICA

The HIAB 090 has become standard equipment among Antarctic research teams. With the temperature hovering round 40° below zero and the closest service facility a continent away, reliability becomes an instrument of survival. The Pisten Bully, fitted with a HIAB 090, does most of the transport jobs.





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#### CONSTRUCTION BOOM IN SPAIN

Housing, roads, airports, bridges, tunnels, bypasses... The construction wave is particularly intensive in the main urban areas. Competition is hard between the 30,000 knuckleboom cranes in Spain. Customers want the latest technology to the tiniest screw.

# "Fully customer-adapted right from the production stage"

Hiab are now setting their sites even higher with regard to delivery security, quality assurance and complete deliveries.

"Our manufacturing process will during the year be entirely steered according to the customers' orders," says Mats Persson, new Head of Production at Hudiksvall, "...and the cranes we deliver will be ready-for-use and ready for mounting on the truck." Mats Persson is no newcomer to Hiab. He worked at Hudiksvall for 12 years before moving to take up production and technical management posts at other local companies.

Manufacturing to customer specifications is a new approach within the crane business and one that Hiab have come far with.

"Our factory in Holland has come furthest on that front, but this approach is rapidly being introduced at all our factories," says Mats Persson.

#### Assured quality in the right time

This move will facilitate matters considerably for all body builders, as they will now be getting a more thoroughly worked product and a complete delivery. All accessories will have been tested from the outset to ensure optimum function.

Hiab will also benefit as it will dispense with the need to keep a full assortment in stock and thus significantly reduce the amount of tied-up capital. Customers will, in turn, get impeccably functioning and more thorough products, at the right price, with the right quality and delivered within the time promised.

#### The right crane - always available

"This will put quite a bit of demand on our salespeople. To ensure customers get what they want, they'll need not least to be provided with precise, detailed and comprehensive information. Remember, we can supply each individual HIAB crane in a wide variety of versions."

The extensive choice available should not make it hard for customers to decide. On the contrary, it will help them, as it provides all the information they need to be able to match the specifications to their specific requirements.

"Ours is a mature market with increasingly specialised needs. That's partly what we are responding to by introducing this new system."

#### Own ID number

Each order will be implemented in accordance with the customer's specifications and accorded its own identification number through the entire production process.

In parallel with the chan-geover to customer-steered production, Hiab continue to work towards applying the ISO 14000 environmental standard to all aspects of their production chain.

New surface treatment methods are being tested at Hudiksvall, where the new – among other things, processoriented – ISO 9001 standard is also being introduced.

Considerable advances are being made, at the same time, in crane safety. New cranes are now equipped with service indicators, which improves safety during the intervals between different service measure and contributes to better the already high level of operational reliability.

With regard to warranty claims, Mats Persson assures that good margins are being maintained in relation to the set objectives and foresees even further improvements.

The fact is, Hiab do not content themselves with being best, they are constantly raising the stakes.



PRODUCTION
MANAGER

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Hiab AB S-824 83 Hudiksvall Sweden





We are now proud to welcome two new models to our range: The HIAB 180 R and 220 R,

# **New Flexible** "Rollers" designed for rail-mounting. These 'rollers'

are fitted with their own power units to enable them to be moved across the length of the platform even under full load. This type of Hiab crane has gained widespread popularity, particularly in the UK. Users there have found them to be ideal when flexibility is important, above all, when delivering such items as bricks and long floor panels to building sites.

obility across the length of the platform - and even L between the vehicle and trailer – always allows the crane to be placed in an optimum position in relation to the load, while maximising its lifting capacity. This in turn means you can fit a smaller unit, freeing up more cargo capacity.

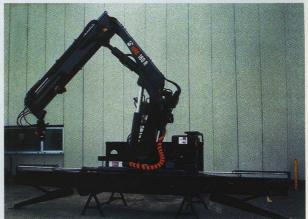
During transport, the roller crane can be positioned to keep the load locked in place. It can also be removed, enabling the maximum length of the platform to be used for long items of cargo and thus allowing a wide variety of transport jobs to be carried out.

The crane's mobility enables it to cover a wide working area and helps to minimise the number of times the vehicle needs to be moved when unloading, even if the cargo is to be set down in different places and there are obstacles in the way.

Both of the new cranes are available with up to four hydraulic extensions, which gives maximum outreaches of 10.4 metres for the HIAB 180 R and 10 metres for 220 R. Even at their maximum outreaches, these two cranes will lift up to 1,550 kg and 1,870 kg respectively. Close-in, their lifting capacities are 5,500 kg and 6,400 kg respectively.

The boom system has been designed to ensure "straight upward" lift movements, both close-in and when fully extended. Both cranes have a slewing angle of 4060 and are fitted with a rotator.

A choice of three solutions is available as regards rail-design: exterior, interior or extended interior. Big driving wheels deliver maximum grip and enable the crane to be operated at maximum capacity at platform angles of up to 15 degrees.



A self-contained bundle of power. Hiab's Roller Cranes have their own power units and drive wheels that always enable the best position to be attained when unloading or loading a platform or trailer.

The cranes are fitted with an air-cooled two-cylinder diesel engine, which feeds a constant or variable power-flow to a hydraulic pump. The latter alternative enables lighter loads to be handled fast while providing a very steady and smooth action in the case of heavy loads.

These two rail-mounted Hiab cranes are fitted with an ergonomic top seat, which gives the operator a perfect overview of the workarea, vital for secure and fast handling of the load.

### The Hiab 085 L - A Debutante at the CV-Show



his year's Commercial Vehicle Show in Birmingham provided Partec Cargotec with a good opportunity to put an extensive assortment of cranes and Multilift demountables on display. The occasion also marked the "coming-out" of the new HIAB 085 L.

It was in good company – along with Hiab's new demonstration vehicle with other family members: The HIAB 052, 085 E, 095, 102, 220 and 400 E crane models – most of them radio-controlled.

Visitors also had the chance to acquaint themselves with the new software that Hiab's salespeople use to specify customers' wishes from among the wide and varied choice available today. Many of the different cranes were moreover there 'in person', including the HIAB 085 Roller and a couple of new models of the Multilift demountable systems.

The HIAB 085 L made its debut at the CV Show in Birmingham, one of many interesting exhibits on display there.

