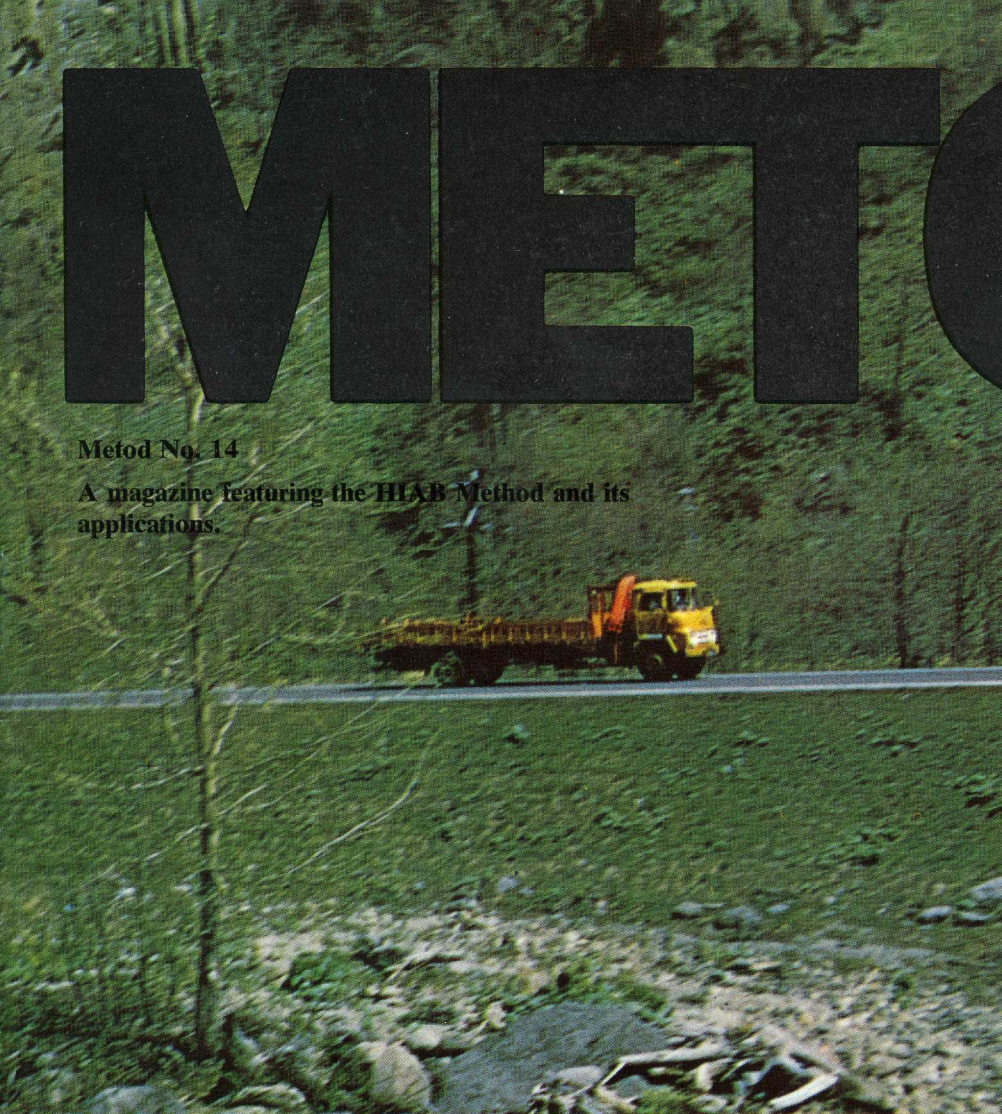


METOD

HIAB

Metod No. 14

A magazine featuring the HIAB Method and its applications.



