



Method

HIAB

Method No. 38

A magazine featuring the HIAB Method and its applications



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Cover picture:

Rationalised unloading of lightweight concrete — see page 5.

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A Method for Survival

The deep recession that has hung over much of the world during the past few years has been especially hard on building and construction and on the building-material industry. In many places, new housing construction has fallen to its lowest level since the Second World War, and the same has been true of investment rates both in industry and in the public sector. Production cutbacks, layoffs, closures, overproduction and warehouses filled to bursting with unsalable inventories round out the gloomy picture of a crisis-ridden sector of the economy.

And yet, even in this hard-hit industry, you can find companies that are not merely surviving but are also making money and expanding. Some of them are featured under the collective heading "Rational Building Hauls" in this issue of METHOD. Their recipes for success vary, but they all have one powerful ingredient in common: effective utilisation of the HIAB crane in combination with an attachment that's just right for the job in hand.

Another method of surviving and even expanding against stiff competition in a much shrunken market is the one that HIAB-FOCO has gone in for. The key to it is an intensive, unceasing and carefully targeted concentration on aggressive product development. This approach has resulted in products that represent wholly new concepts in handling by crane.

One such concept is seen in the production loaders that were introduced some years ago to meet the demand for cranes able to stand up to hard, continuous work. Another is the HIAB SeaCrane, to which some pages of this issue are devoted. Its advent means that the HIAB loader is now set

to become just as familiar a sight on the seven seas as it has been for decades on the five continents. It's true that HIABs — like similar cranes from competing manufacturers — are already simplifying handling jobs on vessels large and small, but the SeaCrane has been specifically designed for ship-board duty, using materials and surface treatments that match the special requirements imposed by the marine environment.

"Five Cranes Born to the Sea" is the title we've given to the SeaCrane feature. Justly, in our view. The HIAB SeaCrane has already established itself in the offshore operations of the oil industry — a sector where people demand a lot from their equipment. When METHOD asked some offshore outfits in Scotland why they'd chosen the HIAB SeaCrane for some particular job, many of the answers took the line that it was hardly a case of *choosing* — it was the only shot on the board. There was simply no competing equipment in sight.

We've drawn another illustration of HIAB-FOCO's intensive product development from the HIAB Method's original field of application — forestry. A modern mobile loader equipped with a Jonsered HC 250 has an astonishingly high capacity. If all the timber that is harvested in Sweden were to be collected at sufficiently large landings you wouldn't need more than around seventy such cranes to cope with the entire job of loading it onto trucks. The evidence for this is the loader that METHOD visited — it was handling one million m³ a year! No doubt about it: the development that began when the Forest Elephant took over from the rope crane has come a long way.

Rational Building Hauls

The HIAB Method is Standard Around Here

For some of the materials used in the building industry, handling by the HIAB Method has long been so well established that it is well-nigh standard practice. Examples that come to mind at once are bricks, concrete blocks and roofing tiles.

The advantages of HIAB handling in this connection are numerous and obvious. After all, even small deliveries of building materials for a single house can run to many tonnes' weight, so that offloading them without mechanical aids is practically ruled out. In this kind of situation the HIAB Method comes out well ahead of other alternatives, such as renting a loading machine for just a few hours' work, which is expensive, or relying on a building crane if there is one on the site, which usually involves waiting times, besides which it upsets the schedule of other operations.

Another advantage of the HIAB Method is that the lorry driver can offload entirely by himself, whereas with the alternatives he has to call

on other personnel for help. Usually, too, the HIAB Method gives the shortest offloading time, enabling the vehicle to be used more efficiently. The HIAB Method also gives the widest scope for optimum spotting of the drop: roofing material can go straight up onto the roof, bricks can be put down right where the bricklayer wants them — even if it's several storeys up. Besides this, the risk of damaging the goods during offloading is a good deal smaller when they're handled with a grab or clamp that's specifically designed for the job.

Many firms that make building materials of this type have a very high output and in consequence a big daily dispatch volume, so that their distribution organisations oper-

ate sizeable fleets. Transportation on that scale provides ample scope for precise costing calculations and a firm basis for comparisons between different ways of tackling the job. Many such enterprises have long since settled on the HIAB Method for offloading their products — and often for loading them as well. The recession of recent years has hit the building trade especially hard, necessitating intensive cost-pruning, which has made the rationalisation gains of the HIAB Method more valuable than ever.

To exemplify this, we show here some of the rigs used in this field by big transportation organisations that have successfully applied the HIAB Method.

London Brick

A number of brickworks around London belong to the London Brick Group, which has a transport organisation running to hundreds of vehicles. Most of them are equipped with the "Self-Stack", a mechanical offloading device that has been developed and is manufactured within the firm. In recent years, however, London Brick has equipped a number of its lorries with HIAB loaders. Offloading by the HIAB Method is about as fast as with the Self-Stack, but it affords greater freedom of choice as regards the spotting of the bricks. With the Self-Stack, the only place you can put them down is right next to the lorry. With a HIAB loader, on the other hand, you can put them anywhere you like within quite a large radius — even on the other side of a fence for example, or within the confines of a building site.

With advantages like that, HIAB loaders are going onto more and

more of the new vehicles that the firm buys.



Rational Building Hauls



Eternit Express

Anyone who travels the autobahns of West Germany soon becomes familiar with the two words "Eternit Express". From six factories, Eternit distributes building material, such as roofing and siding, direct to construction sites all over the Federal Republic using a fleet of white truck-and-trailer rigs each with a rear-mounted HIAB loader. The Eternit organisation comprises no less than 44 such outfits equipped with a HIAB 1165 and a hydraulic clamp. As a rule, each truck does two delivery runs a day, and the average haul is 150 km. All of them are crewed by one man and are equipped with two-way radio.

Gilberg, HIAB-FOCO's dealer in Koblenz, recently delivered the first unit in a new generation of Eternit Express trucks equipped with HIAB 1280s. This crane, though larger than the HIAB 1165, weighs very little more, yet it has a substantially longer reach, enabling it for example to raise roofing material to a greater height. The new Eternit Express generation, according to present plans, will run to about 35 vehicles. ①



Lignacite

Not far from the historic town of Hastings, on the south coast of England, the Lignacite company has a plant making lightweight concrete. Its products are transported to building sites by the firm's white lorries, and are unloaded by the HIAB Method. In order to reach all parts of the platform with a sufficiently high lifting torque the loader is mid-point-mounted. Just recently, too, the firm has commissioned a rig with a Rolloader, which can operate at optimum lifting capacity over the whole length of the platform — however long it may be.

