

LIEBHERR-WERK NENZING GMBH
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January 2002

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THE NEW GENERATION OF LIEBHERR HARBOUR MOBILE CRANES

With the introduction of its new range of Harbour Mobile Cranes Liebherr has been able to extend its market success in this field.

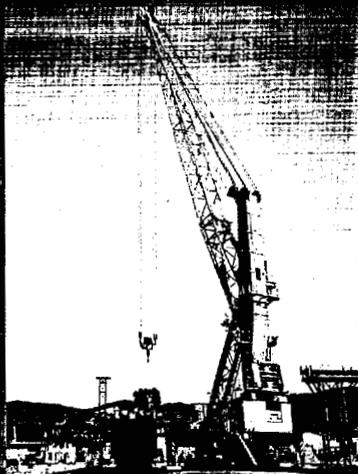
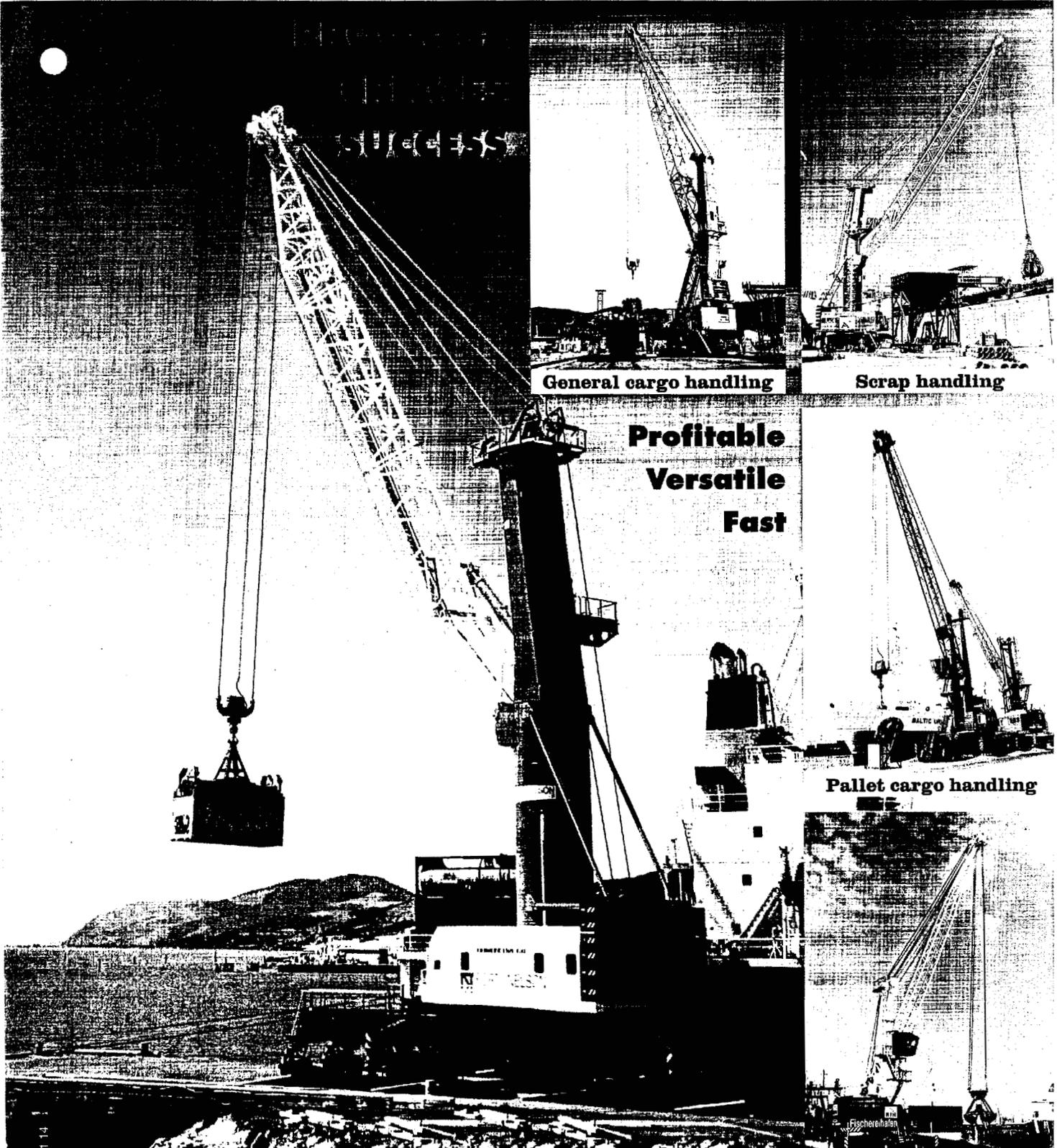
All the important parameters for efficient and flexible operation of the Liebherr harbour mobile crane were defined together with the end user and then put into practice. New characteristics, best possible turnover rates, ease of operation in conjunction with improved service requirements as well as maximum flexibility and mobility come to the fore.

The result is a well balanced programme of 7 variations of the existing series with performance ranging from 26 tonnes to a maximum of 140 tonnes covering each segment of the market world-wide. Since the introduction to the market in 1974, more than 300 Liebherr Harbour Mobile Cranes have been delivered world-wide confirming Liebherr's leading position as crane manufacturer.

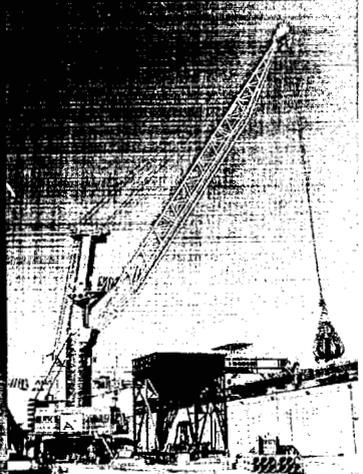
Above all, the cranes of the new generation are successful in Europe, North- and South America and the economically leading countries in South East Asia. However, an increasing number of enquiries for Harbour Mobile Cranes for container, bulk or general cargo handling are emerging from CIS and African states.