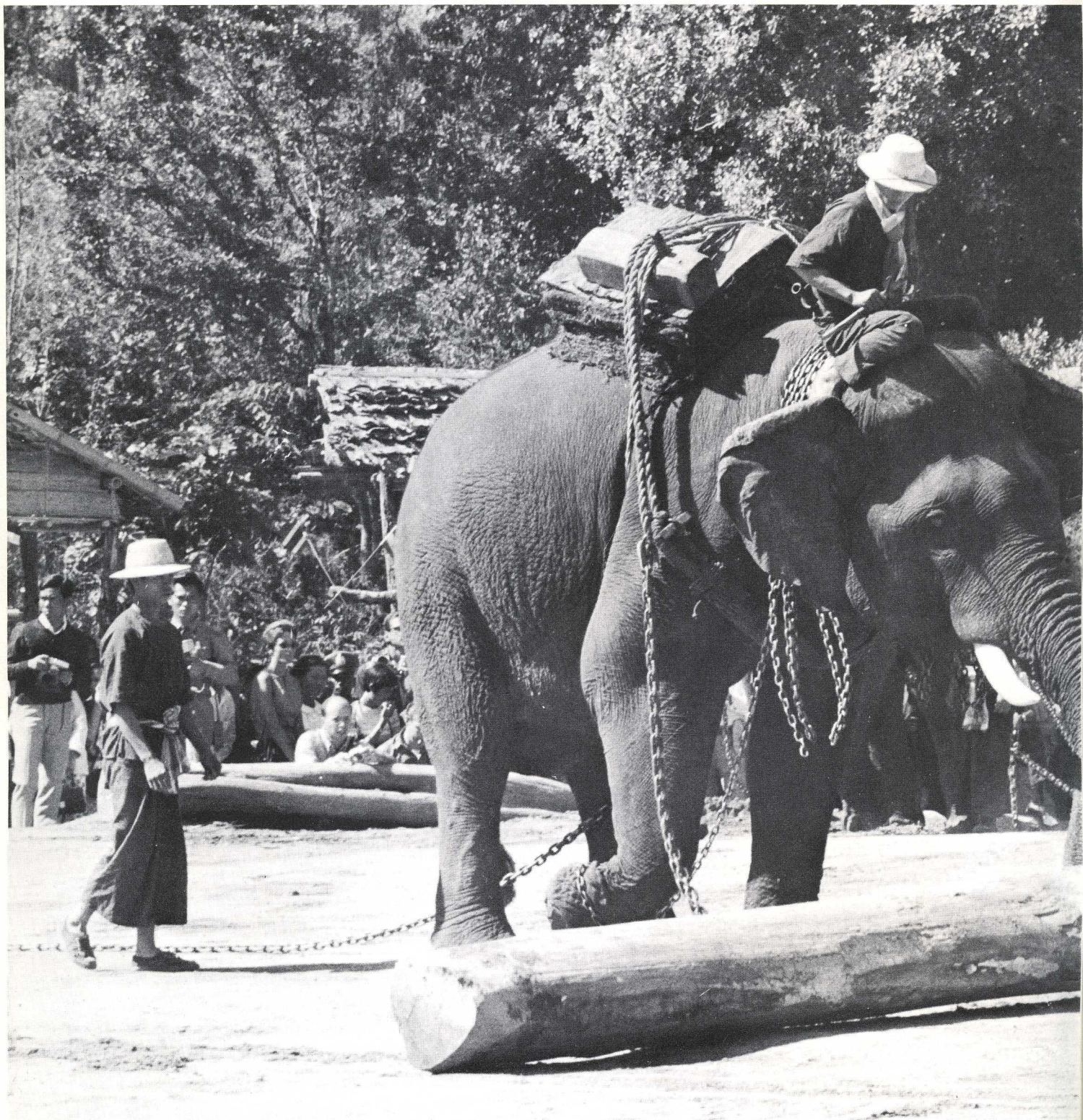
The Problem Solvers

A pile of concrete blocks waiting to be delivered on the Fiji Islands. A trawl, bursting with herring, that has to be brought aboard ship off Lofoten. Bulky, sensitive instruments for oil prospecting being raised and lowered in the sea along the west coast of the United States.

Three different situations from three different parts of the world. And yet they all have something in common. All three constitute a handling problem.

Three problems, among the hundreds that crop up every day all over the world. Many of them are turned over sooner or later to the Hiab man. He's

also to be found all over the world, and his job is solving handling problems. He tackles them with relish and solves a good many. He has a big "bank of experience" to draw on. The funds in that bank consist of handling problems and method solutions from all the world.



And these funds are always on the increase. Every Hiab man reports back on interesting problems and solutions. Some of them appear in Metod. Many of them serve as raw material for Hiab's Method Service Sheets which are distributed round the globe. Others form the subject of films and film strips.

Another category of people who frequently turn to Hiab's bank of experience in the course of their work are the researchers and designers in Hiab's development centre. Those

worldwide findings provide the essential foundation for their efforts. At the same time they constitute a guarantee that the designs and methods which emerge from the centre will not be mere drawing-board products or solutions of purely local utility. Thanks to the experience gathered by Hiab's field men the world over, the development people in Hudiksvall can work up local solutions of special handling problems into complete methods for tackling integrated tasks—methods that will serve in similar situations anywhere else on earth. ■



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Hiab Metod No. 14

A magazine featuring the Hiab Method and its applications, published by HIAB, Hudiksvall, Sweden.

