



HIAB



NETTFLÖD

No. 44





A NEW ERA IN CRANE TECHNOLOGY

The recent introduction of Hiab's 52 tonne-metre crane heralds a new era in crane technology. The HIAB 520 is without a doubt the most advanced articulated crane in its class – and the first crane in production to feature Hiab's revolutionary safety system, SPACE Control. CombiDrive, a new type of remote control, plus the HIAB Valve 91 are also standard features on the HIAB 520.

Page 4



The New HIAB 125

Page 6



Applications Around The World Page 10



SPECIAL REPORT FROM CANADA

Atlas Polar Co. Ltd. in Toronto has been a Hiab distributor for almost 40 years. And during that time they have established a network of sub-distributors and service outlets in every one of Canada's

provinces. We visited two of those provinces, Ontario and Quebec, to take some photos of the HIAB method at work.

Page 7



Hiab News Page 15

HIAB METHOD

No. 44 • November 1992

HIAB Method is published by
HIAB AB, Hudiksvall, Sweden.
 Publisher: Göran Wiklund
 Editor: Terence Prout
 Editorial Assistant: Iia Berglund
 Printing: WR Graphics Oy

Some equipment featured in this publication may be optional, and a number of applications may require the approval of local authorities.

READER ENQUIRY SERVICE

For further information about any products, accessories, or applications in this magazine, simply complete the enclosed card and encircle the appropriate Reader Enquiry Service number. If this card is missing, or additional information is required, please contact your local HIAB distributor, or write to:

HIAB AB
S-824 83 Hudiksvall, SWEDEN.



The HIAB 520 has hydraulically operated outrigger extensions with a span of up to seven metres.

SAFER, MORE EFFICIENT WORKING ENVIRONMENT

The new 52 tonne-metre HIAB 520 is a high capacity crane with exceptional reach.

But what makes it totally unique, is that it's the first Hiab crane in production to feature a revolutionary new electronic system called SPACE Control.

SPACE, which stands for Speed, Payload, Accessories, Certification, Electronics, was designed to make crane operation safer.

However, combined with CombiDrive and the new HIAB Valve 91 (both standard features on the new HIAB 520) it also enhances crane performance.

And in addition, provides operators with a more comfortable, more efficient working environment. How?

Well first of all, unlike more conventional control valves, the HIAB Valve 91 is a load sensitive, pressure compensated valve that operates independently of the pump flow, the load and other crane functions that are running simultaneously.

In other words, as long as there is sufficient pump flow, the speed of each crane function is always in direct proportion to the displacement of the control lever movement.

CombiDrive in its turn refines the superior control characteristics of the 91 Valve even further with its built-in electronic system. It works like this:



The first crane in production to feature Hiab's SPACE Control.

Coded signals are sent from CombiDrive's control unit to the SPACE box.

The crane's central computer unit evaluates these signals in a fraction of a second, checks them against the actual load and the capacity limits stored in its memory, then determines if the intended movements are allowable.

If any of these movements are dangerous, and as a result not permitted, they are stopped.

Advanced electronics also make it possible to preset the speed of each individual crane function so that an operator can choose to reduce the slewing speed, for instance, and still retain full extension speed.

It's also possible, using a button on the remote control unit, to temporarily lower the speed of all crane functions to 50%, or 20% of the crane's normal speed.

What's more, CombiDrive can control up to 12 proportional functions. And be used to control on/off functions such as operating the horn, warning lights, engine, etc.

Now, let's take a closer look at SPACE Control.

To start with, it has an overload

protection function (OLP) so that sensors on the crane monitor the load, as well as the position and the movements of the crane.

When the OLP function is activated, which takes place when the crane has reached 100% of its load limit, all boom movements that increase the crane's lifting momentum are stopped.

There is a risk, of course, that an operator can find himself in a situation where OLP won't allow any movement at all. However, an OLP release button allows the crane to be run for the few moments it takes to escape from such a situation.

SPACE Control has another unique feature.