The HIAB 085 L is the latest addition to Hiab's family of cranes. It has all the flexibility of the basic

# Specially designed for building site deliveries

085 design, including slewing system in an oil bath as standard. This makes it extremely hardwearing, however tough its tasks are.

hat particularly stands out about the HIAB 085 L is the extra long inner boom which boosts lifting capacity high-up—ideal, among other things for deliveries of heavy building materials. At 2.8 metres, the HIAB 085 DL-1 can lift as much as 3000 kg and at 4.4 metres it can manage 2000 kg. Its hydraulic reach as standard is 6.5 metres.

Lifting height "straight up" 700 mm from the crane's centre is 3 metres and maximum lifting height above the platform is 8.7 metres.

The slewing angle is 400° with a wide variety of operating modes to choose from: it can be manoeuvred using Hiab's unique cross-controls or from a top seat/control platform – alternatively by remote control. Valve 50 or Valve 91, which ensure a smooth and easy action. SPACE/MiniSPACE control and safety system is standard.

On other fronts this crane offers the same extensive freedom of choice as the HIAB 085. The flexibility of the basic design enables the crane to be tailor-made to individual requirements and tasks.



The 085 L has an extra long inner boom, which provides unbeatable power right when you need it, for example when delivering building materials.

# A small crane that goes far

T he new HIAB 022 T is the solution for most kinds of jobs that require long hydraulic outreach and medium lifting capacity. The 022 T is the smallest Hiab crane available with three hydraulic extensions, but can still lift an impressive 500 kg at an outreach of 4.2 metres. It weighs just 250 kg and is thus suitable for almost any type of light truck.

A subframe – available in versions for mounting on or below the platform – facilitates quick and safe installation. Other accessories include hydraulic or manual outrigger legs.

The new HIAB 022 T has a hydraulic slewing system  $(330^{\circ})$  slewing angle) with a worm gear encapsulated in the cast-solid base of the crane.

The crane is delivered either with Power Pack – an electric hydraulic unit made up of an oil tank, pump, and electric engine with overheating cut-out – or a connector to enable it to operate on a continuous basis from the vehicle's power take-off.

Hiab have built into the design all the know-how gained of practical crane applications in a variety of work situations. Resilience and stability is reflected in, among other things, the boom system



A light construction with a long outreach characterise the HIAB 022 T.

– a hexagonal profile design that provides superior stability while saving on weight. Another example is the base of the crane, which is cast and houses the slewing engine – fully encapsulated and protected from water and dirt.

The "JIC" coupling system and in-built hose-failure, alternatively load-holding valves, are just a few examples of Hiab's safety thinking.

The HIAB 022 T is yet another quality product that will deliver the performance, reliability and ease of maintenance the branch has come to expect from the world's leading manufacturer of cranes for vehicle-mounting.



Canadian roofing contractors have come to expect a great deal from

# Reaching new heights with the HIAB 245 E

D & W Forwarders new HIAB 245 E with jib. Its ability to reach

up to seven storeys high has made it very popular in the branch whenever a task arises that calls for long outreach and flexibility.



When folded on the trailer

this powerful

crane takes

up hardly any

Roofing contractors are not an easy category to please in terms of what they demand from a crane, namely the ability to reach up to five or more storeys and to drop its load with precision on different points across the roof. The HIAB 245 E easily measures up to those demands. With a hydraulic jib, this crane can reach out to 25.8 metres.

D & W Forwarders operate haulage and delivery services across Ontario, Quebec and north-eastern areas of the United States. The company's founder and Managing Director, Walter Veenstra, is satisfied with the new crane and has ordered another one. He is even considering acquiring an even bigger model.

"We bought our first Hiab nine years ago. Our latest HIAB 245 E has shown itself to be very reliable and has met all our expectations." says Walter.

Operator Terry Thompson, who has been working with the new crane for over a year now, appreciates its performance and versatility. He can drive into a building site, unfold, and with the support





Terry Thompson can control the entire unloading operation, without sacrificing safety or precision.

legs in position, can place his customers' goods just about anywhere in the site. The crane's impressive outreach saves him the trouble and time of having to move the vehicle within the site.

The HIAB 245 E delivers superb performance, not least thanks to the Valve 91 – fitted as standard. It boosts the crane's smooth and precise handling qualities, while enabling parallel operation of a number of functions. Thus, Terry can work fast without sacrificing safety. With the help of his CombiDrive drive radio-control unit, he can also position himself on the roof, where he can control the entire unloading operation.

A final aspect Terry Thompson is pleased about is the positive response shown by his customers – building material suppliers – to the new crane.

## New trucks led to important contract



ESA, Kladno are one of the Czech Republic's biggest transport and logistics specialists. With their modern fleet of trucks and cranes, they offer their services across the country. They recently strengthened their fleet with ten new Scania trucks, all of them equipped with HIAB 125 cranes. That move has already paid dividends.

Zdenek Zahrádka, a director at ESA, says that it was thanks to the company's modern transport logistics and its trucks fitted with cranes, that they were able to clinch an exclusive deal with the well-known roofing sheet manufacturer. Bramak.

ESA offer road, air and combined transport solutions, warehousing and forwarding as well as services related to customs matters.



Ten Scania trucks of this type, with rear-mounted HIAB 125s, helped ESA clinch an exclusive deal with the roofing materials manufacturer, Bramac.

# Bigger crane for the heavy tasks

Lloyd Raymond is now the proud owner of the biggest knuckle-boom crane south of Timaro and Queenstown in New Zealand. His detachable HIAB 300 enables him to handle substantially heavier loads than he used to.

Loyd Raymond Transport has been in the haulage business for 20 years and carries everything from eggs and mixed cargo to perishable products throughout Otago and Southland. When Lloyd decided to widen his field of operation, he realised it was vital to be able to take on heavier loads.

After consultations with two local companies, Harvey Tanks and Burford Tanks, he decided to invest in a detachable HIAB 300.

"It allows me to handle up to ten tons close-in and in excess of 2,000 kilograms at maximum outreach," he tells, adding that the new crane has made it "almost easy" to tackle bulky items.

"From the moment I start loading a 5,000-gallon tank (23 cubic metres), to when I'm back on the road again, takes just half-anhour." he says.

Lloyd has also found that, placing the load on a number of appropriately positioned tyres on the platform, considerably cushions the ride and eliminates vibrations. As the crane is easily lifted off, the



A five cubic metre concrete tank is no match for Lloyd Raymond and his new HIAB 300. He found that placing old tyres as extra shock absorbers under the load made for a smoother ride

truck can be used other kinds of tasks, with for example a bin for bulk cargoes.