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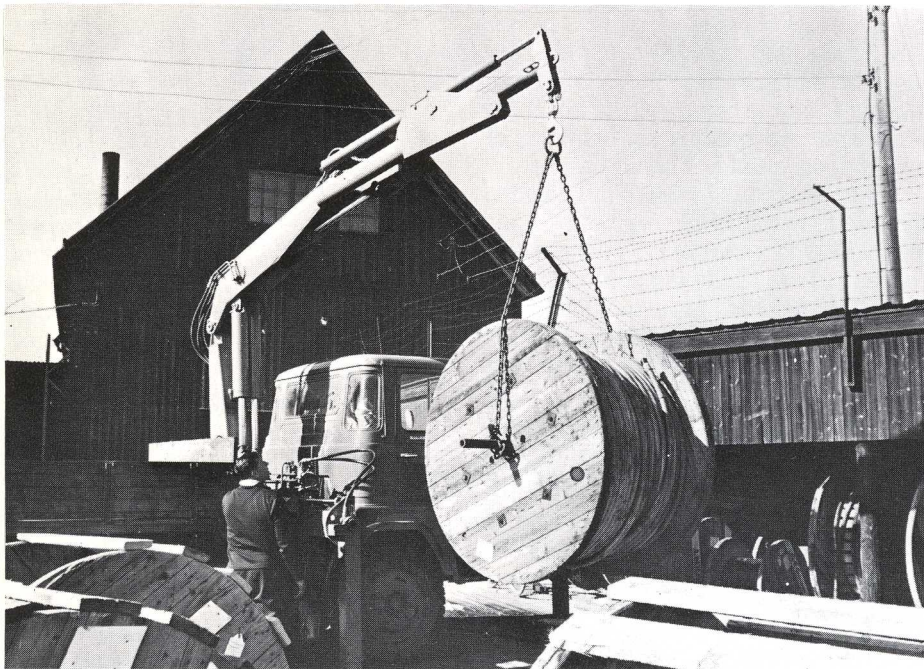
Cover

The colour pictures on the cover are a selection from those that reach Hiab daily from all parts of the world. They illustrate the manifold handling problems that Hiab men have solved and are solving on the basis of the experience accumulated by the Hiab development centre and the field representatives.

Printing: Wiking Lito, Södertälje, 1969

Hiab Metod No. 15

The next issue of Metod will mostly be devoted to Hiab's new loader, the HIAB 9501.



If the prototype of the HIAB 9501 has any weak points they have little chance of getting past Trygve Waage undetected.

Prototypes and Contrary Types

Once a week, Trygve Waage of Oslo sends off a report to Hiab in Hudiksvall. Waage has many irons in the fire. He's a trucker who does a lot of work for the Norwegian defence forces. He's the moving spirit in the Norwegian Truckers Association. And also—which is most to the point just here—he's one of many experienced and exacting truckers all over the world who have voluntarily undertaken to try out new Hiab designs.

Just now, Waage is working with a test specimen of a new loader model bearing the type designation HIAB 9501—which tells you that this is a really big loader. It is at present undergoing test not only by Waage in Norway but also by truckers in Sweden, the United States and Holland. At the same time, of course, the HIAB 9501 is being subjected to laboratory fatigue tests at Hiab's development centre in Hudiksvall. There, for example, it is put through a round-the-clock programme of lifting and slewing movements without respite. After a few days on the testbench the loader will have done as much lifting as it would during many years of service on a truck.

As yet, it's too early for either Waage or Hiab to say anything definite about the HIAB 9501 or when it might be ready for market introduction. Hiab prefers to take its time, both in passing

judgment and in putting the loader into serial production, until it is quite certain that the model has been thoroughly tested and that any teething troubles have been cleared up. They've got little chance of escaping Waage's vigilance. His working programme is really varied and gruelling, both for the loader and for its operator.

"Some lifts are so complicated that you just have to *engineer* your way to the right technique," says Waage.

"For our part we think that our collaboration with Waage and the other loader testers is a good example of the way we look at our job," say the staff at Hiab's development centre. "We're determined to put our products to the test before we let them go. They have to be given a tough time of it on real-life jobs and under genuine field conditions. And the tests have to be carried out by people who know what's expected of a loader. And Waage's one of them. The HIAB 9501 is only one of a long line of loaders that he's tried out. Over the years he's become a staunch Hiab man—but that doesn't stop him from criticising us. Without the criticisms raised by him and the other loader testers we should find it very hard to track down and correct the many minor drawbacks that we consider must be put right before we release a new loader. ■



The HIAB 2451 is used for both loading and unloading concrete beams at the precast-concrete works in Östra Grevie.