The new undercarriage design allowing movement in all directions, and the integrated Liebherr control system Litronic®, which together with the diesel-hydraulic drive allows for 10 - 15% higher turnover, are representative of the variety of technical advantages that have been put into practice.

Liebherr Harbour Mobile Cranes

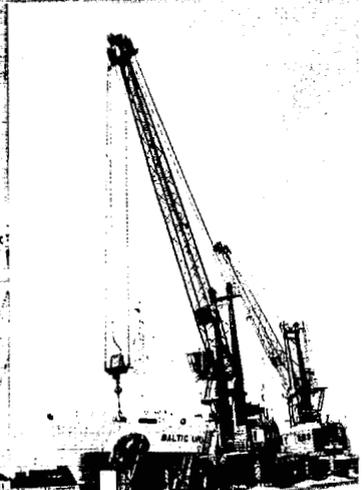


General cargo handling

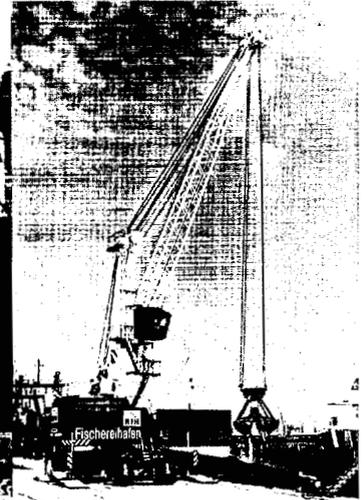


Scrap handling

Profitable
Versatile
Fast



Pallet cargo handling



Bulk handling

LIEBHERR-Werk Venzian, P.O. Box 40, A-8740 Nanzing, Austria
Phone: +43-5525-6060 Fax: +43-5525-60653