# Hiab keeps Japan's railways in good trim

Puji Heavy Industries are probably best known among the general public for their successful 4WD Subaru rally cars. However, the company has a broad range of operations being, among other things, an important supplier of equipment to Japanese Railways.

During the past few years, Fuji Heavy Industries have delivered about a thousand track and overhead line maintenance wagons, fitted with Hiab equipment.

The latest delivery of these wagons, known as "Track Motor Cars", were equipped with HIAB 060 cranes. Their compact size



Japanese Railways have taken delivery of over 1,000 "Track Motor Cars" fitted with blue Hiab cranes and supplied by Fuji Heavy Industries.

when parked, long outreach and high load capacity close-in, coupled with reliability in the field, are the factors behind the customer's choice of this crane.



#### Chose a Hiab as their first crane

Graham Haulage are one of Northern Irelands biggest independent hauliers. They have been successfully transporting goods to and from Ireland, the UK and continental Europe for over 25 years.

To meet continuing expansion needs, Graham Haulage recently bought their first crane, a HIAB 330-4, which they use to handle miscellaneous goods, heavy machinery and portacabins.

They made their choice of crane after thoroughly researching the market and finding that Hiab measured up best to their requirements, most importantly in terms of reliability and service.





Graham Haulage can now easily handle bulky tanks with the help of their new HIAB 330-4.



Antarctica is probably the only continent in the world lacking regular service facilities. That's why the machinery they do use here can be classed as the most reliable in the

# Hiab standard when conditions are extreme

world. Kässbohrers Pisten Bully vehicle has become almost standard equipment for researchers trying to uncover the secrets of the Earth's past, locked under this vast continent of snow and ice.

As manufacturers of snow-trail groomers, Kässbohrers's experience of vehicles designed for extreme off-road and weather conditions goes back a long way. Early this year, the first of their newest model, the Piston Bully 300, was put into service in the Antarctic. It is being used by the Alfred Wegener Institute, which has two bases here, the Neumayer and Filchner bases.

Those working in the often extreme conditions of the South Pole rely on their equipment to function perfectly – whatever the task or the weather. The Pisten Bully is bristling with advanced technology, including a GPS satellite navigation system and... a HIAB 090.

Apart from the German research groups, Hiabs have been well-proven and used in this environment by Indian and Chinese teams as well. They have also chosen Pisten Bully. These machines could be, in simple terms, described as refined snow-trail groomers. They are used continuously, among other things, to tow sleighs loaded with mobile accommodation and laboratories backwards and forwards across the expanses of snow and ice. A constant watch has to be kept to avoid the glacial fissures that can appear out of nowhere and can be almost a kilometre deep.



Summer in Antarctica – snow ice and freezing temperatures. But what researchers from all over the world are here for is the geology. The teams rely on HIAB 090s to help transport equipment and prefabs for accommodation and lab work.

That gives us a hint of the kind of everyday problems that teams down here have to face. A more extreme example is what happened in the autumn of 1998.

#### Broke loose

It was then that British researchers noticed from a satellite picture, that an iceberg 5000 square kilometres in area had broken away from the ice-shelf and was slowly drifting away... all 1,200 cubic kilometres and 1,000 gigatons of it. Not such an unusual occurrence down here, but there was a difference this time. Because, also drifting on the iceberg were parts of the Neumayer base. It was unmanned at the time, but the code in the Antarctic is to clear up anything that could affect the environment. So they had to mount a rescue mission – fast. A vessel tied up by the drifting island of ice, three Pisten Bullys were unloaded and got down to work. After ten days feverish activity in a continuous snowstorm, they managed to salvage 120 tons of material as well as 50 tons of machinery and sleighs.







1. Pisten Bully vehicles help to transport sleighs loaded with mobile accommodation and laboratories backwards and forwards across the glaciers. 2. Cool guys... The Alfred Wegener Institute has two bases in Antarctica, the Neumayer and Filchner bases. Deep drilling is one method they use in the search for knowledge of the Earth's past. 3. With the temperature hovering round 40° below zero and the closest service facility a continent away, reliability assumes a new meaning. The Pisten Bully, fitted with a Hiab has become something of a "standard" vehicle among Antarctic research teams.

business. For some years now, they have specialised in the purchase,

sale and rental of material, accessories

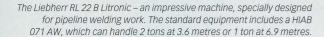
The Dutch company Maats B.V. have gained quite a reputation in the pipeline contracting pipeline welding



and other equipment both in and outside Europe.

aats B.V. hold the world agency for pipeline products from Liebherr and are general agents both on the European and North American markets.

One of the products that Maats B.V. have developed jointly with Liebherr is a hydraulic tractor for welding work. These machines are specially equipped to meet the very high quality standards required in pipeline welding. The standard equipment on these tractors includes a hydraulically powered 125 kWa generator, four 400 amp welding units, a 16 bar air compressor and a 7.2 ton metre crane – a HIAB 071 AW. The vehicle weighs 23 tons and is powered by a 132 hp diesel from Liebherr.







## Hiab helps out with traffic control

A division of McAtee Equipment in Arizona, Woudenberg Enterprises, are a leader in the field of safety services and products for road works and other traffic control requirements. They can provide everything from concrete barrier walls, underground shoring services and steel caissons, to temporary road ramps of steel.

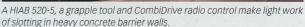
he company makes sure that everything is put in place, moved as required and removed when the job is completed.

There is often heavy lifting involved, but McAtee are wellequipped. Three of their vehicles are fitted with HIAB 300-4s while three others have HIAB 520-5s. They are all equipped with CombiDrive radio controls.

The concrete barrier walls are rented out on a daily, weekly, or monthly basis. Additional charges are levied for delivering and putting each barrier wall unit in place or for re-positioning them. The up to \$10 per unit charge applicable varies depending on how far the job site is from McAtee's plants. Recently, 7,000 such barriers were placed along a 15-kilometre-long stretch outside Phoenix. The job took just seven hours, with the help of four of the vehicles equipped with Hiab cranes.

Normally, each vehicle can place six units at a time from one and





the same position.

Other important niches are handling steel caissons and road ramps for temporary holes or trenches. Normally, just one person can do the job of delivering and putting the sections in place.

"Hiab cranes are perfect for our operations," says Warren France at McAtee Equipment.