The B. Andersson trucking outfit is testing the HIAB 9501 on hauls of lightweight concrete. The loader is rear-mounted on a 33-foot semitrailer (left), and is used to unload both the semitrailer and a 30-foot trailer. Its hefty lifting moment and its long reach are valuable advantages in this kind of work.

Endurance and Precision

Another specimen of the HIAB 9501 is on trial at the B. Andersson haulage firm just outside Gothenburg. It's mounted at the rear of a 33-foot semitrailer and is used for unloading and positioning lightweight concrete units. The loader is fitted with an extra boom section which gives it a maximum reach of 30 feet. That enables it to cover any point on the semitrailer and on the 30-foot trailer that is usually included in the rig. The long reach and the muscular lifting moment also come in very useful on site, since the lightweight concrete units, which may weigh anything up to 1400-1500 lb., have to be put right into their final position in the building. With a loader as strong as this one, the job seldom gives any trouble.

A lightweight concrete floor slab for a house of about 1300 sq. ft., weighing

some 18 tons, is finished in about four hours. Another important feature in this context is that the loader is controlled from a mast-top seat, giving the operator the necessary clear view of the working area.

The Andersson firm's rig provides really good scope for testing the new loader in two very vital respects—its performance in long, uninterrupted spells of work, and its precision of control. When the rig has a full load—30 tons—on both semitrailer and trailer the erection work may take from five to eight hours, during which time the loader is hard at work with scarcely a pause. And the positioning of each individual unit makes telling and varying demands on the precision and responsiveness with which the loader moves.



The Hiab 2451 at Work

HIAB's latest loader, the 2451, is now appearing in growing numbers both in Sweden and abroad, and METOD presents below some examples of the work it is doing. The reason why all the featured outfits are based in Sweden is quite simply that they were easiest to reach. Reportage from other countries will appear in the next issue.

Floor Slabs in Four Buildings Put Down in 75 Minutes

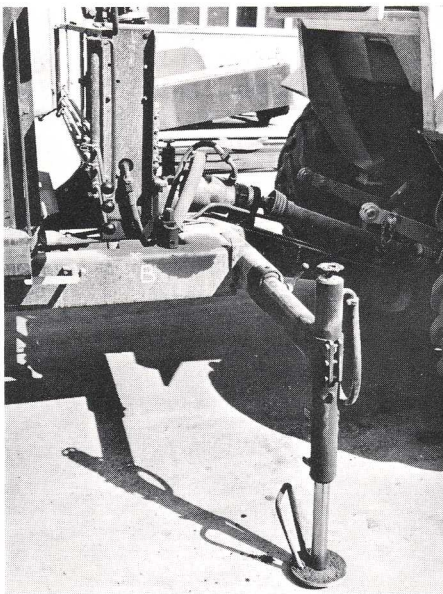
Östra Grevie Cementgjuteri just south-east of Malmö has specialised in reinforced concrete beams for floor slabs. The beams are supplied to housebuilding jobs, school construction sites and so on. The average transport run is about 50 km, though longer hauls do occur.

The business is characterised by two factors that are of special importance on the haulage side. One is that the deliveries are highly seasonal, with plant-to-site hauls showing intensive peaks in the autumn and spring and pronounced slack periods in between. There is a long lull during the winter months, when all building activity of this kind is suspended, and a shorter one during the summer. During these low seasons there are hardly any hauls, while during the peak period between ten and fifteen outfits are kept busy. The second factor is that the building sites to which the deliveries go usually don't have any crane equipment. This means that the firm has year-round work for only one rig, and has to rely on leased trucks during the peak season. Like its own vehicle, the trucks it hires have to be equipped with a loader. The choice fell upon the HIAB 2451, which is used for both loading and unloading. The vehicle has a one-man crew in principle, but in both loading and unloading the driver is assisted by one or two men who position the tongs with which the beams are lifted and put the beams in place on the foundation. The labour economies that could be achieved with such extras as a hydraulically controlled grapple and a rotator are not considered to justify their cost, since the loading time is only about half an hour and the unloading seldom takes more than 75 minutes.