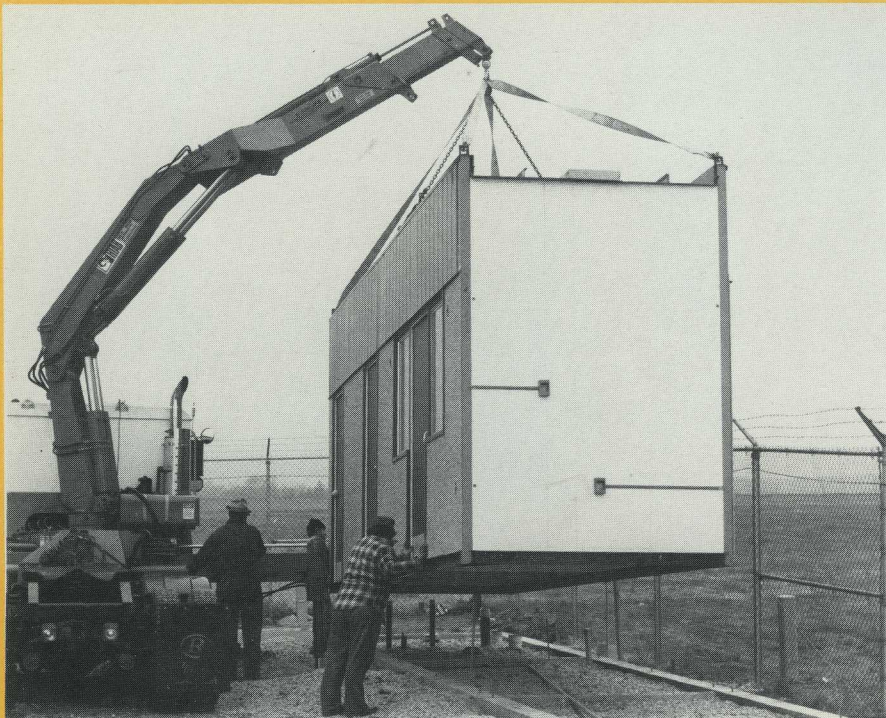


Fourth Floor Next Stop

The great outreach of the HIAB 1280 enables it to lift parcels of tiles weighing 940 kg up to the fourth floor if need be. The outstandingly efficient rig that is used by a roofing supplier in Bonn, West Germany, takes a load of 10.2 tonnes on the tractor truck and 12.3 tonnes on a four-wheel trailer. The loader attachment is a 1.6-tonne block clamp from the standard HIAB-FOCO range. A foot-rest on the loader base makes it easier for the operator to climb up into the control seat. ②



Rational Building Hauls



The HIAB 2070 is used to offload and erect house modules weighing up to six tonnes.

Saving \$1000 a Day

"We make it a point of honour to keep our jobs on schedule, and in this we've found the HIAB loader to be such a valuable aid that we're all set to get another one."

The speaker is Steven R Frey, of Madison Industries Inc. The firm has a factory at Conyers

in Georgia making building modules which are assembled on site to form complete single- or two-storey structures. They're used for gas stations, temporary shops, offices, cafeterias, fast-food eateries, homes, warehouses and so on all over the U.S.

Steven Frey points out that it has always been the firm's policy to procure the best available equipment for any given job.

"It costs a bit more, that's true, but it pays off in the long run. This reasoning is amply borne out by the HIAB loader. In the days when we used rented cranes we averaged two or three deliveries a week. With the HIAB loader we do twice as many — i.e. between four and six. That increase, added to the fact that we can make better use of personnel and materiel now that we've cut out waiting times, means that we can usually reckon to save around \$1000 a day."

Success Formula

By a successful combination of attractive, functional design, high precision in manufacture, and comprehensive customer service embracing everything from planning and applications for permits

through to the turnkey building, and by fielding skilled and experienced personnel, Madison Industries has enjoyed great success and has gone on expanding despite the construction recession of recent years.

"We used to use rented cranes for offloading and erecting our modules, and it involved severe problems and heavy costs. Often the crane didn't turn up on time — or didn't come at all, which was worse. That left us stuck there with highly skilled, highly paid personnel who couldn't get anything done. And when the crane did show up it was still expensive. As often as not we needed it only for an hour or two, but we still had to pay a whole day's rental at 60-70 dollars an hour plus two or three hours' travelling time. That ran into big money.

"Now that we have our own cranes we've drastically slashed these

costs, while minimising waiting times and bringing our operations under much better control. Our HIAB 2070, the latest loader we've bought, fits perfectly into our new way of working. It's strong, fast and easy to operate, and it handles its load with great precision. Thanks to the new HIAB, loading and offloading is done with a good deal more speed and convenience."

Madison Industries' HIAB 2070 is mounted behind the cab of a tractor truck pulling a semitrailer, and is used for building modules weighing up to six tonnes. It's also a valuable aid in installing additional items on site. Modules and components that aren't due to go into the building straight away can be offloaded by the driver himself at the most appropriate point. Since the crane is mounted on the tractor it doesn't encroach upon the load space of the semitrailer.

Deliveries Up 200%

"Since we got ourselves HIAB loaders we've been able to step up our deliveries by nearly 200% — and still save 50% on labour, because each truck now needs only one man. The man

who used to ride along to assist in offloading can now drive another truck or make himself useful around the warehouse."

Tom Kidd speaking. He's responsible for shipments at John McDaniel, a building-material wholesaler of Atlanta, Georgia. Established only five years ago, the firm has prospered by going in for perfect service and well-known quality products; it now supplies thousands of customers, mainly contractors and home-owners in Georgia. An important factor in the firm's successful customer service is fast and punctual delivery, and in that connection the HIAB Method has a key role to play.

McDaniel's fleet includes two HIAB-equipped trucks. One of them has a HIAB 650 and mainly serves the smaller sites in housing areas. It often does two or three drops during a single delivery run. The other truck has a HIAB 1265 and is used for the bigger deliveries.

"Now that we have these cranes our work is hardly to be compared with what it was like when we unloaded our trucks by hand," Tom Kidd goes on. "If a truck with a two-man crew managed three deliveries

a day we felt we were doing well. Nowadays, a solitary driver with a HIAB crane can get through six to eight deliveries a day without physical exertion. When he comes in from a run he's actually eager to get his truck reloaded and be off on the road again."

Tom Kidd ticks off other advantages of the HIAB cranes besides faster deliveries and economies of labour: "They're very reliable. We've had very little trouble from our HIABs, and they have a wide margin of safety built into them. They've never once given us an anxious moment. And the hydraulic system is designed to high standards. All the connections are sealed tight, so we've had no problems with oil leakage or outside contamination. That's one of the reasons why the cranes have a high availability rate. They stay on the job."