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LIEBHERR

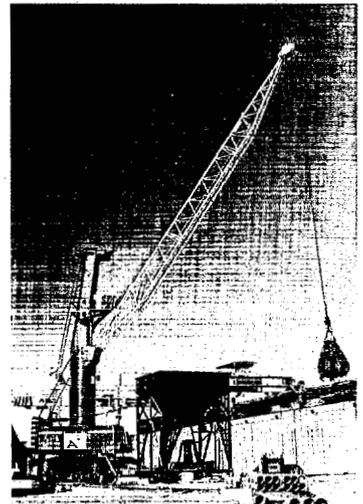
The name for cranes

Liebherr Harbour Mobile Cranes

**PROGRESS
CREATES
SUCCESS**

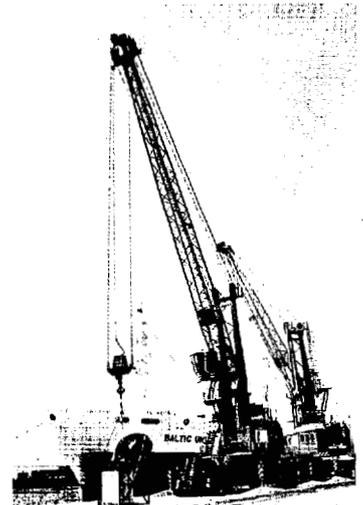


Container handling

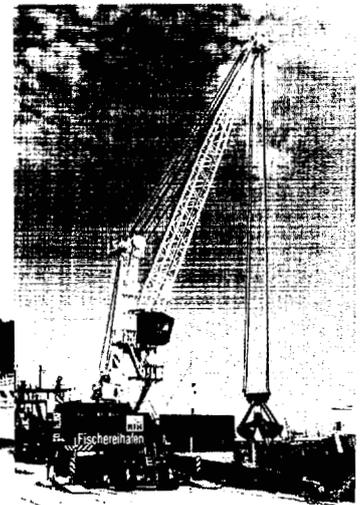


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LIEBHERR

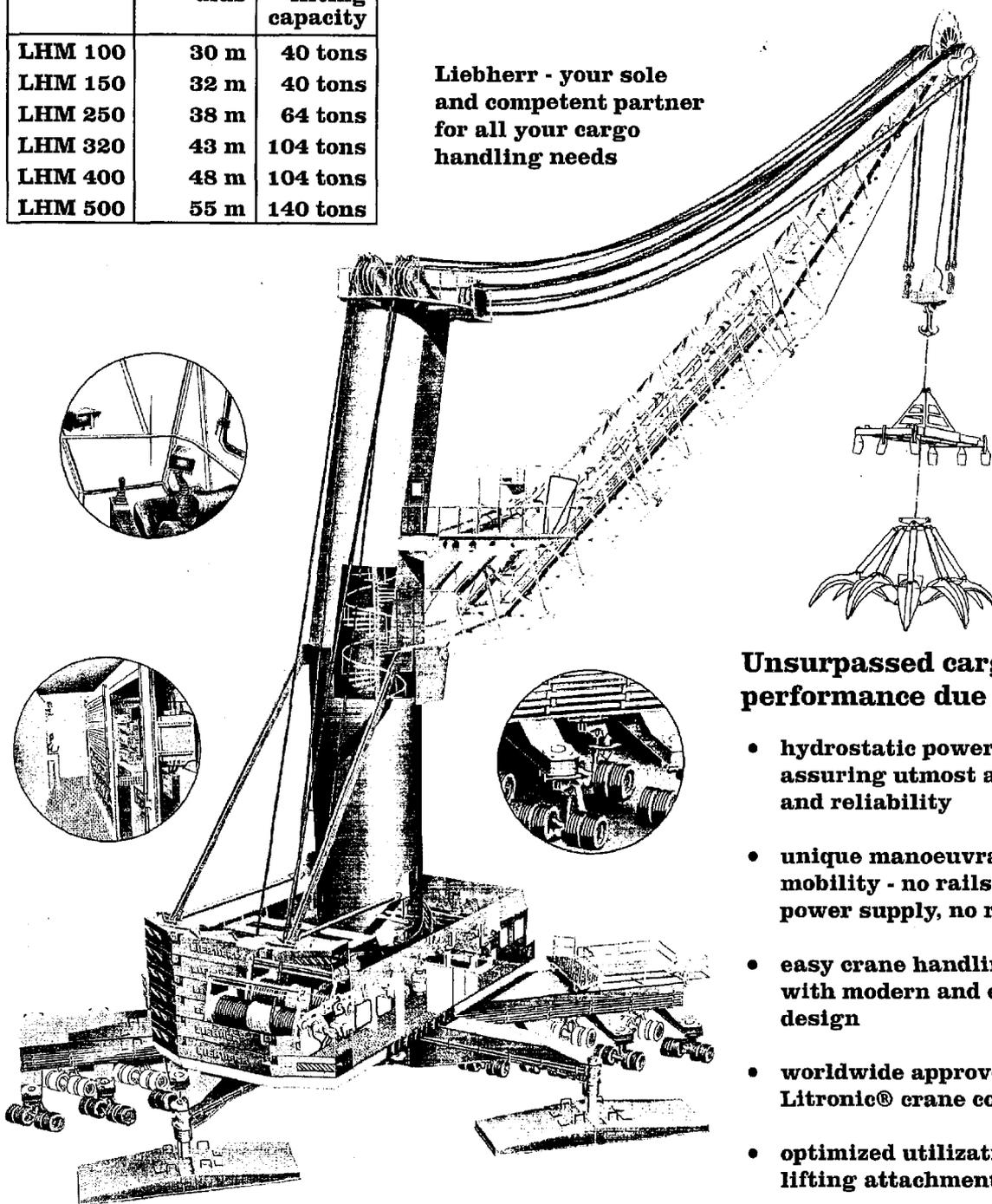
The name for cranes

Liebherr Harbour Mobile Cranes

The complete LHM-range		
Type	max. radius	max. lifting capacity
LHM 100	30 m	40 tons
LHM 150	32 m	40 tons
LHM 250	38 m	64 tons
LHM 320	43 m	104 tons
LHM 400	48 m	104 tons
LHM 500	55 m	140 tons

- Our contribution to your success -

Liebherr - your sole and competent partner for all your cargo handling needs



Unsurpassed cargo handling performance due to

- hydrostatic power transmission assuring utmost availability and reliability
- unique manoeuvrability and mobility - no rails, no electric power supply, no restrictions
- easy crane handling combined with modern and ergonomic design
- worldwide approved LIEBHERR Litronic® crane control system
- optimized utilization for all lifting attachments

Telefax Reply

Yes, we are interested in the new Liebherr Harbour Mobile Crane series. Please contact:	
Company:	Contact Person:
Address:	
Phone:	Fax:
Special interest:	

LIEBHERR-Werk Nenzing, P.O.Box 10, A-6710 Nenzing, Austria
 Phone: +43-5525-6060 Fax: +43-5525-60653

Liebherr Harbour Mobile Cranes

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Profitable - Versatile - Fast



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80993

LIEBHERR

The name for cranes

**What it takes
to be a winner?**

**The right
decisions!**

**LHM Harbour Mobile Cranes.
Leading technology
from Liebherr.**

General Cargo Handling

Bulk Handling

The right decision:
Efficient Container-
handling with the
LHM 400 - precise,
safe and efficient.

Liebherr Werk Nenzing GmbH, P.O. Box 10, A-6710 Nenzing, Austria, Tel: +43-5525-8060, Fax: +43-5525-80653
E-Mail: harbour.mobile.cranes@lwn.liebherr.com Internet: www.lwn.liebherr.at