Internal Hauls By Tractor and Trailer

The Mörrum pulp mill in Sweden is at present in the throes of a major expansion. The sulphate mill is being augmented with an entirely new line for pulping hardwoods. The construction operations have involved an increase in internal movements of building materials, machinery and so on. Since all these movements were over very short distances the mill decided to make do with a tractor and trailer. The trailer was equipped with a HIAB 2451 for loading and unloading. Since the trailer can be coupled up to any of the tractors at the mill, which are equipped in various ways, this approach proved to be very flexible. The hydraulic motor of the loader is driven by a shaft coupled to the power take-off on the tractor.



The hydraulic pump of the loader is driven by a shaft from the power take-off of the tractor.



By having the loader mounted on the trailer it can be used in combination with any of the mill's tractors.

How Often Do You Lift More Than 1½ Tons?

Trucker Jan-Erik Claesson, in the Stockholm suburb of Huddinge, gets many of his jobs from the local council. They involve a variety of tasks, and none of them is on such a scale that it would pay him to invest in special handling equipment. But an all-round loader is something he needs.

Since he sometimes goes a week or more without needing his loader he decided he didn't want any bigger model than the HIAB 2451. And by all accounts this was the right choice. Despite the limited capacity of this loader he hasn't yet had a lift he couldn't tackle.



The jobs Jan-Erik Claesson does for the Huddinge council are many and varied. And up to now his HIAB 2451 has managed every lift they've involved.

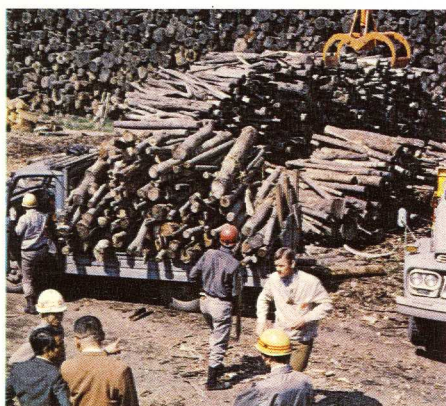
Japan — the Land of Contrasts

Japanese industry has gained world fame for such products as watches, cameras and television sets. But it is not nearly so well known that Japan is also an important timber producer, with annual fellings running to about 3,100 million cubic feet. That puts it a cut above Sweden, where the corresponding figure is 1,950 million.

But when it comes to harvesting technique, Japan is still in the midst of its development. There is plenty of scope for more efficient methods—something which Hiab realised as far back as 1963, when the first hundred Hiab loaders were sold to Japan. After that, not much happened until last spring, when Bernt Jonsson, sales manager at Hiab in Hudiksvall, together with regional manager Hirotaka Yuki did a demonstration tour on the island of Hokkaido. This article gives some

glimpses of Japan as they saw it on their trip.

The island of Hokkaido has about five million inhabitants and accounts for some 400 million cubic feet out of the total cut. The terrain in the highest areas of the island is not unlike parts of Norway and Sweden. A town now coming into the news is Sapporo, where the next Winter Olympics are to be held, although the preparations were not yet much in evidence. But like most other towns of any size Sapporo had a modern, Western-inspired city centre with smart, prestigious hotels, while only a few blocks away was a warren of streets where the houses were little more than sheds. This kind of housing contrast struck the observer everywhere—an uncompromising look of either/or in the built-up areas. ■



Schoolboys in neat uniforms are a feature of the Japanese street scene, pictured above in Turano, a medium-sized country town.

The picture in the left comes from a pulp mill. The six-foot lengths of pulpwood are normally loaded by hand. Hard work for the men—but the trucks work hard too! The little one in this picture, used for internal hauls, was for the most part loaded so that the springs hit bottom. The use of safety helmets in Japan is on an exemplary scale.

Women engaged in hard physical labour are a common sight in Japan. The group on the right is working on the foundation of a building in the resort town of Akan, situated in a large national park. What makes it still more remarkable is that the picture was taken on a Sunday!





The picture on the left shows the two demonstration outfits drawn up in Sapporo, where the Winter Olympics are to be held in 1972. The men in white overalls are Japanese mechanics who are being trained as servicemen, while the well-tailored gentlemen in the foreground, clutching their Hiab brochures, are the representatives of Japanese forestry authorities.

The picture above comes from a sawmill in Kitami. The steep slopes in the distance are clothed by planted forests. The timber they yield is hauled out by overhead cableways.

All available means of transport are pressed into service. In the picture below, two women are in charge of horse-drawn on-site hauls at a pulp mill in Kushiro. Even very small wood is duly collected for pulping.