If a crane is mounted behind the cabin and a heavy load is lifted in the area in front of the cabin the unit may become unstable.

But SPACE Control detects this movement and prevents it, thus eliminating the risk of a truck tipping over in this situation.

When working close to the crane's capacity limits SPACE also has a Load Operated Speed (LOS) function which cuts in and reduces the operating speed.

Lifting capacity is then increased by 10 to 15% compared to a crane without this LOS function.

Another feature of SPACE Control is that it supervises the crane's manual levers so that they won't function when CombiDrive is being used.

If one of the manual levers are



This new 52 tonne-metre crane has a lifting capacity of over 3.3 tonnes at a reach of nearly 14 metres.

accidentally moved, the crane stops.

Furthermore, there's also a pump flow distribution (PFD) function to make certain all simultaneous functions operate smoothly.

Plus a built in diagnostic system for fault finding. And several other options are available too, including overload

protection of a jib and/or winch, and monitoring of the instrument panel, support legs, etc. ☑

No. 1

TWO MORE HIGH-CAPACITY CRANES FROM HIAB

HIAB has also recently introduced two other high-capacity cranes – the HIAB 300, and the HIAB 330.

Both these cranes have excellent close-in lifting capacity and exceptional reach.

Plus advanced boom systems that allow up to five hydraulic extensions giving them a maximum hydraulic reach of 13.5 metres.

Add a jib and manual boom extensions to either crane, and reach can be extended to over 25 metres.

The HIAB 330 also features a new "electronic link" that increases lifting capability at high boom elevation, plus CombiDrive, the new HIAB Valve 91 and Hiab's SPACE Control. ☑

No. 2



The HIAB 330 has a new "electronic link".

HIAB 125 – OUTREACH, POWER AND PRECISION

The HIAB 125 is a crane with tremendous outreach that's been made to handle heavy loads at cluttered job sites where there isn't much space to manoeuvre.

Its boom system, which incorporates a unique single-weld construction, allows up to four hydraulic extensions and a maximum hydraulic reach of 12.2 metres.



With four hydraulic and one manual extenon, this HIAB 125 has a reach of 14.4 m and is lifting close to 500 kg.



The HIAB 125 can be equipped with the new HIAB Valve 91.

But if you add a jib with two manual extensions, reach can be extended to almost 21 metres.

In addition, a sturdy linkage system situated between the inner boom and column provides exceptional hook approach and lifting capacity close-in.

This 12.5 tonne-metre crane also has powerful interconnected extension cylinders, and large adjustable slide pads.

And for increased operating safety, pilot-operated load holding valves are mounted directly on the inner and outer boom cylinders.

What's more, the HIAB 125 can be equipped with either the HIAB Valve 40, or the new HIAB Valve 91. ☐

No. 3

COMPACT BOOM SYSTEM

Using the latest CAD technology, HIAB has also designed a new 10.5 tonne-metre crane for both cargo handling and bucket operation.

It features, for instance, an extremely compact boom system that allows a bucket to be easily stored even on a short truck bed.

Plus a heavy lift attachment, heavy duty extension cylinders, flanged slewing cylinders and a cast base with a rack and pinion gear in an oil bath.

There's also a "JIC" coupling system to assure perfect sealing in the oil lines. ☐

No. 4



The HIAB 105 has been designed for both bucket operation and cargo handling.

HIAB IN CANADA



To install gangways, The Maid of The Mist Steamship Co. Ltd., which operates four boats that take passengers on a spectacular tour of Niagara Falls, uses a HIAB 140 equipped with remote control. "That remote control is worth its weight in gold", said Frank Simon, the company's General Manager of Marine Operations. "These gangways have to be lifted over a fence and down an embankment to floating docks on the water below. So if we didn't have a remote control, the operator would need another person standing by the fence using hand signals to direct him."