# Maintaining power lines in difficult

Over
650,000 subscribers are
supplied with electricity by
Mitteltschechische Energiebetriebe A.S.
(Stredoceska Energeticka Praha). Extending and
maintaining a modern network are prerequisites to

ensure a continued secure supply.



The company have found that Mercedes trucks, with off-road capability and fitted with Hiab cranes, is the combination best suited to the task of maintaining and improving the network in their area, which stretches some 11,000 square kilometres in the central Czech Republic.

They operate two such combinations, one with a HIAB 155 and the other with a HIAB 195, both fitted with SPACE remote control. The company's smaller vehicles are equipped with HIAB 060s, also remote-controlled.

"Up to now, we are very pleased with the results and we thus foresee further investments in the future," says Technical Director, Ludek Kokta.



4-wheel drive trucks with radio-controlled Hiab cranes ensure power supplies to over 650,000 people in the central Czech Republic.

### Solutions for high-level tasks





The Georgi brothers and their company F.LLI GIORGI snc di Giorgi T&C i Sala di Cesentico very often have to tackle complicated roofing jobs. A secure, reliable and exact crane, that was precise in its movements, was thus a must for them. After having tested a series of different makes and talked to colleagues about their experiences, their choice fell on a HIAB 550-6.

As they work mainly with metal roofing, gutters and drainpipes and at high altitudes within the narrow confines of a city environment, they demand a lot from their crane – and it delivers. Their HIAB 550-6 is equipped both with Jib 135-4, personnel basket, 2-tonne winch and radio control. The personnel basket reaches a height of 30 metres and can carry two people.

"This solution enables us to both lift the material up onto the roof and repair gutters, drainpipes and other metal parts," say the Georgi brothers. "And what's more, with the help of the Jib, we're able to dismantle scaffolding from all four corners of a building without having to move our truck."

That alone, saves several days' work. They have also found it very useful to be able to tilt the jib upright.

"Thanks to that, we're able to park as close as you can get to the building, thus keeping well out of the way of any traffic."

The Georgi brothers were looking for a reliable all-in-one solution and found it in the form of a HIAB 550-6 with Jib, winch, personnel basket and radio control.





# Our biggest crane launch in 20 years

ere at Hiab we are justifiably proud of our reputation for innovation. Since the early fifties we have led the way in control valve development, computerised safety technology and remote control systems. Today, these Hiab-inspired advances continue to set the standard. However, not since the development of our black crane concept some 20 years ago, has there been a more important development in the market than the launch of our new XS crane range.

On show for the first time at IAA, Frankfurt, the first of the **HIAB XS** range is the culmination of years of research and development and of listening and responding to the needs of our customers. Initially available in the 11 to 17 tonne metre classes

with a crane in the 70 tonne metre range also on offer in the imposing shape of the XS 700, the HIAB XS breaks free from the shackles of convention and takes a giant leap forward in design. Here is a crane that not only looks different, but IS fundamentally different in every way. Advanced modular manufacturing techniques give unprecedented flexibility in specification. HIAB XS delivers more lifting capacity for its weight than any other comparable crane. Above all, the XS concept gives you a crane that is perfectly matched to the job you want it to do.

The realisation of new thinking. Tomorrow's crane, today. The new **HIAB XS** will change the way you look at truck cranes forever.

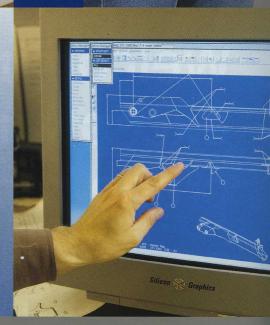




### The Task Force Behind the XS Project

he HIAB XS range is the result of the vision and commitment of a large team of designers, engineers and strategists at Hiab. Amongst the key people that have been driving the project forward are Lars Mörk, President of Hiab, Hans Bäckström, Project Leader, Anders Hansson, Marketing Manager and Per-Olof Berg, Head of Engineering. This impressive task force harnesses many years of experience in materials handling and brings together a wide variety of highly specialised design, manufacturing, marketing and project management skills.

The XS concept is a meeting of minds across the Hiab organisation in pursuit of a common purpose, as Lars Mörk explains: "The XS project optimises the talents, facilities and resources in all our operations and brings them together in a unified endeavour to develop a truly innovative product. The result is a new-look crane range that offers benefits to our customers way beyond the improved performance and safety of the cranes themselves. The modular manufacturing methods we use not only provide more choices and more options in specification, they also give us the possibility to reduce both production and lead times."





## "It's the control systems that make XS cranes so unique"

n providing a crane that is perfectly matched to the tasks required of it, control systems are the key. Lars Andersson, Head of Control Systems at Hiab, and Harm Mokken, Chief Design Manager, have masterminded the development of control systems across the new HIAB XS range.

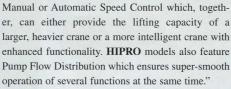
"It's the control systems that make XS cranes so unique," says Lars. "It's all about choices. The stomer can specify all the lifting capacity and

For example, our well-proven HIAB Valve 50 is fitted as standard to CL and DUO models whilst

> the more advanced Valve 91 is at the heart of PRO and HIPRO variants.

> "We've developed our SPACE computer controlled safety system as well as our

RadioDrive and Combi-Drive remote control systems to provide the capacities and features that are right for each crane and its applications. And we've introduced exciting new control technologies such as Automatic Duty Control and



"With these systems and these choices, the customer is able to specify the optimum crane solution for his needs without having to compromise on performance or pay more for unnecessary and unwanted features to achieve the capacity he requires," he added.



monitors crane performance and includes electronic overload protection. Cross controls, control platform or top seat control are available on manually operated models, Alternatively, RadioDrive, the radio remote control option, provides enhanced precision, freedom of operation and safety. CL is a crane built on well-proven principles, with performance enhanced by the latest technology.

### סטם

Need a little extra lifting power? The DUO gives you everything the CL offers plus a highly innovative feature called Automatic Duty Control (ADC). This intelligent system senses the type of job being done by tracking the lever movements and automatically selects the optimum operating mode. By switching between capacities depending on which valve functions are being used, it effectively gives you two cranes in one, RadioDrive is optional.