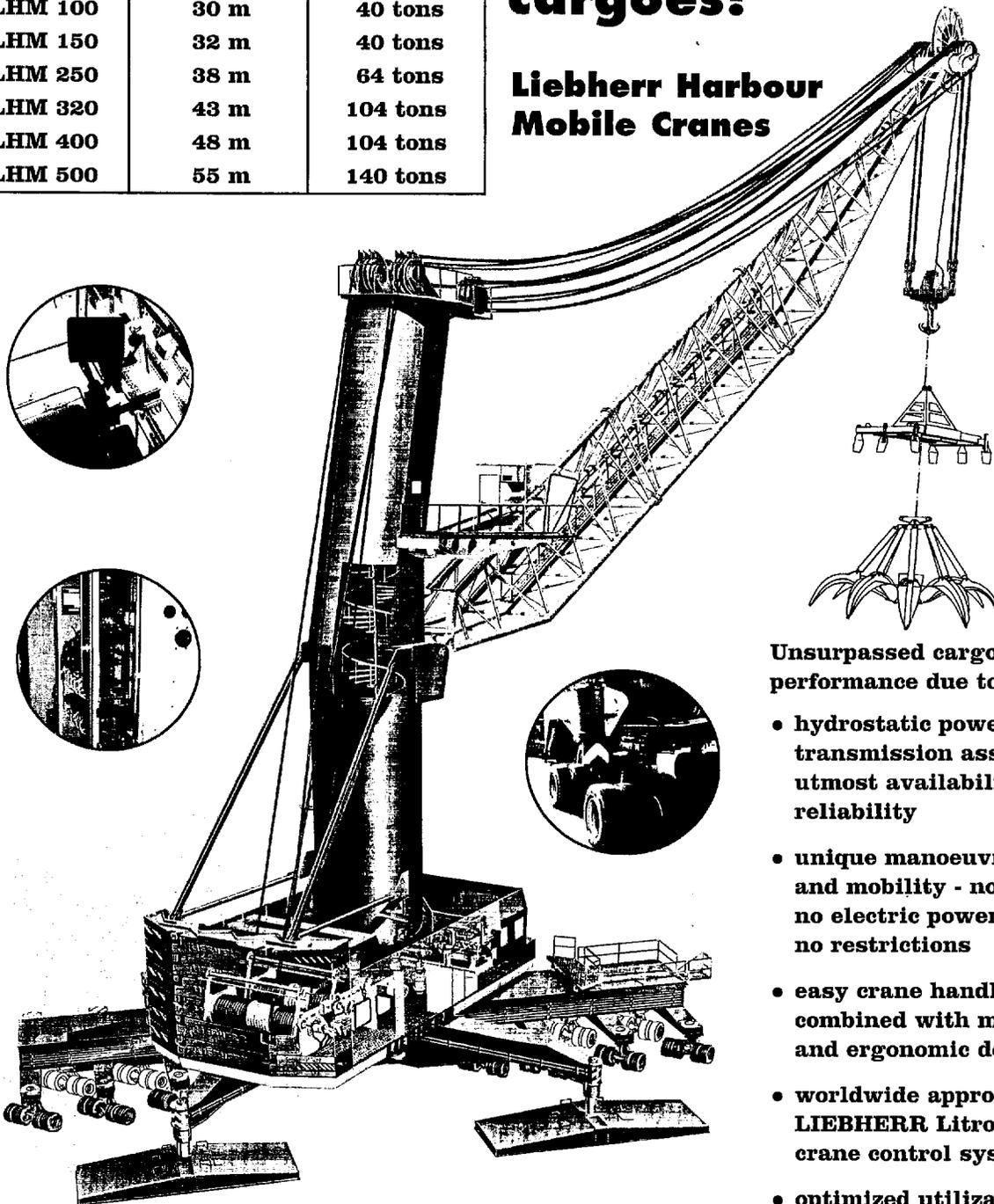
LIEBHERR

The name for cranes

The complete LHM-range		
LHM Type	max. radius	max lifting capacity
LHM 70	26 m	26 tons
LHM 100	30 m	40 tons
LHM 150	32 m	40 tons
LHM 250	38 m	64 tons
LHM 320	43 m	104 tons
LHM 400	48 m	104 tons
LHM 500	55 m	140 tons

Ideas are moving the world - and your cargoes!

Liebherr Harbour Mobile Cranes



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- worldwide approved LIEBHERR Litronic® crane control system
- optimized utilization for all lifting attachments

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Phone:	Fax:
Special interest:	

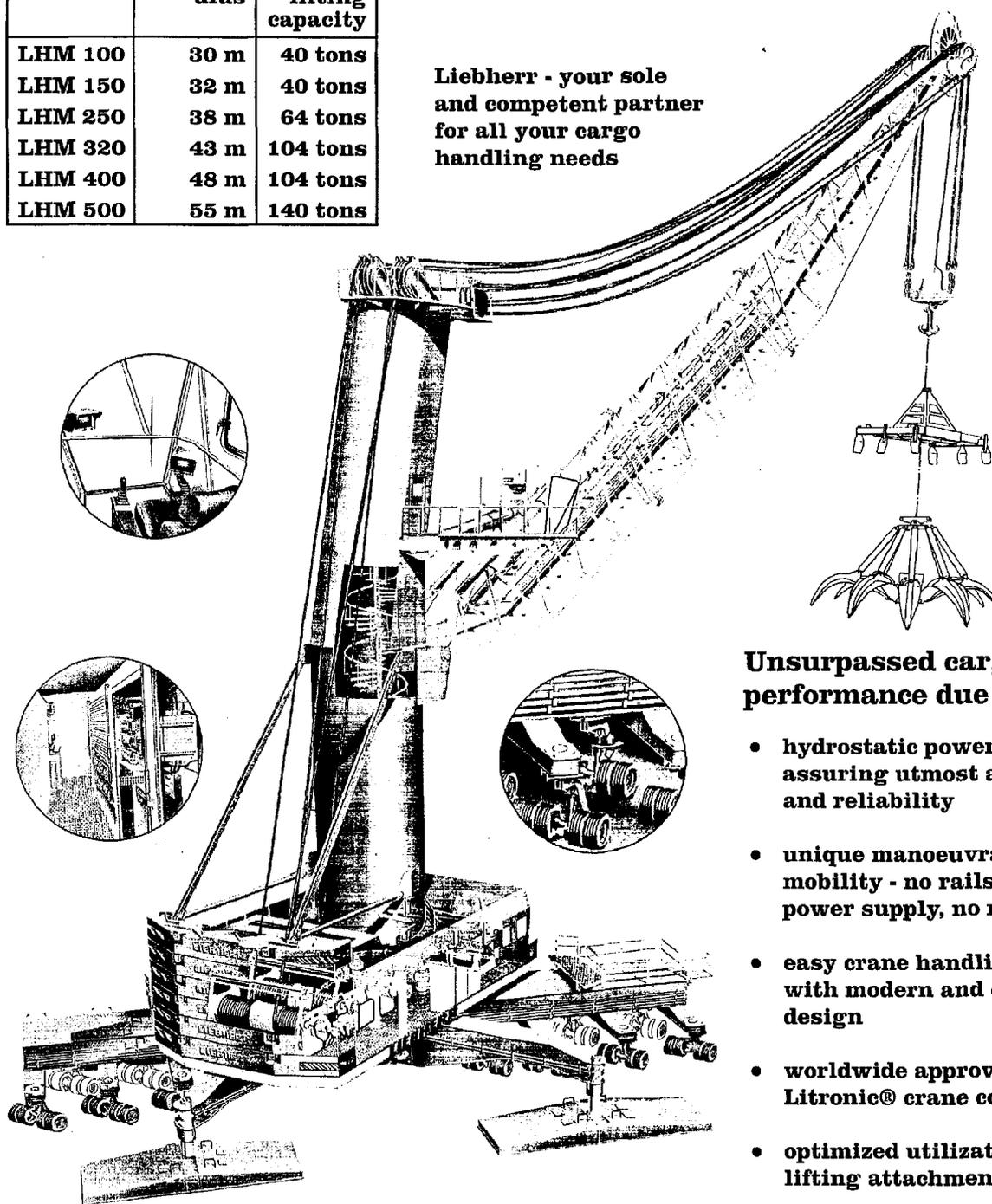
LIEBHERR-WERK NENZING GMBH, P.O.Box 10, A-6710 Nenzing / Austria / Europe
 Phone: 0043-5525-6060, Fax: 0043-5525-60653,
 E-Mail: harbour.mobile.crane@lwn.liebherr.com Internet: www.lwn.liebherr.at