The Water Works Department of the City Of Niagara Falls recently had a HIAB 100 mounted on a double-axle International with a utility box chassis. "We used to have a crane from another manufacturer mounted on this truck", said equipment supervisor, Gilles Theberge. "But we had a hard time getting parts for it." The Water Works Department uses the HIAB 100 primarily for removing sections of old cast iron and lead water pipes and replacing them with modern plastic piping.

This crane working at the gates of Ontario and Quebec Paper, just outside Niagara Falls, is one of three new HIAB 160-2s Toledo Scales Canada Ltd. has bought to check the accuracy of their larger capacity truck and train scales. First the truck, which carries twenty-five 500 kg weights, is driven onto the scales, and its total weight noted. Then it's parked beside the scale, and the weights are unloaded onto the scale five at a time using the HIAB 160 and a specially constructed bracket. Finally, the weights are taken off the scale and the truck is weighed without the weights. So when you're finished, you've verified that the fully loaded truck weighs exactly the same as the empty truck and the weights.



Material Lumberland Inc., one of the largest building material supply companies in Montreal, sells a lot of wallboard. As a result, it's only natural that the latest addition to their fleet, an International S2600, was equipped with a HIAB 2640. The HIAB 2640 was designed specifically to handle wallboard and other stacked sheet materials like panelling and plywood. It's a powerful crane with a 4000 lb (1800 kg) lifting capacity from 40 ft (12.2 m) horizontally to over 52 ft (16 m) vertically. That means that with multiple story buildings, there's no problem lifting a full load of wallboard as high as the fifth floor. Or putting a load exactly where its needed at cluttered construction sites, where it isn't always possible to manoeuvre a truck to the best place for unloading.



"The two HIAB 140s we bought have more than doubled our business", said Rick Dawe of Canadian Float Glass Industries, a growing wholesale glass distributor based in London, Ontario. Previously, the company was only able to unload at places where a fork lift was available - and that meant they were missing a lot of potential customers. Now they're able to deliver a wide variety of glass products to both large and small retailers, as well as construction sites, all over southern Ontario.



The St. Lawrence Seaway Authority has several HIAB cranes, including this HIAB 070AW mounted on a four wheel drive International, to help maintain a 27 mile (42 km) stretch of one of the world's most unique water transportation routes. "And we've never had any complaints", said Bill Smith of their Niagra Region office in St. Catherines, Ontario. "In fact, we recently sold a HIAB that's been working for us continuously since 1959 and purchased a new HIAB 071."



Mat rie Laurentians, in Lafontaine, Quebec, purchased this HIAB 160-4 equipped with a rotator and a fork because customers were increasingly asking that the plywood, lumber and other building materials they bought were unloaded exactly where they were needed. "Today, when someone is re-roofing, for instance, they want those skids of shingles on the roof", said the company's Managing Director, Denis Warnett. "Not on the ground where they're forced to hoist them up scaffolding, or carry them up two or three flights of stairs. And the HIAB 160 has enough reach to put them there."



GERMANY

MINIMUM MANPOWER


To lay pipes for a new gas-line in eastern Germany, TRP Tief- und Rohrleitungsbau GmbH in Potsdam uses two HIABs mounted on Unimogs.

The first crane holds a section of pipe in position, while the second crane lowers another section of pipe into the ditch. Then, both sections are welded together.

And the process is repeated kilometre, after kilometre.

It's an effective technique that requires a minimum

amount of manpower, and thus reduces costs considerably.

TRP also have several larger-capacity HIAB cranes mounted on Mercedes trucks that are used to handle heavy machinery and containers. 

No. 5

An effective way to lay pipes.



GREAT BRITAIN

FASTER, AND MORE COST EFFECTIVE SOLUTION

A HIAB 160 equipped with remote control and mounted on a Unimog has made work a lot easier for GBS Estates, a Hertfordshire firm which

specialises in transplanting mature trees for golf courses, parks, etc.

"Before the engineers at GMC 600 came up with this


solution, the only way to remove trees of this size was to fit a tree spade to a large front loader," explained Stefan Kitching, the company's

Managing Director.