The Land of Contrasts

But there were contrasts galore in the country which we so readily associate with geisha girls and cherry blossom. Japanese industry is impressive, but uneven. In certain fields, development has gone ahead at a hectic rate, while progress in others has not kept up so well. To some extent this can undoubtedly be traced to shortage of labour, which is in fact making itself felt in Japan, even if it is not so pronounced as in Sweden.

One area in which Japan has raised itself to an impressive position is the motor industry. Among countries producing motor vehicles it now ranks second, having achieved this standing

after an astonishing spurt in recent years.

In a country with such a large vehicle output there ought to be plenty of trucks, and indeed there are, although it is rather difficult to arrive at any concrete figures on this point, since the Japanese include three-wheel vehicles as trucks as well. But of course there are king-size trucks too. An outstanding example is a container truck designed for transporting wood chips. With a suction-tube technique, its container can be filled with 1,250 cubic feet of chips in six minutes.

The Japanese are also really big and competitive when it comes to watches, cameras and television sets, to take some popular examples.

In passing it is interesting to note that while Sweden is just on the point

of opening a second TV channel the Japanese viewer can take his pick from among seven TV programmes, most of which are in colour. ■

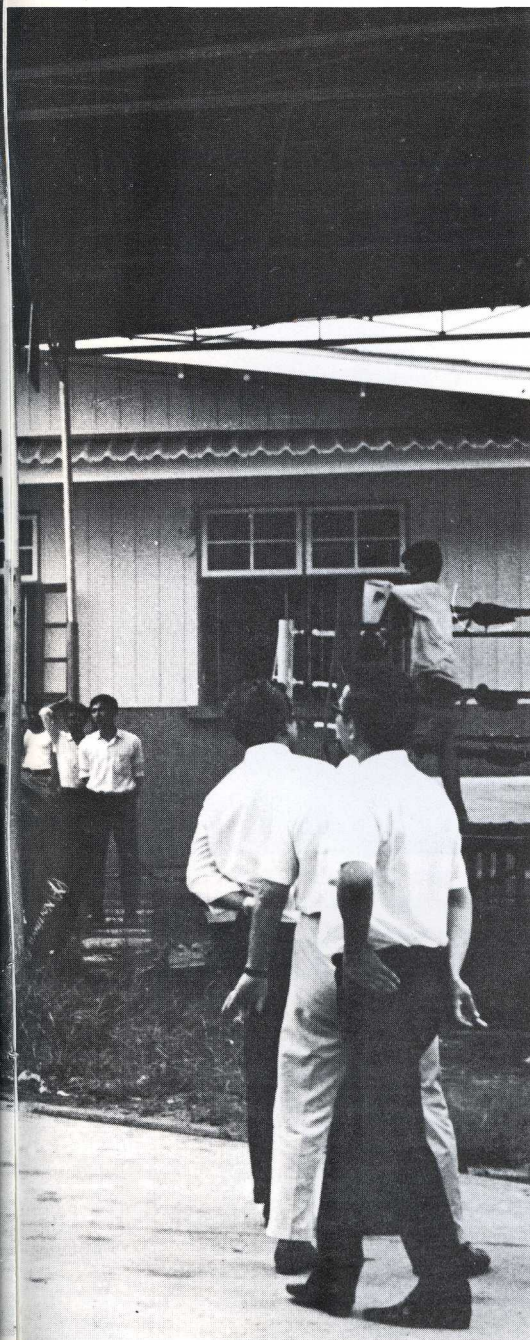
Barking by Hand

During the Hokkaido tour, Bernt Jonsen noted that the Japanese had made maximum use of the available scope for planting forests. But their harvesting methods were, by Swedish standards, out of date. However, there were definite signs of a transformation in progress—not least of which was the great interest attracted by the 174 and 177. The situation was much the same as regards barking. True, barking ma-



chines were to be found here and there, but they were only one more proof of what has been said about the unevenness of Japanese industry. This is a field in which they have quite simply not caught up. The bulk of the barking work was done by hand, and remarkably enough it was generally a job for womenfolk. For that matter, it was quite common to see women labourers on building sites too.