Liebherr Harbour Mobile Cranes

The complete LHM-range		
Type	max. radius	max. lifting capacity
LHM 100	30 m	40 tons
LHM 150	32 m	40 tons
LHM 250	38 m	64 tons
LHM 320	43 m	104 tons
LHM 400	48 m	104 tons
LHM 500	55 m	140 tons

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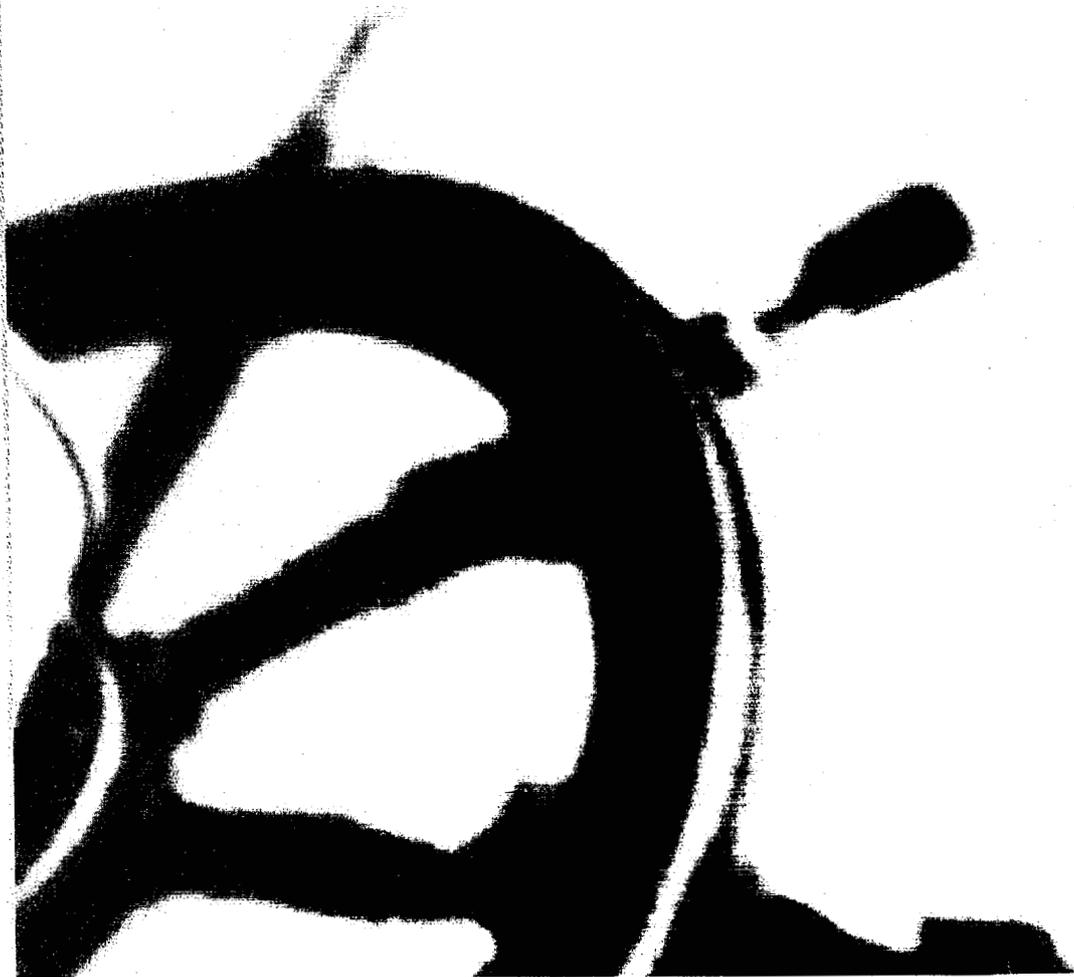
The LHM Harbour Mobile Cranes.

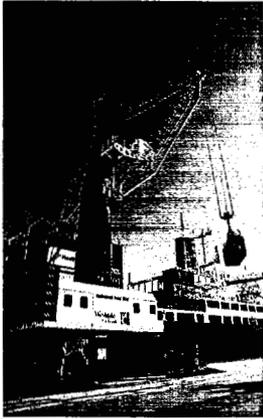
Progress in Motion.



LIEBHERR

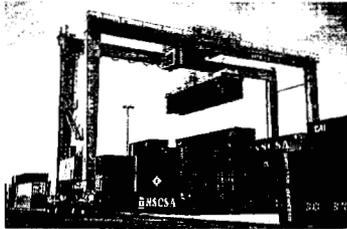
The name for cranes





Understanding your Business.

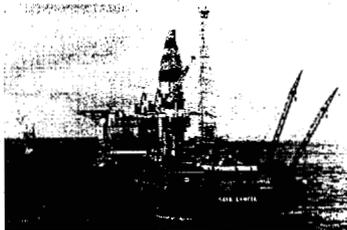
For more than 50 years Liebherr has been converting customers' ideas with great intensity and enormous innovation into new products with improved benefits. A clearly defined company strategy guarantees that only first class top quality products are developed and built in the most modern production facilities.



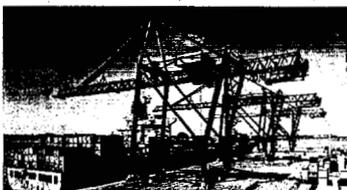
Supported by development units specific to each product within the organisation, Liebherr employees are in continuous close contact with the end-users. This results in the highest quality and safety standards and, therefore, our customers can expect above average performance and quality from every new Liebherr product.