### PRO

Equipped with Hiab's highly responsive manually operated Valve 91, PRO models combine high load-cycle speeds with unerring precision for even greater productivity. The SPACE 3000 safety system monitors crane performance and incorporates a new feature called Manual Speed Control (MSC). When you're operating at the limits, MSC provides increased capacity by reducing the speed of the 1st and 2nd boom to 30% of normal - yet still allows several functions to be operated simultaneously. PRO models also include the ADC function (see DUO). Higher capacity, faster load-cycle times and ultra-smooth precision, PRO gives you more crane for

### IIII PRO

are quite simply the ultimate in power, speed, precision, safety and comfort. At the heart of the HIPRO's unrivalled specification you'll find the fully proportional Valve 91, the new CombiDrive 5000 ote control package and the new, sophisticated SPACE 5000 Safety System. Also new and exclusive to HIPRO is an intelligent capacity-increasing patented function - Automatic Speed Control (ASC), which comes in gently and fluidly, without steps, to reduce speed to 30% of normal. HIPRO includes ADC (see DUO) and superb multi-function operation is assured by electronic Pump Flow Distribution (PFD) which is also included as standard. HIPRO - crane handling perfection at your finger-tips.





### A terrific line up of exceptional cranes



The HIAB XS family currently includes the XS 122, XS 144 and XS 166 series with capacities ranging from 11 to 13, 13 to 15 and 15 to 17 tonne metres respectively. Having identified the crane with the lifting capacity you need, you then have a choice of CL, DUO, PRO and HIPRO model types. Each model offers an increasingly high level of functionality and technology. You choose the controls, the boom configuration, the capacity and the safety

features that you want and that are ideally suited to your business and your materials handling needs.

An awesome addition to the existing range has already been made in the shape of the XS 700 – a massive crane in the 70 tonne metre range with no fewer than 8 extensions. Although at present only introduced in Europe, the XS 122, 144 and 166 series will be launched in the Americas and Asia from mid-2001.

## From designer cranes to designer clothes

o coincide with the exciting launch of this new breed of truck cranes, we've set about designing a whole new line of accessories too. High quality XS clothing includes stylish baseball caps, t-shirts, working gloves, socks, jackets, vests and much, much more. You can also choose from a wide range of other attractive items all bearing the distinctive XS motif including pens, playing cards, overnight bags, CD carry case, tool kits and umbrellas.



now through your local Hiab dealer. Phone or call in soon for a copy of your product catalogue and get



### What's in a name

number of people have asked us what XS actually means. The man with the answers is Hiab Marketing Manager, Anders Hansson. "The XS idea has evolved over time. It started with our vision of developing something extraordinary that would redefine the way that truck cranes are designed and built. For us and for the market as a whole, this new crane range represents an eXciting Step forward. XS is about eXtra Strength, eXceptional Specification, eXcellent Safety. It's also about control systems with eXact Sensitivity and, perhaps above all, providing each and every Hiab customer with an eXclusive Solution to their truck crane needs."







# Precision job in Marbella harbour

To lower a 1.6 tonne Penta engine into a boat that is in the water is a real precision job for a crane operator. José Sarriá Núñez had to have his wits about him when he manoeuvred the engine into place.

"Any jerkiness in the crane could have caused the engine to break through the hull of the boat, but with my HIAB 245 E it was no problem," he says.

The Australian ocean-going yacht Happy Hour had almost reached Marbella when the engine seized. The yacht still managed to make harbour at Puerto Deportivo Banús. To get the seized Penta going again, extensive repairs were needed, so it was lifted up through the roof and put through a thorough reconditioning.

Then came the hard part – to put the engine back in the boat. But José Sarriá Núñez is an experienced operator who gladly takes on a challenge.

"I use the 245 for the tricky jobs," he says.

It's a HIAB 245 E with Jib 65X and a winch mounted on the rear of his two-axle Mercedes 1828 with a short chassis.

#### Two centimetres

He had just under two centimetres to spare. Then the engine had to be held in the right position while it was screwed into place again. Using CombiDrive and radio control, he could stand just next to the boat and follow the mechanics' directions with exact precision. Everything worked out fine this time too.

It usually does. José Sarriá Núñez has 15 years' experience and



The engine weighs 1.6 tonnes and there are two centimetres to spare. A winch-equipped HIAB 245 E and CombiDrive radio control make this just another routine job for José Sarriá Núñez.

specialises in tricky jobs. His crane is fully equipped and can even be equipped with a personnel basket when necessary.

Radio control is nothing new to him. Earlier, he used one that he had built himself – based on a helicopter's control unit.



José Sarriá Núñez has specialised for 15 years in tricky operations that need a crane. Now his son Juan is accompanying José to work in order to learn the finer points of the job.

### Windpower and waves

- two specialities at Gruas y Plataformas

With a wide variety of jobs, it's essential to have versatile cranes.

Gruas y Platformas in Aragón in north-eastern Spain has learned that.

They have six Hiab cranes in their fleet and use them to handle a broad spectrum of jobs.

Moving portacabins, raising electricity poles of up to 40 metres in height, distributing building materials, installing electricity and telephone lines, installing truck weigh stations along the Spanish roads... the jobs are extensive and varied.

"One of our specialities is raising wind power stations," says operator Jesus Rodriguez Magallón.

Wind power stations are growing like mushrooms in Spain, and are responsible for an increasingly large proportion of electricity production here.



With a HIAB 245 E – mounted on a three-axle IVECO EuroTech Cursor – operator Jesus Rodriguez Magallón can handle a whole range of tricky jobs. This is one of the easier ones....

The newest crane is a HIAB 300 with Jib 90 and CombiDrive. There are also two HIAB 245 E with radio control, one HIAB 260 AWV, one HIAB 190 AWV with three manually operated extensions and one HIAB 175-4.



# **Construction boom throughout Spain**

#### and customers demand the latest

A sonic boom of construction is passing through Spain right now. New motorways are being built between all the larger cities, new railways are being driven through mountains and over valleys. And then of course there is the construction of houses – masses of houses. The slow depopulation of the countryside that characterised many of the countries to the north is now taking place within a few years in Spain.

It is easy to talk about overheating in the Spanish construction industry. You can see building cranes sticking up everywhere, and houses are growing like mushrooms, especially in Madrid. As a result of the low inflation, interest rates have dropped to their lowest level in modern times, and that has led to an eruption in the building sector.

But if you were to calculate prices only according to the cost of bricks, there would be real hyper-inflation in Spain today. From having cost 8 pesetas each a few years ago, bricks now cost 22 pesetas – if you can find any. In Madrid they are delivered directly



Masses of bricks are needed, and they are delivered directly from the brickworks to the building sites. A number of the brick works have obtained their own Hiab cranes so they can deliver the bricks precisely where they will be used.