Safer with Remote Control

McDaniel's HIAB 650 is equipped

with a HIAB remote-control unit. With its aid, the driver can operate the crane from anywhere within a radius of about 15 metres, giving him a better view of his work so that he can guide his load to the right spot with far greater certainty than when he's standing at the control levers on the loader base. By making the operator free to move, the remote control drastically reduces the risk of damage to the goods or injury to persons within the working area.

Tom Kidd's enthusiasm over his HIAB loaders extends to their simplicity of operation.

"Teaching a new man to use a HIAB is a cinch," he says. "Done in next to no time. After a few hours practising loading and offloading at our warehouse he's ready to take a truck out solo. He knows that he can handle it because the controls are so simple, and I know he can handle it because we've trained so many new men. Anybody with a spark of judgment can operate a HIAB crane."

④



With the HIAB Method the unaided driver can get through from six to eight drops a day. Remote control reduces the risk of damage.



The Seven Sisters Get

Hydroelectricity has long played and important part in Canada's energy supplies, and many of the big power stations on the rivers have been around for a long time. One such is to be found 97 km north of Winnipeg in the province of Manitoba. It's sited on a waterfall romantically named the Seven Sisters. At this point the waters of the Winnipeg River were harnessed by a large dam as far back as 1930, and in 1949 the facility was enlarged to a rating of 150 megawatts.

For more than fifty years the great dam has held the huge volumes of water in check, and it's now showing its age. The concrete piers supporting it have begun to decay. When that happens, the usual thing is to build a new dam above the first one and then demolish the old dam, but it's a very costly and cumbersome solution. Manitoba Hydro, the owner of the facility, therefore decided to try another approach, never before attempted in Canada, which was to leave the dam standing and to replace the seventeen aging piers by new ones.

The engineers studying the problem began by building a scale model of the dam. It helped to give them an idea as to the equipment that could be used and the scope of the work involved. One of the big problems was how to demolish the old piers. Their siting was such that it ruled out the use of large machines, and the concrete was altogether too thick for hand-held jackhammers. And blasting the piers down was out of the question since it might

have caused serious cracks in the dam.

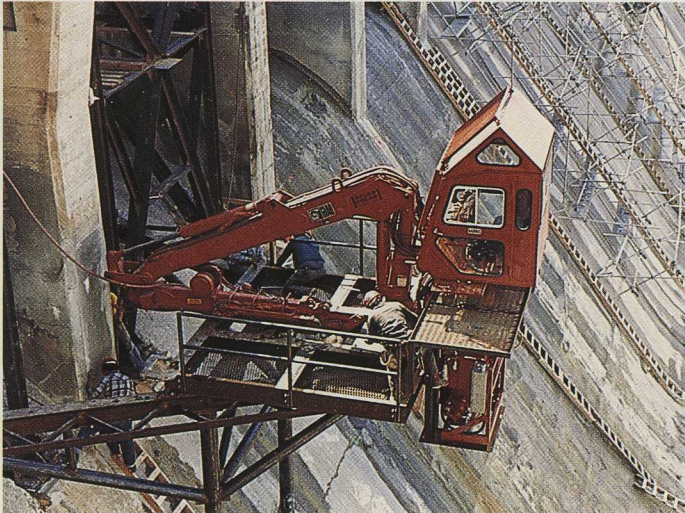
In quest of suitable equipment for its task, Manitoba Hydro tried a string of machine suppliers, among them Vulcan Equipment of Winnipeg, a HIAB dealer for more than twenty years, and that's where they found the answer. Experts from HIAB-FOCO's general agent in Canada, Atlas Polar Ltd., collaborated with two engineers from Manitoba Hydro to modify two HIAB 1300s for this special job.

These cranes, which were originally production loaders intended for forestry work, were fitted with an 0.9-metre positioning arm for manipulating a hydraulically powered concrete breaker. To suppress the pressure surges set up in the hydraulic lines by the breaker, accumulators were installed in the lines to the inner and outer booms. In this way the engineers contrived a flexible boom that could operate with the breaker at practically all angles and even in the inverted position. The crane was also fitted with a winch for use in hauling materials up

Instead of building a new dam, Manitoba Hydro elected to renew the concrete in the old piers.

It takes a heavy breaker to tackle such massive concrete. The HIAB 1300 has the muscle to handle it.

The platform on which the HIAB crane is mounted is quite spacious enough to permit easy drill changing and other servicing.



Seventeen New Piers

to the working level.

The cranes were mounted on roomy, specially constructed steel platforms, which are secured to the dam and can be moved from one pier to another. The crane and the breaker are operated from a cab which is mounted on the crane body so that it slews with the crane.

The renovation of the dam at Seven Sisters is a good example of how an almost impossible problem of performing a heavy and risky job can find an elegant solution in the HIAB Method. The crane enables one man to handle the heavy concrete breaker with ease while sitting in a cab that protects him from wind and weather, concrete fragments and falling objects. Also important! — he himself runs no risk of falling from his working perch high up on the face of the dam.

⑤

An extra articulation gives the breaker the necessary manoeuvrability. Steel grills protect the cab windows from flying concrete.



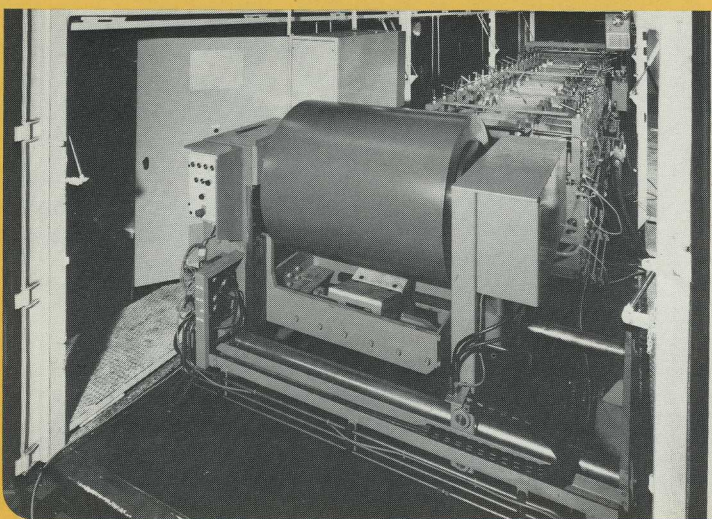
Two containers swallow the entire plant. In the parked position the complete HIAB loader goes into the smaller of them.

If the Mountain won't come to Muhammad . . .