Today, Liebherr is the world's leading manufacturer in many fields of lifting and material-handling technology with the widest range of products. The name Liebherr does not only represent products and performance but has become a concept for ideas and innovation. Whether in the construction business with tower cranes, mobile cranes and excavators or in the world of rapid cargo handling with container cranes, harbour mobile cranes, offshore and deck cranes, the products and performance offered by Liebherr crane technology can claim a top position in the international markets.

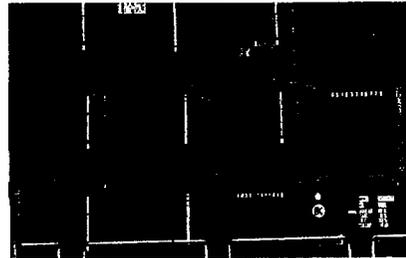
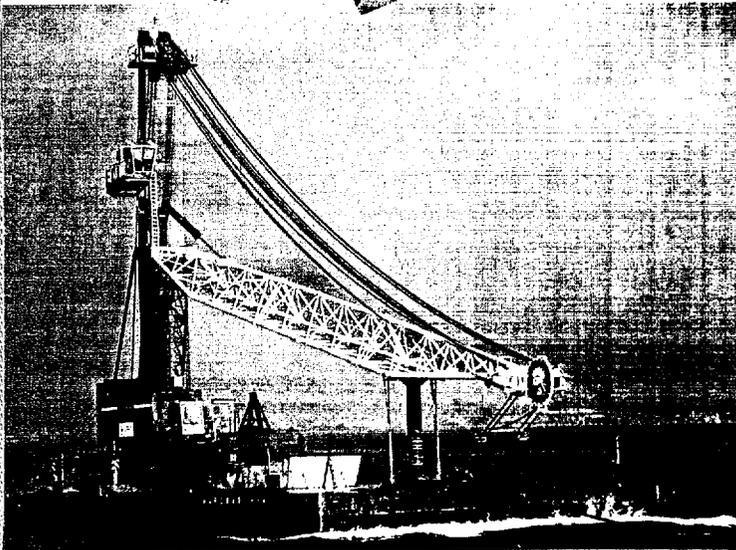
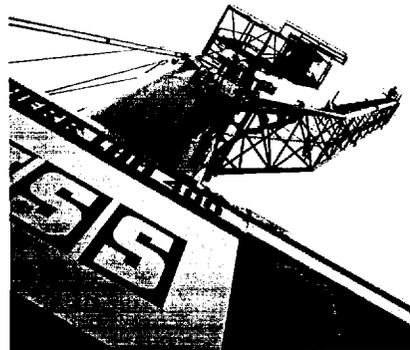
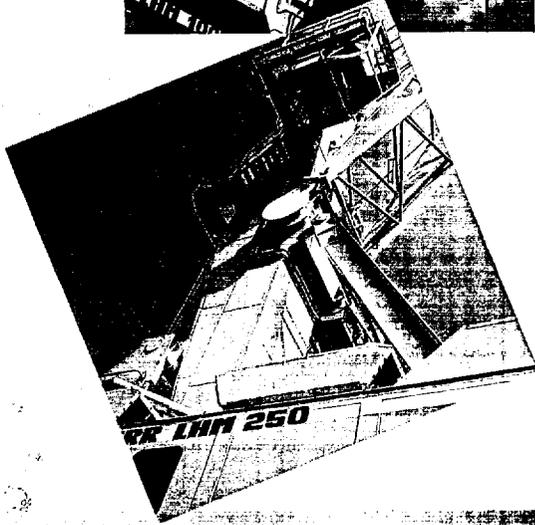
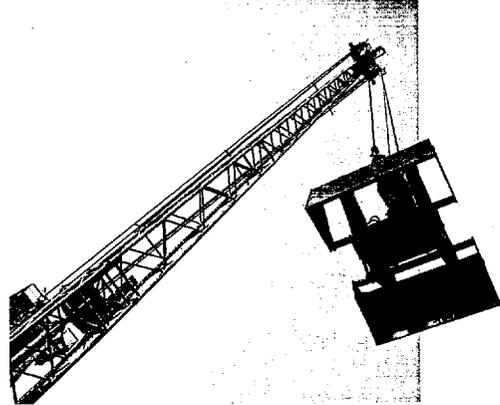
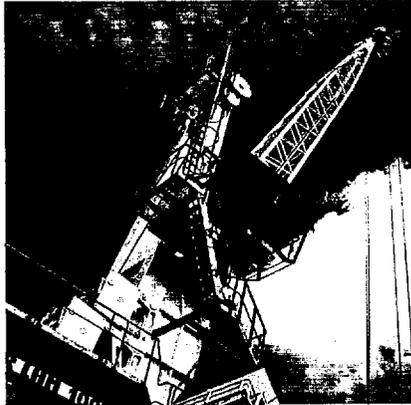


More than 5000 maritime cranes in operation worldwide prove our competence and experience in the most diverse of fields.



Your customers are also our customers.

Liebherr Harbour Mobile Cranes.



Innovation for more benefit -The Liebherr Harbour Mobile Crane.

Maritime Competence.



Through many years of experience and technology strictly orientated towards customer requirements, a range of products has been created which sets new standards in innovation, quality, mobility and flexibility. The close partnership between Liebherr and our customers is proverbially: "Progress in motion".

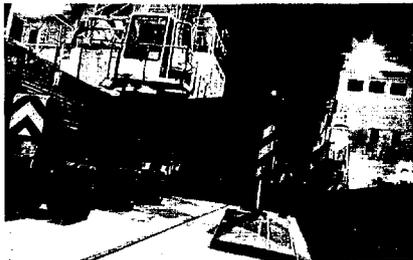
Demands for more flexibility in cargo handling and shorter docking times for vessels increasingly force a restructuring in many areas of the transport and harbour industries. Lack of certainty in planning leads to demands for investments which, in terms of performance, capability and risk, simultaneously offer the highest standards in safety and independence.