But this doesn't mean that the reader should let all his visions of geisha girls go up in smoke. In the typically Japanese hotels and inns—and they are after all in the majority—the guests still sit on the floor to eat, and a kimono-clad hostess sits at the table to see that they enjoy their meal. Tradition is still very much alive in the burgeoning industrialised Japan. ■



In the big picture on the left, the HIAB 174 is showing what it can do. The lightweight design and the flexible, precise movements of the loader attracted keen interest. Japanese loading equipment in general is a good deal heavier and more unwieldy. The wire-rope crane shown in the upper picture is among the more advanced of the home-grown aids, but would scarcely arouse any great enthusiasm in a Western trucker. In the picture above, an interested clientèle gathers round the colourful Hiab brochures on a temporary "exhibition booth" outside a motor dealer's premises. On the right, Bernt Jonsson and Mr. Yuki relax in their hotel room over a Japanese meal, waited upon by a pretty hostess in a kimono. The Japanese have all their meals seated on the floor.



Canada

Canada is one of the leaders among the world's forestry countries, and it follows that the Hiab Method has long been in use there. But in Canada, as elsewhere, the method has spread to other fields as well. The pictures on this page show some non-forestry sectors in which people are saving time and labour by rationalising their handling.

Stationary Loader For Industry

This Hiab loader was the attention-getter for the Swedish pavilion at an industrial exhibition in Toronto recently. It's a HIAB 177 on a fixed mounting, used for handling and erecting heavy equipment in factories, on loading decks and in storage depots.



Competitive Cartage

Driscoll Cartage of Toronto transports poles and large cable drums for a telephone company. The poles are carried on semitrailers, drawn by a tractor equipped with a HIAB 174. Thanks to the loader, the firm has succeeded in shortening its loading times for both poles and drums. The cable drums, which sometimes weigh close on three tons, are lifted by the inner hook attachment onto the semitrailer, where they are rolled into place on the deck and secured by chains. The time savings achieved by the Hiab Method have given Driscoll Cartage a valuable edge in meeting fierce competition from other firms in the business.

Instant Lawns

The house is finished, the garden is laid out, and here comes the lawn. The production of ready-to-lay lawns has become something of an industry in Canada. The turfs are lifted by special machines and laid in rolls on pallets, which are loaded and unloaded by a HIAB 174 equipped with a pallet fork. The drivers soon become virtuosos in handling their loaders, and the lawn of an average-sized garden is often put down in a single morning.



"Hippy Haven"

The Parks and Leisure Board of Toronto uses this outfit, mounting a HIAB 174, for a variety of jobs, such as planting trees and handling machinery in the parks. The picture shows a tree being planted in Yorkville. The clothes worn by the youngsters in the foreground are commonplace in the area, explaining why this quarter of the city has been dubbed "Hippy Haven".



Business with Abandon!

"You can't do this job on this scale without Hiabs. We can now honestly say that we'll pick up scrap cars—in reasonable quantities—from any local council or breaker's yard anywhere within a 200-mile radius of London, and if need be we'll go even farther afield. We couldn't do that without Hiabs. If you know of anyone who has a scrap-car problem—the bigger the better—tell 'em to get in touch with us and we'll solve it."

So says John Kernahan, head of the West London car-dismantling firm that bears his name, who in only three years has turned a one-man enterprise—started with nothing more than an old pick-up truck and a total working capital of £7 15s. 0d.—into one of the city's largest scrap-car organisations, handling over 15,000 vehicles a year.

Kernahan's have nine Ford D-800 trucks—seven articulated and two rigid vehicles—five of which are fitted with HIAB 174 loaders. With a working area that already extends from Portsmouth to Oxford, the company eventually will cover the entire southern half of England, taking in East Anglia and most of the Midlands. Within the next two or three years, says Mr. Kernahan, his firm's turnover will certainly double and will probably be quadrupled.

Mr. Kernahan reckons that the average abandoned car is worth, to him, about £2 nett, in terms of scrap metal and second-hand spares. A car shell, minus engine, tyres, battery, etc. is worth about £1 nett.

The average return trip made by his vehicles—which operate over a 100-mile radius—is about 29 miles, mainly in the most-congested areas of London.

"If we were to use breakdown trucks or five-tonners equipped with winches, picking up a maximum of two cars per trip, we simply couldn't make a profit. Each truck would make probably no more than two trips a day, taking eight hours to collect four cars. The running costs of the truck would be about 30s. an hour—including wages, depreciation, overheads and so on. Our transport costs, therefore, would be £12—and the most we'd get for the cars would be £8. There's no profit in that!

"Now look at the difference the Hiabs make. Our Ford D-800s make three trips a day, picking up an average of five cars each per trip. In an eight-hour day one truck will bring in a minimum of 15 vehicles. The trucks cost around 55s. an hour to operate, or about £22 a day. The 15 cars are worth around £30, which gives us a gross margin of £8.