Aluminium wall and roof units are bulky things that cost a lot to transport. If the aluminium factory is in West Germany and the building to which the units are destined is a sports stadium in Mecca, Saudi Arabia, the freight quotation gets so big that the shippers are impelled to sit down and do some serious thinking about it.

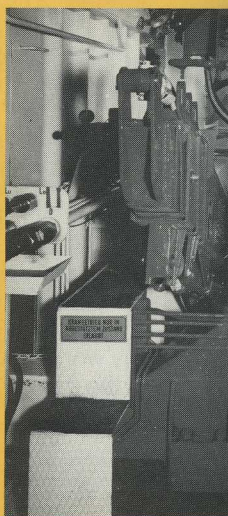
The thinkers at the Kaiser Aluminium plant in Koblenz, which was faced with the problem, soon worked out that it would be a good deal cheaper to send the aluminium sheet in coils to Mecca and to make the profiles on the site. Collaborating with HIAB-FOCO's general agent in Koblenz, Gilberg, they designed and built a small mobile plant for profiling aluminium, which went into one 20-foot and one 40-foot ISO container.

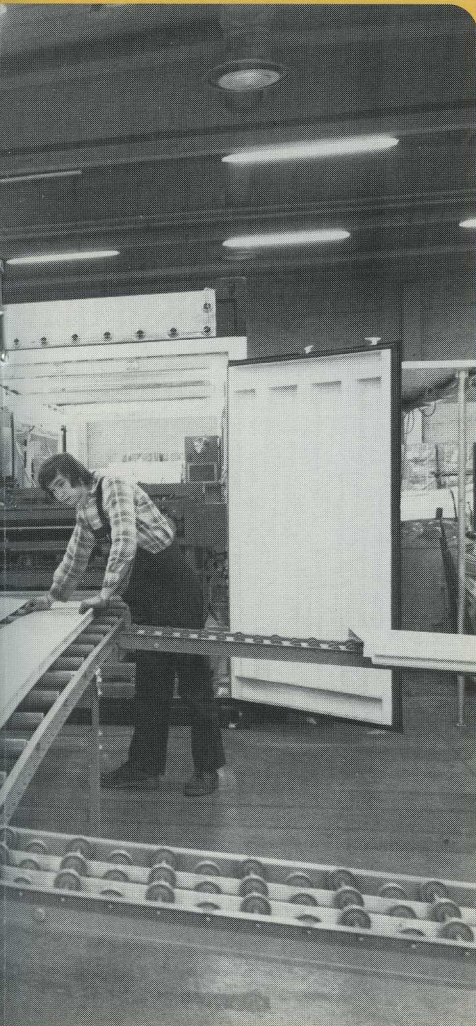
The machines for making the profiles are packed in the 40-foot container, while the contents of the smaller one include a HIAB 2070 to do the lifting jobs — chief of which is the handling of the input stock in the form of three-tonne aluminium reels. In the same container is a six-cylinder Deutz diesel engine, which drives the hydraulic pumps and the generator that provides the electricity for running the plant. In view of the climate at the site, the



The main job of the HIAB is to handle the three-tonne coils of aluminium from which the building units are made.

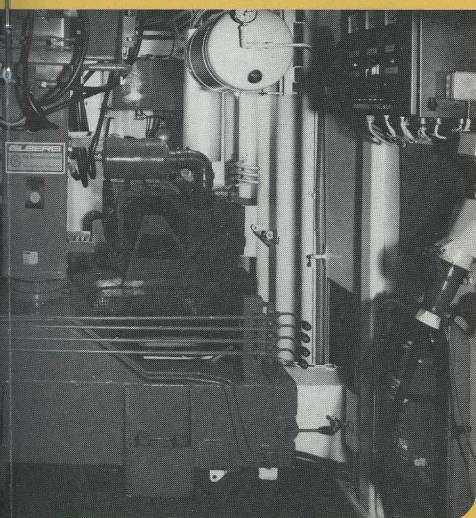
Besides the crane, the smaller container also has room for an oil tank, an oil cooler, a generator, workbenches, tools, spares and so on.





shippers also sent along a high-efficiency oil cooler and a 1000-litre hydraulic-oil tank. Right at the back of the container is a small workshop, equipped with the tools and spare parts needed for servicing and maintaining the facility.

Once the works in Mecca are completed, the firm expects to move the little factory to some other building site in the Middle East.



With his small HIAB crane the driver can often deliver the goods right into the addressee's warehouse.

Not As Easy As You'd Think

The popularity of the motor-cycle has grown amazingly in recent years. Great numbers of machines, mostly Japanese, are being sold all over the world. The job of distributing them from a central import warehouse to a network of dealers doesn't sound particularly complicated, but in practice it's not as simple as you might think.

The dealers are often small firms lacking the space to hold big stocks, so frequent deliveries are needed. Besides this, many of them are located in or near town centres, fronting on narrow, busy streets that can't be corked up too long by the delivery lorry. What's more, it's extremely important that the driver drops off the *right* machine, since the serial number must agree with the one on the registration documents, which reach the dealer through other channels. So a lorry being used to deliver motor-cycles to dozens of dealers has to be loaded with forethought so that they will come off in the right order along the route.

This knotty problem has long been familiar to J. Spurling Ltd., which distributes Honda bikes in England from a warehouse on the north bank of the Thames in East London.

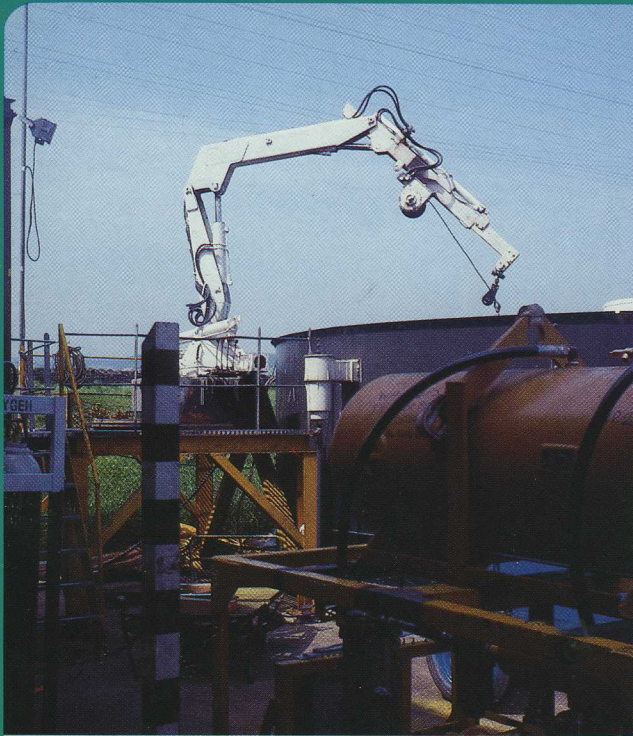
"The machines are delivered in the knocked-down state and are packed two by two in cases with the serial numbers printed on the outside," explains John W. Perry, the firm's transport manager. "We've been using vans with a roller deck. The machines were stowed so that offloading began from the tail end, the remaining load being rolled to the rear step by step. As long as the loading is properly done this system works well most of the time — but not always. Sooner or later, the van

calls on a dealer who for some reason or other can't take delivery. There may be something wrong with the registration papers, orders may have been mixed up — or the dealer may have gone bankrupt.