The Liebherr Harbour Mobile Crane, LHM, forges the link precisely: Unique manoeuvrability and autarkical power supply eliminate the need for investment in expensive infrastructure requirements, for example, crane rails or electrical supplies. Short delivery times, comparatively low costs for transport and erection as well as minimised operating and maintenance costs favour the LHM. It can be used in practically all areas of the harbour where crane capacity is required.

The LHM's extreme flexibility makes it a universal all-rounder and key asset. The LHM beats everything, from containers to bulk goods, steel and wood products, general cargo and even heavy lifts up to 140 tonnes - operating 24 hours a day.



Also for the shifting of extremely heavy lifts or as a replacement for defect equipment, its capabilities know no limits. Comprehensive basic equipment and problem-free transportation guarantee a high resale value and underline its flexibility as an investment.



Proven superior handling performances and the extreme reliability of our harbour mobile cranes contribute to the success of our customers worldwide. Progress which is evident in the market, and will remain so in the future.

Rethinking for higher performance.



Container Handling with Liebherr Harbour Mobile Cranes.

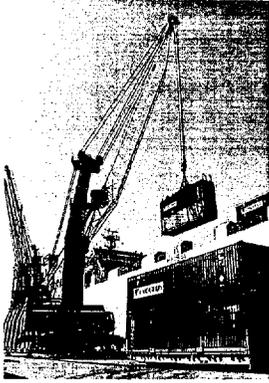
Leader in innovation and safety: The luffing cylinders on all LHM's used for container handling are positioned above the lattice booms, therefore, out of danger. This eliminates any damage to the cylinders through swinging loads or highly stowed rows of containers on board the vessel. Additionally, the jib motion is in a closed hydraulic circuit - a marked advantage with regard to both precise and smooth control, energy savings and safety.

Precision to perfection: due to the strikingly short acceleration times of all crane motions, which are precisely and accurately monitored by the Liebherr Litronic® CAN-Bus Control System, Liebherr Harbour Mobile Cranes emphasize their peak position in container handling. Convincingly high handling performances, minimum operating costs and safe, quick operation are self-evident.

The positioning of containers can be carried out without any problems, even in the deepest of holds, thanks to the video camera installed on the jib head served by a monitor in the driver's cabin. For this purpose the cranes can be equipped with rotators and various container spreaders. Manual, semi or fully automatic telescopic spreaders with integrated centre of gravity devices are available for all regular container sizes between 10' and 48'. Additionally, several twin or special spreaders can be used. This equipment is centrally controlled in the driver's cabin by two ergonomically designed joysticks, operating in parallel to crane operation.

Liebherr Harbour Mobile Cranes have, of course, a horizontal load path. The outreaches and load capacities of this product range are suited to normal types of vessels from post-panamax container liners to feeder vessels.

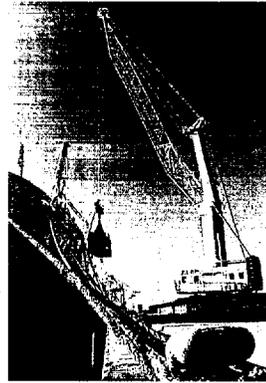
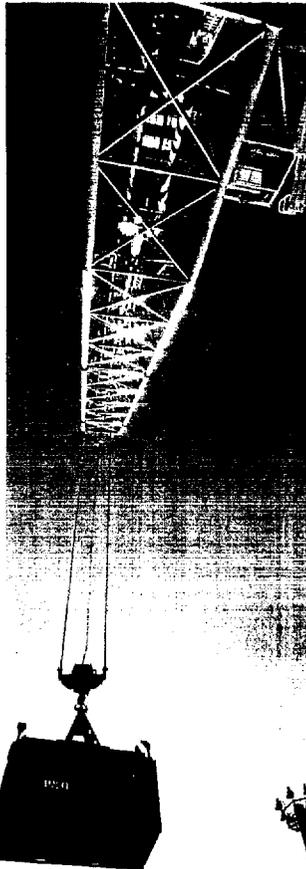




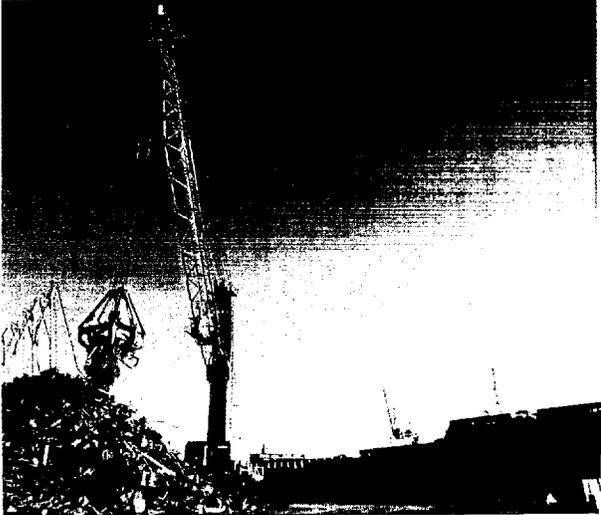
Precise positioning: the optional Anti-Swing Control Device allows almost swing-free lifting and positioning of loads.

The high positioning point of the jib ensures safe and trouble-free crane operation.

Ideas are moving the world – and your cargoes!



Bulk Handling with Liebherr Harbour Mobile Cranes.