To make the intensive contacts between Madrid and Barcelona easier, a new high-speed railway is being built. Gruas Sierra has a lot of work here, not least in delivering materials. Here, operator José Gomez is unloading the heavy reinforcement bars that will be installed in the tunnel ahead. He has a HIAB 400 E with seven hydraulic and two manual extensions mounted on his Iveco Euro Trakker. The customers demand advanced technology.

from the brickworks to the building sites, and several brickworks now keep their own cranes for the deliveries.

The countryside is being rapidly depopulated. First the young segment of the population move, followed by the older segment. A number of small villages have been transformed into ghost towns without inhabitants.

#### Intensive road construction

The road network is also being rapidly improved. Thanks to EU infrastructure grants, motorways have sprung up between all the larger cities. Now they are also being equipped with ring roads. To take the pressure off flight connections between Madrid and Barcelona, a new high-speed railway is being built between them.

All this means of course that there are masses of jobs for construction companies. But competition is brutal.

"There are about 30,000 knuckle booms in operating in Spain today, and to keep up with the competition, you must always have the latest model. Customers demand it, but they are not willing to pay anything extra. So it's tough," says Rufino Sierra Navarro, who together with his six siblings operates Gruas Sierra with 150 employees, 120 vehicles and 80 cranes of all sizes up to hefty stiff boom mobile cranes.

The company, which is based in Madrid and Guadalajara, operates throughout Spain. It recently received its latest order of ten cranes: nine HIAB 400 and one HIAB 900.

"We do most things in the construction sector, and our annual turnover is one billion pesetas," says Rufino's sister and company part-owner Maria Dolores Sierra.

To keep up, the company must make major investments in its crane fleet. "Bueno, Bonito, Barato" – good, beautiful, cheap – is what the customers want.

"Today, radio control is essential. Our customers quickly discovered its advantages and now demand it, because then they don't have to use their own people for loading and unloading. In addition,



To speed up travelling time from Granada to the coast, a new motorway is being built the entire distance under the foothills of the Sierra Nevada. "This is just one of a number of bridges we're building," says operator Torcuato Garcia Contreras of Gruas Alhambra S.L.

all our operators also want radio-controlled cranes because that solution is so convenient and practical," says Rufino Sierra Na-varro.

His colleague in the construction industry, Antonio Molina, who has run Gruas Alhambra S.L. in Granada for 42 years, agrees.

"The secret of success today is to have cranes for everything. Then you can always despatch the right crane for the job," he says.

Alhambra has 90 cranes, and their capacity ranges all the way from 10 to 650 tonnes. A lot has happened since he began using the company's first crane in 1968 – one that he had built himself!

"My first knuckle boom was a HIAB 1165 AW that I bought in 1981. It was so good that I ordered two more that same year. Today, knuckle booms are the only things that count up to 40 tonne-metre here in Spain. Nothing else is good enough in the



The construction boom is providing everyone with full-time work. Here, Francisco Leyva Garcia of Construcciones Maesle S.L. in Cordoba is making a delivery using the construction firm's own HIAB 095 to an apartment building site in Torremolino.



Gruas Sierra is owned and operated by six siblings. "When it comes to crane technology, customers demand the latest," says financial director Maria Dolores Sierra and Rufino Sierra Navarro.

tough competition."

Alhambra is among the leaders, and Antonio Molina has ordered another four Hiab cranes. The normal life of a crane in this company is 6 to 7 years. It is far from being worn out then – especially if it has been used by Alhambra, whose broad range of cranes enables it to have a crane available for the job with capacity to spare.

"But after a few years, the technology progresses further, and customers always want the latest."

There is avid interest in technology in Spain, and good news quickly spreads throughout the entire market.

"Labour costs are always going up as well, so we have to make the best use of our time," concludes Antonio Molina. SPAIN

The Spanish Pensioners give province of Andalusia is experiencing an intensive building phase,

and not just for Spaniards. Immigration from the north has begun to speed up, and many Germans and Swedes are choosing to settle here when they have retired.

For those who aren't happy in the crowded Costa del Sol, Granada has become a favourite, a half hour away from the Mediterranean.

Whith the long hot summers and a well-off clientele, the word "swimming pool" soon appears on the customers' wish list. It's a wish easily met by José Jaldo of Gruas y Transportes Jaldo S.L. in Granada. He purchased his first crane 16 years ago, and today there are four Hiab cranes in his machine park – a 400 E, a 215, a 090 and a 081. He has four other cranes too, but for the demanding jobs he uses his HIAB 400 E, equipped with CombiDrive and a winch, and mounted on a three-axle Mercedes 3331.

"For example, recently I lifted a safe through a small window into the seventh floor of a building. I coudn't have done that precision job without the radio control and the responsive crane."

Such tasks are fairly unusual. A far more com-



Here operator Andrés Jiménez Barrales is lifting up yet another swimming pool at the Granada storage site. "We make about 15 deliveries a month."

mon one is to lift swimming pools into the gardens of Granada.

"They are made of fibreglass and the usual size is 8 by 3.5 metres. When I handle them, I get a lot of help from both the radio control and the twenty-metre long reach – especially when I have to lift the swimming pool over the houses and put it in the garden at the back."

He lifts the pool into position with the crane and then winches it down into exactly the right spot. Using the radio control, he or his operator can do the whole job themselves.

"We do about fifteen such jobs per month."

His other work includes installing cash machines and putting base stations for mobile telephony in place. Here, too, the reach is

very useful, as the base stations have to be placed high up.

The cranes' good performance was not the only reason he chose Hiab.

"The service is also very good here, and that's important, because there's a lot to do, and if something happens to one of the cranes, it's important to get it working again quickly."

It's not hard to understand why Granada has become such a popular choice among active pensioners. It is a pleasant city, and people who live there are close to both the ski slopes of the Sierra Nevada and the warm waters of the Mediterranean. As the saying goes: "Skiing in the morning, swimming in the afternoon...."



It can be tricky to deliver the pool to the right place in the garden, especially in a situation like this. But the winch and CombiDrive make things easy.

José Jaldo





## 1999 a record year

In Zarazoga, Spain, Hiab's largest cranes are constructed at a modern factory that recently had its production area doubled. The Spanish ISO 9002-certified head office, with 36 employees, is located in Madrid. Managing Director Ulf Lindeberg is in charge of operations for this important market, which in 1999 alone purchased 1,200 cranes — mostly the larger, radio-controlled models. The buyers are often small companies who insist on reliability.