"That puts the van driver on the spot. At the tail end of the deck he has one or more cases that he can't get rid of and which are in the way of the remaining load. This makes a lot of extra work for the driver during the rest of the run, with serious delays in consequence.

"We got on top of problems like this when we began using vehicles with a midpoint-mounted HIAB loader. At the time of loading we put slings round all the cases, enabling the driver to reshuffle his load almost at will. If he can't deliver a particular consignment it simply remains there in the van. If it's in the way of the next delivery he can easily move it somewhere else, and even if some of the cases have gone on in the wrong order it's no longer a disaster.

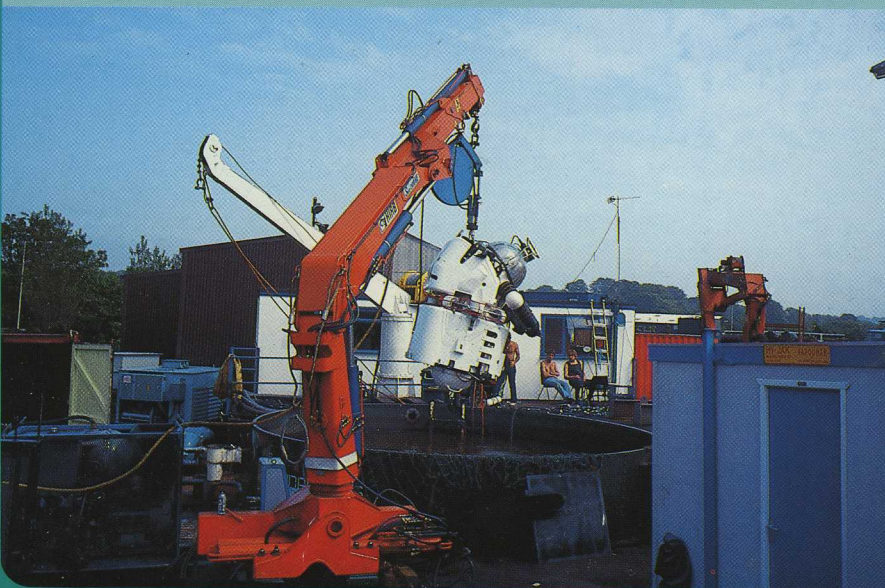
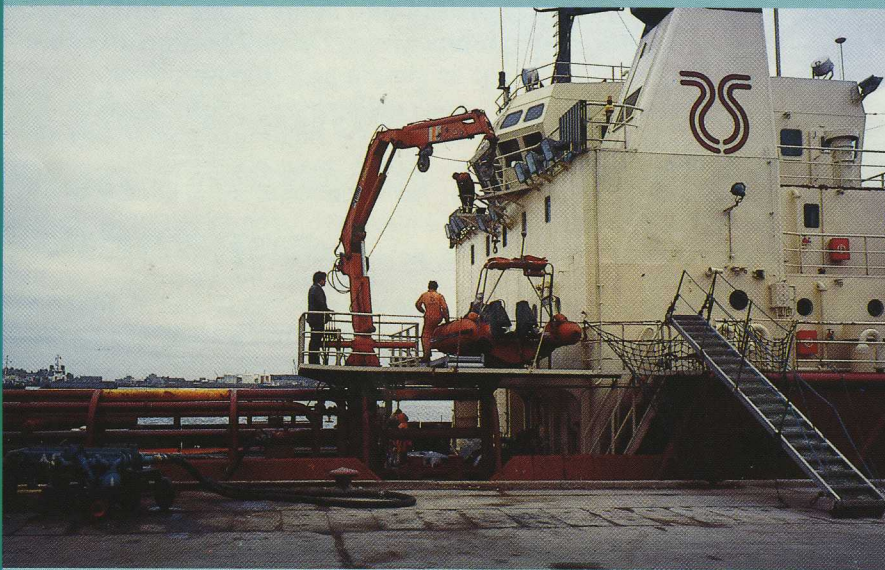
"Another advantage of HIAB handling is that it makes the driver quite independent of any equipment which the dealer may or not have. If there's no loading bank he is able, all by himself, to set the goods down on the pavement, or even put them right into the dealer's stockroom. And it's done quickly, too, since the driver doesn't have to wait for help of any kind. ⑥



HIAB

SEA CRANE

Five Cranes Born



A HIAB loader at sea is no novelty. Almost every issue of **METHOD** has featured cranes serving aboard craft large and small — stories which show that the HIAB Method is just as widely disseminated over the seven seas as it is throughout the five continents. So far those cranes have been ordinary HIABs — landlubbers if you like — that have taken to the water and become good seafarers.

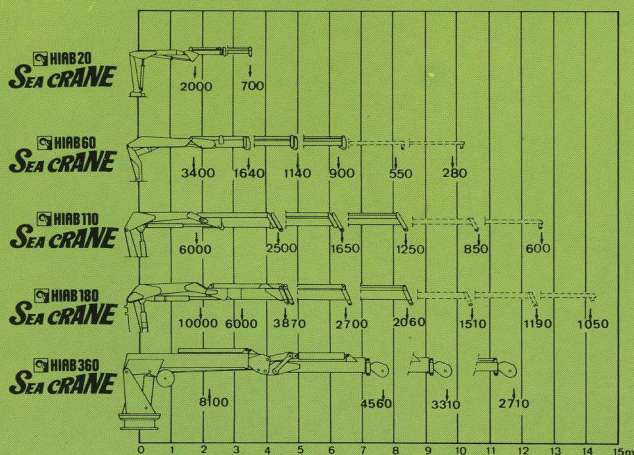
The HIAB SeaCrane is something else again: a series of cranes specifically designed for marine duties. Starting from the HIAB concept and from the outstanding action and superior performance of HIAB loaders, HIAB-FOCO's designers have evolved a series of five crane models in which design, materials, surface finish and so on are matched to the specialised and exacting requirements of service at sea.