"You'd shunt backwards and forwards, often over soft ground, close to a tree, lift the tree out, move it away and then move the loader back close to the next tree to be taken out.

But now, we can lift every tree within a 12 metre radius of the vehicle – and that can be up to 40 trees.

Needless to say, it's faster, and a lot more cost effective."

"We are also able to move two tons of tree and root ball in one operation and replant it where it's needed, or load it on another vehicle for transportation somewhere else." 

No. 6



Mature trees can now be replanted far more efficiently.

FRANCE

LARGER CRANES ARE IN DEMAND

Gilbert Santiard, the owner of Société Santiard, a transportation company in Marseille on the southern coast of France, bought the company's first HIAB in 1978.

Less than fifteen years later he has a fleet of eight

cranes, including a forty-eight tonne metre HIAB 480 that was delivered in July.

"There's an increasing demand in the area for larger capacity cranes", says Mr. Santiard.

"As a matter of fact, if

business continues to go as well as it has been lately, we're planning on buying another HIAB 480 next year."

With five hydraulic extensions, Santiard's new crane has a hydraulic reach of 13.7 metres where it's still capable of lifting over 3000 kg.

Yet it weighs just 6100 kg – including the support legs. And requires less than 1.5 metres of installation space. ☑

No. 7

Société Santiard's HIAB 480 has a hydraulic reach of 13.7 metres.



The new HIAB 480.

A U S T R A L I A

HIAB 100 AWW CLEANS UP DOWN UNDER

Hamersley Iron, one of the largest exporters of iron ore in Australia, has developed a quick and effective way to help them maintain a high-level of productivity.

It's called a "washdown truck", and it's used to wash off iron ore dust, grease and

oil before servicing or repairing mining equipment.

The body of this vehicle, complete with a 23000 litre water tank and 1000 litre detergent and degrease tanks, was designed and built by a local sub-contractor, Boomerang Engineering.



This HIAB 100 helps maintain a high-level of productivity at Hamersley Iron.

After that, the components were assembled onto a Wabco 120 tonne chassis and fitted with a HIAB 100 AWW equipped with a two man personnel basket.

Mounted inside the basket are a pressure washer, a

detergent gun and a HIAB remote control to manoeuvre the crane into position. ☑

No. 8

Hamersley Iron's washdown truck.



SWEDEN

REDUCES COSTS BY 60%

Uddeholm Kraft AB, one of Sweden's largest power companies, had a problem.

The equipment they previously used was not able to handle the longer, heavier wooden poles that were now needed to replace shorter poles on a distribution network that stretched over 2000 km.


Then Kjell Stenbäck, an employee at Uddeholm, suggested mounting a HIAB 160-4 fitted with a pole grapple and personnel basket on the rear of a CAT excavator.

Christer Jansson, who's responsible for machinery and

materials at Uddeholm Kraft was extremely happy with the solution.

"This is a machine that's capable of doing the work of several machines", he says.

"And it significantly improves our employees working environment."

"What's more", he adds, "the cost of installing our new distribution poles has been reduced by as much as 60%." 

No. 9



Uddeholm Kraft uses a HIAB 160 mounted on a CAT to maintain their distribution network.

FRANCE

UNIMOG AND HIAB WORKING ON THE RAILWAY

A complete re-building of the MONGY tram line that runs between Lille and Tourcoing is currently underway, and the company responsible for installation of the line's new electrical system is CEGELEC.

"For a job like this we used to use three trucks, each mounted with a crane," ex-

plains Mr. Potier, the technical manager of CEGLEC's regional office in Villeneuve d'Ascq.

"Now we use one, a highly-versatile vehicle we have constructed ourselves that operates on roads as well as rails."

The foundation of this vehicle is a Unimog 1650 L


and mounted behind the cab is a HIAB 120-1.

And because the HIAB 120 weighs so little in relationship to its capacity, they are also able to carry two cable drums that weigh 1350 kg each and hold 1400 metres of electric cable.

"This is the first time we've had this unit in opera-



tion", says Mr. Potier. "But we are extremely satisfied with the results."