"It was a record year for us, as it was for many companies in the



# Quickly and safely with Hiab

When Catalonia's "county police", Mossos d'es Quadra, needed to renovate the facade of its head-quarters in Lleida, the job went to Grutrans Cabos. With its Hiab cranes, the company can handle amost anything.

"It took us three days to re-paint the facade and replace the windows," says owner José Ramón Cabos Gallinar. He has 20 years' experience in the business and has always used Hiab cranes.

oday the company has eight cranes: two HIAB 330 models with Jib 90, one HIAB 245, one HIAB 195, one HIAB 140 and an old HIAB 100 that has been around ever since 1981 and is still in mint condition.

"Knuckle booms are taking over more and more of the market. Sure, we're charging twice as much per hour as several of our competitors who have

simpler cranes, but we do the work so much faster that we can still get the jobs. Our customers also appreciate the increased safety this kind of cranes give them," says José Ramón Cabos Gallinar.

Improved performance is crucial for survival in this highly competitive marketplace.

Over the years, Grutrans Cabos has also developed a number of specialities. The HIAB 330 cranes have both approved personnel baskets and are mainly used for painting jobs and window installation. Another crane is used almost solely for replacing street lighting.

For the facade of the police headquarters, both 330 cranes were used in conjunction. One was equipped with a lifting device



The precision of the HIAB 330 made this job possible," say operators Pedro Casas Sanahuja and Carlos Royes Filella, who worked together on this job. Here they are flanking José Ramón Cabos Gallinar

with suction cups to lift the large, heavy window-panes into place. With a personnel basket in the other crane, the operator manoeuvred himself into the right position with the help of the CombiDrive, fitted the panes and screwed them into the window frame. The panes were unloaded here and there onto empty spots in the car park outside, so that the outreach was really needed to get hold of them all.

## for Hiab in Spain

building and construction sectors. Here, we are seeing construction of ring roads around all the bigger cities, motorways, new rail links, airports, hotels and housing – both for those living here and for tourism," says Ulf Lindeberg.

Something that is much appreciated by customers is Hiab's welldeveloped network of service locations. There are currently about 50, spread across the whole of Spain. That means short downtimes if anything happens.



stand ready for delivery in long "It can look like a lot, but corresponds to about two weeks' orders," says Managing Director Ulf Lindeberg. To the left is

# Speed causes many traffic accidents

You often hear the acronym "CCC" in Spain whenever there is talk about the leading causes of death: Cancer, Corazón, Carretera – cancer, coronary problems and roads...

A lot of money has been invested in improving the latter of the three.

"But with the better roads come higher speeds. The number of accidents just keeps rising," says break-down lorry driver José Barragan of Gruas Barragan in Madrid.

To help recover vehicles from big and steep ditches, one of the winches is sometimes used.

(All accident

pictures by cour-

tesy of Antonia

Barragan.)

Gruas Barragan currently has twelve lorries in operation and specialises in vehicle recovery. There is no lack of work – quite the contrary.

"We get about 1,200 calls a year in and around Madrid – and we are not the only company in the area," says José Barragan.



He is also specialised in recovering lorries, so he is called mainly to accidents involving such vehicles. He himself drives a four-axle Renault 385 equipped with two winches and a HIAB 550 with five hydraulic extensions and Combi-Drive. With that combination he can handle almost anything.

"And it will be even better when I get the HIAB 900 I've ordered. I need the power because I deal mostly with heavy vehicles."

What, then, is behind all these accidents? The road network in Spain has been extended and improved at an unbelievable pace in

recent years.

"That's true. But with better roads, the speeds just get higher and the accidents more serious. What's more, the traffic gets worse every year."

José's wife Antonia often accompanies him on his calls



José Barragan heads his company Gruas Barragan together with his wife Antonia. The twelve vehicles are fully occupied. The company specialises in salvaging wrecked lorries, and then the HIAB 550 can show what it's capable of.

and documents the work with her camera. At the office, she has box-loads of photographs – showing one accident worse than the other.

"You see a lot of horrible things. Sometimes the victims are sitting wedged fast in the wreck when we get there. As for us – we drive carefully...."



This overturned lorry will result in a hefty bill from the bodyshop. But at least the driver survived.

They appear to be more or less alone on that. In Spain, speed limits are generally regarded more as recommendations than limits. The traffic tempo is literally deadly.



1. A tractor unit like this is no real match for José Barragan's HIAB 550. 2. Stripped and burnt to cinder. Yet another fatal accident and José Barragan is on the spot to pick up the pieces. 3. They drive fast and often all that's left when they crash is scrap metal.

# The Owl

### - Keeping a remote eye out

The Swedish armed forces' new surveillance aircraft is called Ugglan – the Owl. It is a small, unpiloted, propeller-driven plane filled with advanced technology such as infra-red/heat and television cameras. This small, 320-kilo "bird" can cover large areas on its military surveillance and intelligence-gathering missions.

The Owl transmits all the information to the operator/pilot at a ground station. The aircraft is normally sent out on a pre-programmed course, but with the aid of its built-in, real-time television camera, the pilot can personally take control of the flight from his ground-based position. From a high altitude, the Owl delivers razor-sharp photographs of everything on the ground, and with the aid of the infra-red/heat camera it can also perceive hidden personnel and warm vehicle engines.

The Owl does not need an airfield. Rather, it is sent up with the help of a pneumatic catapult mounted on a lorry. It is first lifted onto the catapult by a Hiab crane. Once the mission has been completed, the Owl lands with the aid of a parachute and air bags. Using a specially designed crawler, equipped with an electro-hydraulic powered HIAB 015, the Owl is then picked up from its landing spot out in the terrain.







Gusts of wind and other conditions can force the Owl to land in hard-to-reach places. This crawler is constructed to permit retrieval anywhere and in any weather conditions. Lifting is done by a HIAB 015.

The key features of this entire set-up are accessibility, availability and reliability – even in difficult terrain and weather conditions.

# Just in time – on the spot

Kalzip Profiles have taken the phrase "just in time" to new heights when it comes to roof production.

Using a mobile production unit, the roof is manufactured right at the building site, and the entire "factory" is contained within a 20foot standard-sized container.