The five SeaCrane models cover a very wide capacity range, with lifting torques from 2 to 36 tonne-metres and with standard outreaches from 3.5 to 11.8 metres. With extra manual boom extensions the outreach can be raised to something just over 14 metres.

The HIAB SeaCrane has an entirely redesigned loader base with a retaining flange that gives simple and stable mounting on deck or wharf. Welded

HIAB Sea Crane off-shore

The breakthrough scored by the HIAB Sea Crane in the offshore sector is soon borne in on anyone who visits the ports along the east coast of Scotland. The pictures on this spread show just a few of the many HIAB-equipped ocean-going tugs and supply vessels that came within range of **METHOD'S** photographer during an afternoon in Aberdeen and a morning in Peter-



to the Sea

brackets to take a winch are standard fitments on the loader body. The hydraulic lines all end at a connection block beneath the loader base, and the valve assembly is supplied as a separate unit, leaving the user free to choose the control station that gives him the best view of the working area. The valve assembly has two spare hydraulic functions that can be used for a winch, hydraulically operated attachments and so on. All external hose connections have quick-fit couplings.

Rust is a deadly enemy of all equipment used at sea. The designers of the HIAB SeaCrane went to great lengths to achieve durable corrosion protection by appropriate choice of materials and surface finish. The pins are made of high-tensile steel rustproofed by a coating of hardened nickel. The piston rods have a coating of nickel-chromium, a well-tried combination that affords both density and hardness.

The surface treatment consists of a zinc primer applied after the metal has been cleaned by shot-blasting. Over the primer goes a two-component epoxy plastic. The topcoat, too, is a two-component plastic. Inside surfaces are treated with an alkyd primer.

The SeaCrane range also comprises a power pack having a single or duplex hydraulic pump and a choice of two winches with a pulling force of either one or two tonnes.

⑦

head. The pictures at top and bottom on the left-hand page show the testing of equipment brought ashore from the oilfields to be serviced, and they give an idea of the duties performed by HIAB SeaCranes away out on the drilling rigs and production platforms in the North Sea and at most other places where men extract oil from beneath the seabed.





A hundred or so containers like this receive more than fifty out of every hundred bottles emptied in Groningen.

A Rational Way with Bottle Banks

Many city and town councils set out "bottle banks", which are containers of different kinds in which the public can dump its empty bottles. But the problem of waste glass isn't solved as soon as it drops into the container. Regular emptying is called for and the "cullet", as glassmakers call it, must be collected and sent to a glassworks where it can be remelted and used afresh. This can all too easily become an expensive chore unless a simple and efficient method is applied. In Holland and Italy they use containers of roughly the same design, and both countries have adopted the HIAB Method for emptying.

The containers used in Milan consist of a round dome with holes to admit the bottles. The dome stands on a detached floor, in the centre of which is a telescopic post which rises through the roof of the dome and ends in a lifting eye. The collecting truck lifts and empties the container using a HIAB 650 equipped with an electric winch.

The procedure is that the hook of the HIAB crane gets hold of the centrepole and the slack rope of the winch is secured to an eye on the dome. As the HIAB boom rises, the telescopic post first extends about half a metre until the post lifts the floor and the dome, after which the

whole container is swung over the body of the collecting truck. The driver now starts the winch, which he controls remotely via a cable. The rope lifts the dome clear of the container floor, allowing the contents to tumble into the truck. Mounted on the container floor is a conical disc so designed that no bottle can stick in the container.

As the container is put back on the ground the winch is run in reverse so that the dome is lowered to close onto the floor again.

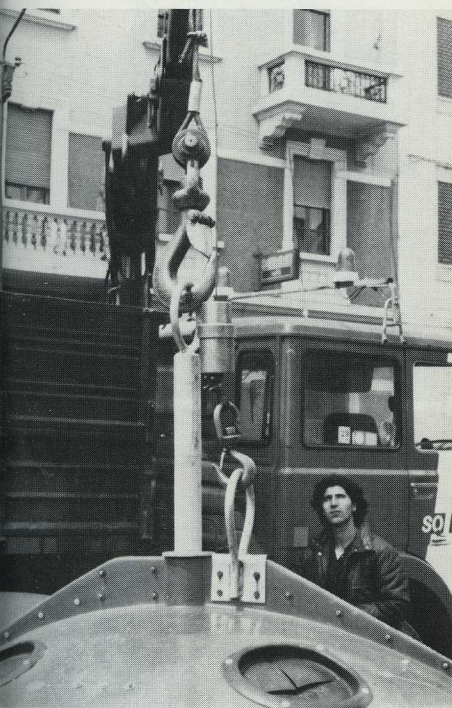
The Dutch system, which METHOD studied in Groningen, works on the same principle as the Italian. The main difference is that instead

of a winch the Dutch use an extra hydraulic cylinder to raise and lower the dome of the container. In Groningen, which has 165,000 inhabitants, there are a hundred or so bottle banks dotted around the town, mostly in shopping centres and outside big food stores. Two trucks are employed in emptying them. Bottle collection, which has been practised in Holland for some years, has grown to be a great success — it's estimated that in the country as a whole between 35 and 40 per cent of all used bottles are recycled. In Groningen the figure is over 50%.

(8)



The Milan council workers empty their bottle banks by almost exactly the same system as in Groningen.



The container is emptied by raising the dome clear of the floor — using a winch in Milan and an extra hydraulic cylinder in Groningen.



Matex Puts a HIAB on a Pedestal

Van Ommern Matex is a firm that has specialised in the storage of liquid products in large tank farms at many of the world's major ports. One of its biggest installations, capable of storing close on a million cubic metres in more than 300 tanks, is in the Port of Rotterdam. The facility has six berths for oceangoing ships and five for barges.

Most of the products handled in the terminal are pumped to and from the storage tanks through pipes that are connected up to the ships by a large but well-balanced and very easily handled swivel device. In some cases, however, the job is done with large-bore hoses, and they're anything but

easy to handle. The fact that fewer and fewer ships are nowadays equipped with cranes suitable for hose handling has made things all the more difficult.

To deal with the situation, Matex has brought in the HIAB Method, mounting a HIAB crane with a winch, a double extension and an extra boom section at the top of a 20-metre column. With that kind of outreach available, even the largest of the tankers calling at the Port of Rotterdam are made to look small.

The idea of putting a HIAB on a high mounting has worked so well that Matex now plans to equip all berths for oceangoing ships in the same way. ⑨

HIAB Lifts Feed to Raise Salmon

As the waters on the continental shelves become fished out and the best fish get harder and harder to catch, fishbreeding has grown to be a common and important business in many coastal nations. Norway's production in 1971 was a modest 500 tonnes of hatchery salmon. By 1980 it had reached 7,500 tonnes, and the projected figure for 1985 is 20,000-25,000 tonnes. About 70 fish farms are in operation and permits are being sought to start another 300-400.