"In fact, as soon as this job is finished, it will start working right away on the French National Railways's line between Paris and Lille where the new high speed TGV trains will soon be put into operation." 

No. 10

This vehicle has been designed to operate on both roads and rails.

FASTRAC AND HIAB, AN EXTREMELY VERSATILE COMBINATION

The London Borough of Havering recently became the first local authority in Great Britain to buy a JCB Fastrac 125 high speed tractor fitted with a HIAB 071.

And it's proving invaluable as a fast response maintenance vehicle.

"We've found it to be a highly versatile and effective combination both on and off the highway", said Direct Services Organisation (DSO) manager, Barry Letton.

"It has replaced three ordinary tractors and is doing more work, more effectively than was previously possible.

With its potential road speed of 40 mph (65 km/h), the Fastrac also saves up to 50 per cent of the time it would normally take to travel between job sites."

The unit, which joins a fleet of 13 conventional tractors in the Tractor Service Unit of the DSO, is used for various contracting duties throughout the borough.

Using the HIAB 071 equipped with a 500 litre ca-

capacity clamshell bucket, for instance, the Fastrac collects builders' trade rubble, waste road materials, etc. and transports it to nearby landfill sites.

This is a solution which not only saves time, but also saves the cost of skip hire or using other vehicles.

"It's also been useful for collecting and loading abandoned cars into the Ken Wotton 14 tonne, high speed tandem axle trailer it tows", said Mr. Letton.

"In fact, thanks to the Fastrac and HIAB combination we have been a lot more efficient when it comes to removing a hazard from public areas which is proving to be a growing national problem."

The unit is also used for numerous other applications including lifting playground equipment for maintenance work, removing waste from depot centers and transporting materials such as cement and ballast around the borough.

When touring Great Brit-



To provide extra flexibility in a variety of applications, Hiab cranes are being installed on a lot of Fastracs in England.

ain with a demonstration vehicle this year, GCM sales staff also found that there was a great demand for the HIAB 071 to be fitted with an earth auger.

Other accessories includ-

ing hooks, log grabs and block clamps are available too. ☐

No. 11



The London Borough of Havering's new Fastrac 125 fitted with a HIAB 071.

GERMANY

THIRTY-FIVE TONNES IN LESS THAN 15 MINUTES

Kempke Transporte a building material supply company in Bad Schwartau, near Lübeck, has discovered that HIAB 150 Rol-loaders provide a superior method for handling large quantities of brick and block.

They have a lifting speed of 0 to 0.6 metres per second and a slewing speed of 18 degrees per second.

That means an experienced operator can unload 35 tonnes of bricks or blocks in

less than 15 minutes.

There's also a HATZ silent pack engine which allows off-loading late at night, or in the early hours of the morning, without fear of disturbing the neighbours. ☒

No. 12

A superior method for handling bricks and blocks.



DENMARK

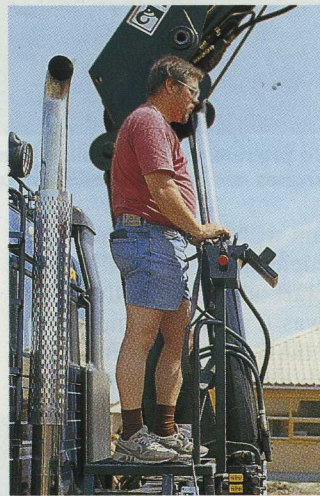
NEW TECHNOLOGY, A QUESTION OF SURVIVAL

"If you're going to survive, you have to be efficient", says René Petersen, a hauler in Denmark.

"And if you're going to be efficient, you've got to have the right equipment."

The right equipment for René was a HIAB 160-4, equipped with the new HIAB Valve 91 and CombiDrive remote control, mounted on a Mercedes 2435 truck.

"Seventy percent of our business consists of installing heavy cover plates at building sites and over road



excavations," explains Mr. Petersen.

"There's a lot of competition, so we're constantly looking for new methods to improve the way we work.