Hiab dealer Gilberg, together with Corus Bausysteme, have developed a trailer with unique features. A HIAB 225 E has the power and reach for this optimal solution. The crane lifts the entire production unit plus the required aluminium rolls onto the trailer.

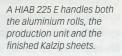
At the site, the unit is set up and manufacturing of the sheets begins.

The Hiab crane then lifts the finished Kalzip sections directly up to the roof. The crane is powered by a hydraulic unit on the trailer. A diesel generator supplies electricity to both the crane and the portable lock-rolling machine that joins the sections.

This is real "just in time" delivery – the entire roof to the building site in a single transport stage!











# **Uplifting** artwork

At the latest RAI trade fair in Amsterdam, Hiab Leebur BV celebrated the sale of its 3,500th HIAB 102 crane in an unusual way. The company asked the well-known multi-talented artist Herman Brood to "brighten up" the display model. It was a challenge he accepted with a combination of exuberance and spray cans. The result, as expected, was spectacular.



What Hiab Leebur had not reckoned with was the many customers who wanted one just like the celebration model. There are, however, no plans to start up production of such models.

"The HIAB 102 is the world's best-selling crane model right now. Its design is optimal in terms of performance, weight, reach and flexibility in meeting customers' demands. It is quite simply an artwork in itself, and it was to emphasise this that we invited Herman Brood to give it an artistic exterior as well," says the Managing Director of Hiab Leebur, Eric Starre.

After the RAI fair, the work of art travelled to the Commercial Motor Vehicle show in Birmingham, and continues on to Kuljetus-



näyttely in Helsinki, Elmia Lastbil in Jönköping, IAA in Frankfurt, SAIE in Bologna and Batimah in Paris.





Artist Herman Brood put an unusual stamp onto Hiab's successful "three-year-old", the HIAB 102. The work of art is on tour to different trade fairs.

# 40 years with Hiab



Forty years ago, in the small town of Castel San Pietro Terme – the "bathhouse of St. Peter" – a young couple started to sell Hiab cranes. It was a historic move because it heralded the arrival of the first-ever Hiab crane on Italian soil.

That couple was Mr and Mrs Brusa, and the historic crane was the HIAB 292 – delivered on a sunny July day in 1960. The Brusa family has sold and mounted many cranes since then, with the next generation becoming increasingly involved in running the family business.

In 1961, yet another seed was sown in Italy when Mr and Mrs Chelucci on the other side of the Appenines imported their first piece of Swedish technology – a HIAB 193 – for a customer in Tuscany. That crane was also a success, and there, too, the next generation has taken over the family's Hiab tradition.



Valve 91 and CombiDrive are built here in Olsbergs' Versailles-inspired workshop in Eksjö, Sweden, Owner Göran

# The valve destined to become a succes

Henriksson is a man who chooses his own paths to reach his goal – the further it may be out of reach of tried and true solutions, the better. Thus, his many patents and close co-operation with Hiab led to the hatching of an intelligent total solution that gives the crane operator full control over the entire operation.

There is a long-term strategy behind everything Göran Henriksson does, and the enthusiasm to always go that one step further. Nor is he ashamed to admit that he is pedantic. Everything must be perfect.

"You can't produce quality in a sloppy environment!"

The result of his philosophy is crystal chandeliers, works of art and the shiny clean floor in his super-modern workshop.

It all really started in 1906, when Göran Henriksson's greatgrandfather started up his foundry in Bruzaholm – on a piece of land known as Olsberg – hence the company name. The products were wood stoves and other traditional cast-iron goods right until Göran Henriksson took over in 1960 as a newly graduated 23-yearold engineer.

"To survive, you have to specialise, and I went into precision casting using the shell moulding method. That enables you to achieve complicated designs with good size accuracy in high-tensile grey cast iron."

Production was focused on hydraulic valve blanks and after just a few years, the small foundry was exporting important quantities to both the U.S. and Europe.

"But despite good blanks, the way hydraulic systems functioned back then left a lot to be desired. That was when I started thinking about designing something ourselves and further refining our blanks."

#### Its own valve system...

Göran Henriksson set about learning all about hydraulics. Together with enthusiastic colleagues, he started to build up own designs based on the existing technology. He patented a load sensing and pressure compensated valve, on electric positioners and on threeproportional control levers. The result was a valve

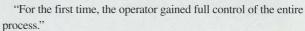


Olsbergs still does casting today, with the blanks now also forming part of the process at the plant.



The crystal chandeliers are Olsbergs' own distinctive mark. "In this workshop, we are currently investing 50 million kronor in new machines for tooling valve housings. Six machines and 100 pallets will permit 150 hours of unmanned operation," says owner Göran Henriksson.

in which all the individual cylinders could be controlled without affecting each other.





#### ...for Hiab

After four years' development work, Olsbergs were able to start delivering their new valve system to Hiab in 1979. Within a short time, the company became one of Hiab's most important system suppliers. In 1983 came the RC3 for the control of general cargo cranes, followed by DigiDrive in 1986 and then in 1991 came CombiDrive and the Valve 91 system, in which everything unnecessary has been stripped away and with important functions delegated to the load holding valves.

The strength of Olsbergs lies in the fact that the company have the entire "package".

"We cast our own valve housings, precision-machine them to within two one-thousandths of a millimetre in our highly automated workshop, manufacture all the components as well as the electronics, including the radio."

Olsbergs have full control of the entire production system. Together with Hiab the company has shaped an intelligent total solution in which Olsbergs' valve, positioners, load-holding valve and electronic control systems work together in perfect harmony with Hiab's SPACE monitoring system. And things aren't stopping there...



# Hiab keeps a watchful eye on the London Eye



It towers 135 metres above the south bank of the river Thames, that giant Ferris wheel and new major tourist attraction known as the London Eye. The view from the top is fabulous. It is also, in itself, a fabulous piece of engineering.

One question that arises is how to maintain such a massive object. An object that weighs 1,100 tonnes and is also in motion demands special solutions.

The answer is two HIAB 175-4 and two HIAB 195-5 fixed mounted to the sides of the wheel.

This special application has, among other things, required software to be added to the cranes' SPACE system in order to

The London Eye – an immense attraction that Hiab "keeps an eye on".

lock them when the wheel is in motion. Thus, most of the work is carried out at night: inspections, maintenance and, when needed, repainting. Work is done from personnel baskets in the larger, radio-controlled cranes, whilst the smaller cranes, which are each equipped with a one-ton winch, are mainly used to lift materials into position.