In Norway, then, the industry is growing at a furious pace and turning over great sums. About 40% of the cost of running a fish farm is accounted for by feed, while labour absorbs another 30%. Both these outgoing items can be influenced by better feeding technology and by more rational and less labour-intensive feed handling.

Many fish farmers in Norway have now discovered the potential of the HIAB Method in this connection. Among them is Ole Torrisen & Söner in the north of the country. By mounting a HIAB on the specially built 14-metre boat that takes the feed out to the farm, Torrisen has changed the heavy slog with the feed bins, weighing 400-600 kg each, into a relatively easy job of handling that can be done by one man. The crane is also used to harvest market-ready salmon from the hatchery waters. A seine net is lowered into the culture enclosure, and when it is full of salmon it is raised again and emptied into catch vats on board. The boat is also designed for the transportation of smolts — the young salmon — out to the farm. ⑩

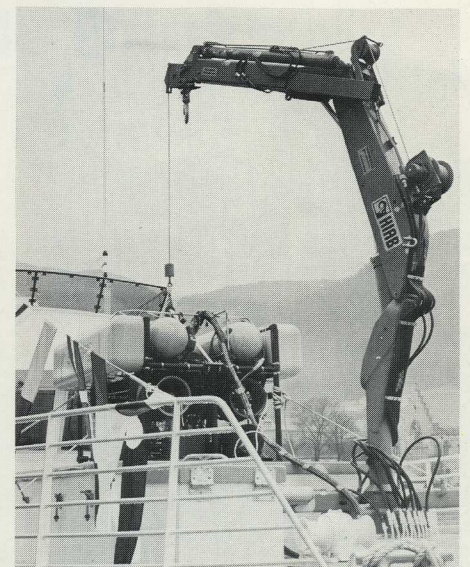


A School for Underwater Pilots



Oil prospecting at sea has spawned a clutch of offbeat products. One of them is "Benjamin", a highly specialised vessel launched some time ago from a shipyard in Nordfjord, Norway. "Benjamin's" main job is to serve as a school for training the pilots of remote-controlled submarines.

The order to build it was placed by the company that makes the Scorpio submarine, of which so many have been delivered in recent years to oil prospectors the world over that an acute shortage of competent pilots has arisen. Training aboard the "Benjamin" is intended to alleviate this short-



The M/S "Benjamin", which is to be based in Bergen, is a 114-tonner capable of 20 knots. It has room on board for twelve people.

age.

The very advanced technical equipment of the ship naturally includes a Scorpio, and equally naturally there's a winch-equipped HIAB 60 SeaCrane on board to launch the vessel and retrieve it again. ⑪

Section S

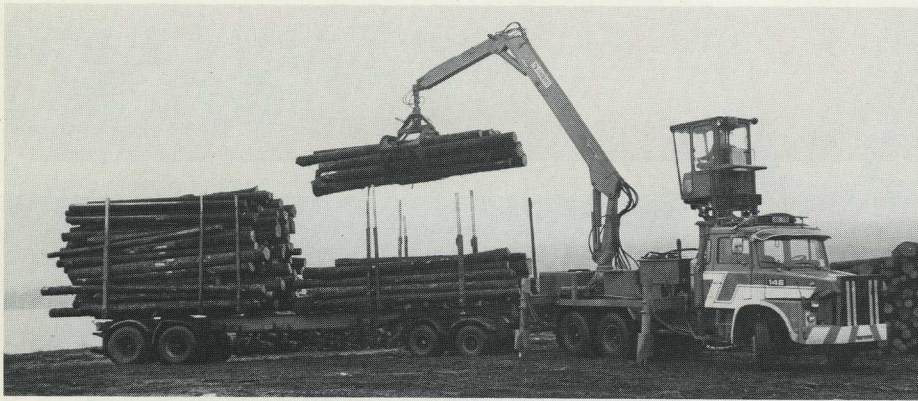


They recently celebrated their 25th anniversary at HIAB-FOCO's German subsidiary in Langenhagen near Hanover. Since the company was founded in 1958 it has sold more than 20,000 HIAB loaders in West Germany and West Berlin. In the picture above the personnel of the head office have turned out for a jubilee photograph.

The picture at top right comes from a show featuring the HIAB Sea Crane in Norway, and under it is a shot from a grand exhibition in Columbus, Ohio.

Below we see how HIAB-FOCO met the world at the latest "Salon de la Manutention" in Paris, and under that is a HIAB SeaCrane as it appeared at a boat show in New Orleans. The yellow HIAB with the earth auger at bottom right was photographed at an exhibition in Algiers.





These logs have to be moved to the sawmill. The outfit collects, hauls and discharges them at the rate of four loads an hour.



Ten minutes is all it takes to load up three stacks of pulpwood aggregating about 70m³ solid measure.

One Machine Loads a Million Cubic Metres a Year

When it comes to the rapid handling of roundwood in bulk it would be hard to find an outfit that could outdo the mobile loader mounting a Jonsered HC 250 that is owned by the Swedish trucking firm of Bröderna Göransson. When METHOD came calling it was at work in the stockyard of Marma Mill, moving

sawlogs on a trailer that was hooked up to it. Loads consisting of two stacks were hauled a few hundred metres and offloaded again at the intake to the sawmill. Over this relatively short haul the rig had no trouble in clocking up four loads an hour.

Obviously, a machine with so large a capacity can't be left standing idle for very long. When we went to see it on the following day, the job at Marma was already over. The loader had been transported overnight some 100 km to a big clear-cutting area where it was busy loading pulpwood.

As soon as the first truck-and-trailer outfit came threading its way in reverse along the narrow forest road to pick up a load of roundwood we were treated to a striking demonstration of the HC crane's power and resourcefulness. The road was too narrow for the transport truck to back up alongside the loader. Instead, the truck, trailer and HC loader ended up in line. How, we wondered, was the crane going to load

the tractor truck — 20 metres away with the trailer in between?

One way, of course, would be for the tractor to wait until the trailer was full, then haul it away and park it at some suitable point, then come back for its own load, then go back for the trailer and be on its way. But that would take a long time — and if you've got a crane like the Jonsered HC 250 there's a much more elegant solution. We watched as the truck-driver got out and uncoupled his trailer — after which the crane operator took a firm grip on the trailer with his grapple and lifted the whole thing, all 7.3 tonnes of it, off to the side of the road, making room for the truck to back up and be loaded!