Now, thanks to HIAB's improved crane technology, that's exactly what we've been able to do."

With the equipment Petersen Transport used previously, they had to move the truck after laying each cover plate.

"But with the HIAB 160 we can put down eight me-

tres of plate with the truck parked in the same place," says René.

"And with CombiDrive we also have precise control over the crane's movement and are able to lay the plates tightly against each other." ☒

No. 13

For René Peterson having the right equipment is a question of survival.



NEW PLANT IN JAPAN

This July Hiab Japan held a ground breaking ceremony, or "Jichinsai", at the site of their new plant in Kurabuchi.

Jichinsai is a traditional Japanese ceremony conducted by a Shirine priest who purifies the ground before construction is started.

He also prays for the safety of workers during construction, and for prosperity of the business after construction is completed.

The ceremony was attended by members of the local community, including the Kurabuchi village council, the staff of Hiab Japan and Dan Backlund from Hiab in Hudiksvall. ☒



A Jichinsai ceremony in Kurabuchi, Japan.

SEVERAL NEW HIAB CRANES ARE INTRODUCED IN THAILAND

This year's annual South East Asian sales conference was bigger than ever.

More than 50 Hiab sales representatives from eight countries took part in the three day event which was held at the Dusit Resort Hotel in Hua Hin, about 300 kilometres south of Bangkok.

There were several customers in attendance too, including a group who accompanied Mr. Philip Shen, the managing director of the Hy-Force Corporation, Hiab's distributor in Taiwan.

The primary purpose of the confer-

ence was to give participants a chance to exchange ideas.

But they also had the opportunity to see a lot of new product including a HIAB 045 and a HIAB equipped with SPACE Control, the HIAB Valve 91 and CombiDrive, the world's most advanced, programmable remote control. ☒

Sales conference in Thailand.



The Hiab training suit.

ELEPHANT IS FASHIONABLE

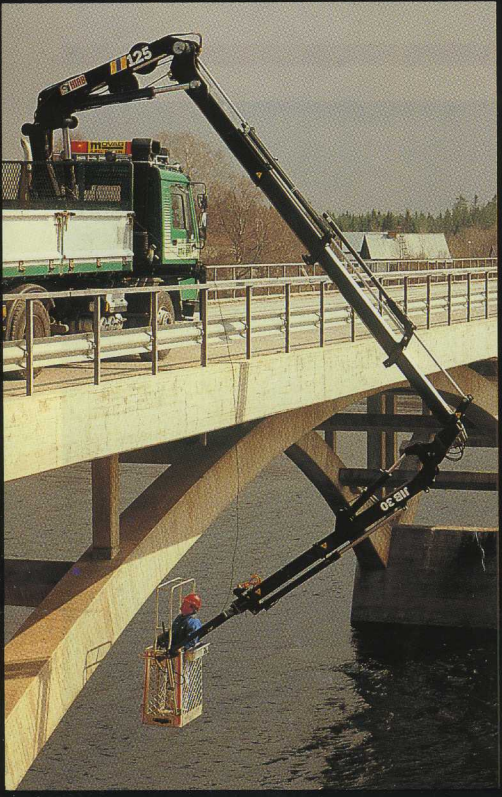
The Hiab elephant is rapidly becoming a big hit in the fashion world.

In fact, his famous profile now decorates a wide range of smartly designed casual clothing and accessories.

Everything from tennis shirts and training suits to golf caps, belts, sunglasses and socks.

Plus a host of exciting gifts items, like tie clips, cufflinks, bath towels, sports bags, wallets, umbrellas, Swedish crystal and Swedish dolls.

But please note that the Swedish doll in the photograph is not for sale. ☒



**ATLAS
POLAR**

COMPANY LIMITED
TELEPHONE: (416) 751-7740
FAX: (416) 751-6475

60 NORTHLINE RD.
P.O. BOX 160, STN. O
TORONTO, ONT.
M4A 2N3



NETHOD

No. 44