"Before we sent cars to the scrap fragmentation factory we had to do all the dismantling by hand. We'd pick off any useful spares, cut the body shell into box sections for baling presses—and that alone used to take one man two hours—and finally sell the sections to scrap merchants for around £2 to £3 a ton.

"It now only takes us 45 minutes to prepare a car—and we're getting an average of £5 a ton. That gives us a fair return for our investment, and there's no limit to our expansion.

"We reckon that we've got the scrap-car problem licked. Scrap cars are our business and we'll go anywhere in Britain for good business."

Today, Mr. Kernahan employs a total of 17 men in his depot, and will shortly be installing a car-flattening press. By the end of the year he estimates that the payroll will have increased to 60—and long-term plans envisage car collection and flattening depots at strategic points throughout the country.

As Mr. Kernahan put it: "Our sole object is never to see an abandoned car on the road. Leaving them to rot is bad business—bad for us, bad for the local council, bad for the police and bad for the public."

Method Hoists

More Mileage — Less Carnage

Atlas Tank, a firm in Vicksburg, U.S.A., makes steel pressure tanks. They weigh anything from 160 lb. up to more than two tons. To load them aboard the transport vehicles and to unload them again on site the firm used to employ derricks and wire-rope winches. The method was both slow and hazardous. In a single year, eleven accidents—ranging from broken bones to serious back injuries—occurred during the course of this work. And by reason of the slow loading and unloading, none of the trucks was able to do more than 50,000–60,000 effective miles a year.

A truck charter firm, Kynerd Inc., tackled the problem and soon came up with a solution. They equipped seven tractor trucks with HIAB 174s for loading and unloading trailers, and leased them to Atlas Tank.

The merits of the new method are numerous and striking. Since Hiab handling was adopted at the beginning of 1968 there has not been a single accident in loading or unloading, nor has there been any damage to tanks or vehicles. Naturally, too, the loss of time that used to be caused by injuries and damage has been completely eliminated. On top of this, the effective annual mileage has gone up by 60 per cent, besides which the firm has succeeded in recruiting more skilful and qualified drivers for these hauls thanks to its new and advanced equipment.

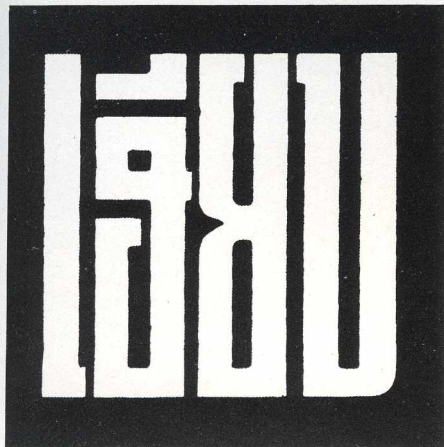
"We also look after the servicing and repair of the vehicles we rent out," says Guy C. Kynerd, "and our records clearly show that the Hiab Method pays, both for us, for Atlas Tank and for its customers."

■ The giant Ferris wheel in Vienna's beloved Prater is a world-famous attraction which over more than 70 years



▲ has given millions of tourists and Viennese a safe but vertiginous high ride—210 feet at the topmost point. The wheel is powered by electricity, and a reserve supply is of course needed so that passengers can be brought safely down to the ground in the event of a power failure.

The generating set that has done service ever since the wheel was reconstructed after the Second World War—and was second-hand even then—has recently been pensioned off. A new Steyr diesel set with an output of 35 kWA was lifted into place by a HIAB 174, as shown in this picture. ■



Hiab is a familiar name in Thailand, even though a Westerner might have difficulty in discovering it. This is what the Hiab trade-mark looks like after transcription into Thai characters. ■



Specialised Rig for Gas and Electricity Utilities

The outfit in the middle of this picture consists of a Mercedes-Benz of North America (known in other parts of the world as Unimog) and a HIAB 174 (known in all parts of the world as the

HIAB 174). The combination attracted great interest at a recent exhibition in Philadelphia, U.S.A., which was specially arranged for about 20,000 experts on gas and electricity distribution. ■



Salesmen From Hanover To Seminar in Hudiksvall

A group of salesmen from Hanover were recently given thorough instruction in the latest phases of the development of the Hiab Method at a three-day course in Hudiksvall. Courses of this kind form part of Hiab's ceaseless training programme for its representa-

tives all over the world. In this picture the trainees and their instructors face the photographer outside a cabin in Dalecarlia, where the group studied such subjects as the many uses of the Hiab Method in forestry. ■