The crane then lifted the front end

of the trailer back onto the road and the drawbar was coupled to the truck again. The forward stack of timber was loaded onto the trailer, then the truck drove ahead and pulled it right up onto the road before the rear stack went on. The Jonsered crane needed only 6-8 lifts per stack, which meant that by this technique it didn't take more than about ten minutes to load the whole rig with some 70 solid cubic metres of timber!

At that rate it's no wonder that the Göransson truckers can load such vast quantities of timber — adding up to the impressive figure of one million m³ in the course of a year.

⑫



The trailer, weighing 7.3 tonnes, is "side-tracked" so that the tractor truck can back up and be loaded.

Despite its size the HC 250 can clear away odd sticks and tidy up the landing while waiting for the next truck to come along.



Method Hoists

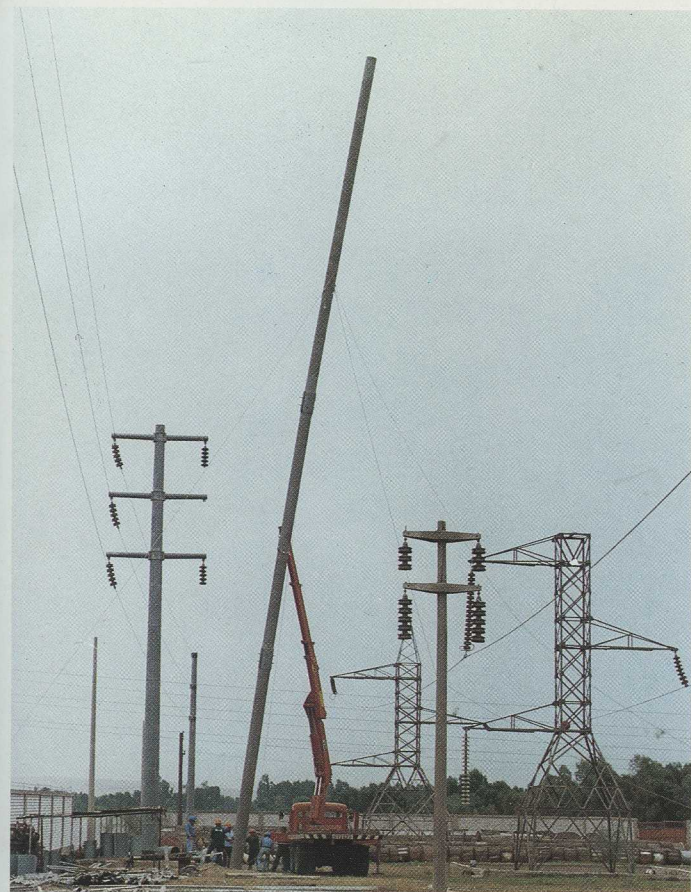
Concrete Con Brio

This side-mounted HIAB is an effective solution to the problem of supplying concrete to pouring jobs at inaccessible points, e.g. the interior of a house foundation. With a skip of the right size on its hook the crane delivers the concrete to the form smoothly and swiftly. It's a lot simpler than building chutes — and far less exhausting than trundling a wheelbarrow.



A Big HIAB Park

The New Zealand Post Office has gone in wholeheartedly for the HIAB Method. The vehicles below are some of the nearly 150 outfits equipped with a HIAB 550 or 650 that have so far been supplied to its fleet.

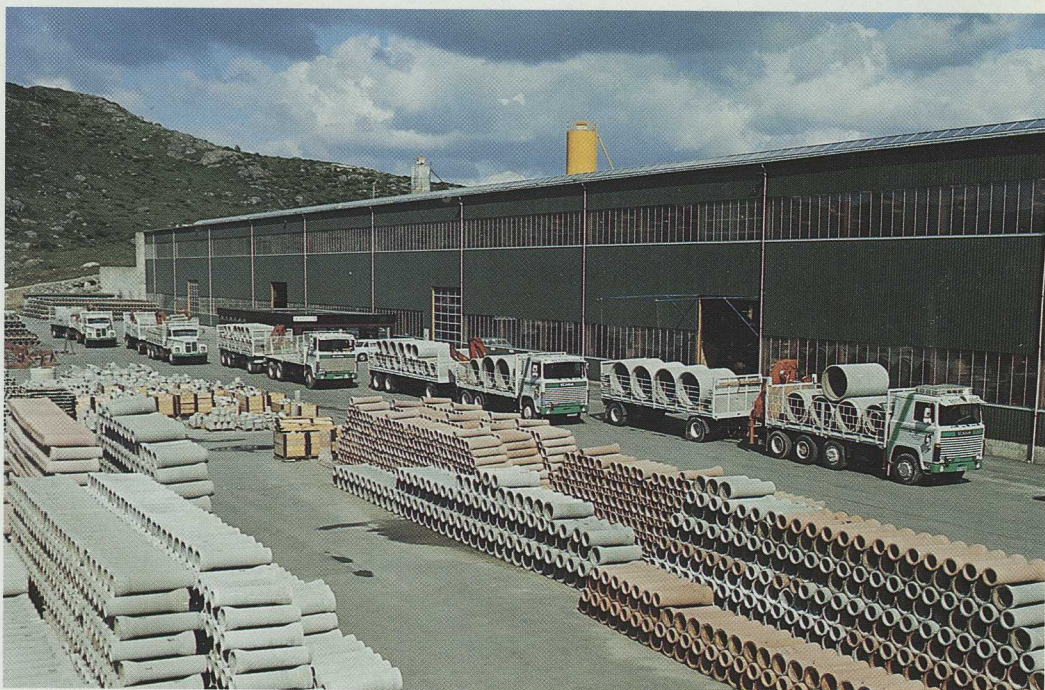


Post-Impressionism

This post, which will help to carry a high-tension cable in Peru, has impressive statistics: 30 metres in length and 3 tonnes in weight. No less impressive is the crane that's raising it — a HIAB 2070.

Pipe Hype

A spectacular show on the forecourt of a big precast-concrete works at Stavanger, in Norway — five big, efficient bogie trucks with four- and six-wheel trailers, all with a HIAB for offloading their freight.



Light, Strong and Sturdy

The Hanover Sewage Department needed a lightweight vehicle that could leave the roads and still get around and could operate in parks without leaving deep ruts in lawns and pathways. At the same time it had to be sturdy enough to carry a crane that could lift heavy pump units out of man-holes, change big sluice gates in rainwater culverts, and clean out ditches and gulleys with a hefty hydraulic bucket. The department found the answer in the combination of a Unimog U 1700 with a HIAB 2070. Four support legs give the lightweight vehicle sufficient stability to serve as a base for the big crane. ⁽¹³⁾