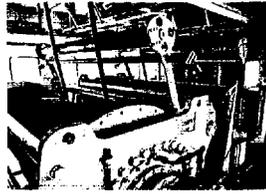
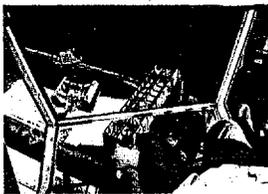


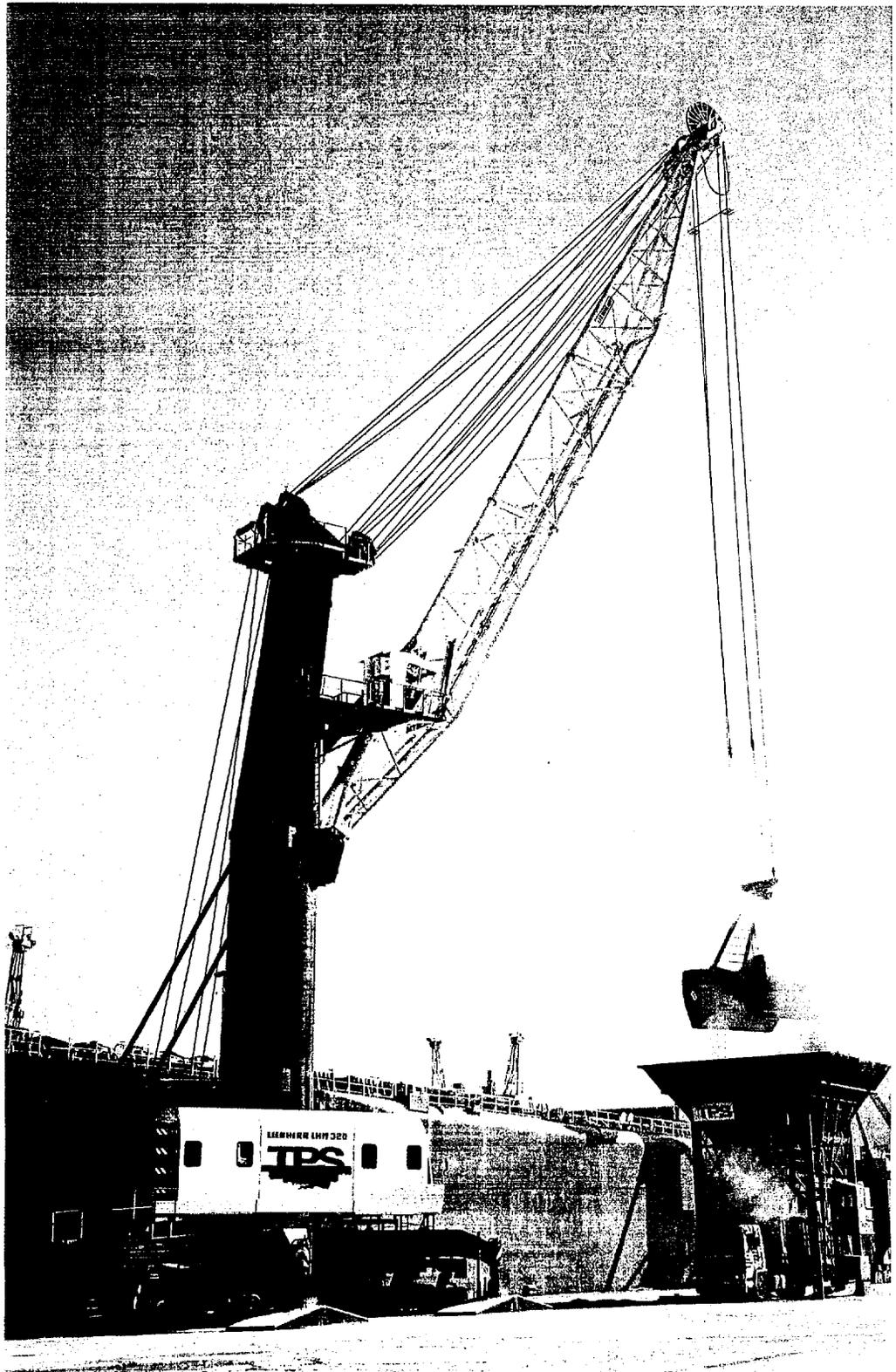
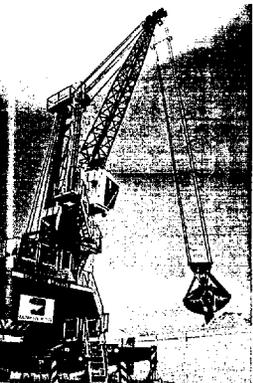
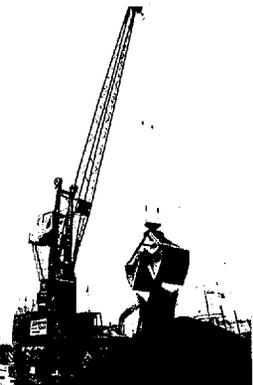
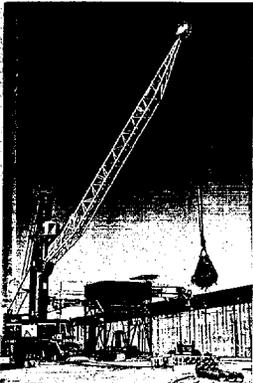
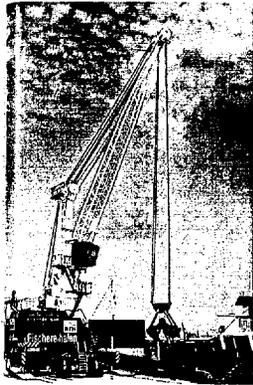
The optimised interaction between powerful hydrostatic transmission and advanced Liebherr electronics ensures short, productive working cycles in bulk handling. Independent of whether using a motor grab or a four-rope grab, all important handling parameters such as the volume to be lifted with each grab, the closing and lifting speeds, simultaneous functions, winch synchronisation, etc. can be optimized using specially developed Liebherr electronics. Grabs which have been provided by the customer can also be specifically adapted.

Additionally, the intelligent Litronic® control allows all operating motions to be carried out simultaneously and lowering energy is fed back to the drive process so saving energy.

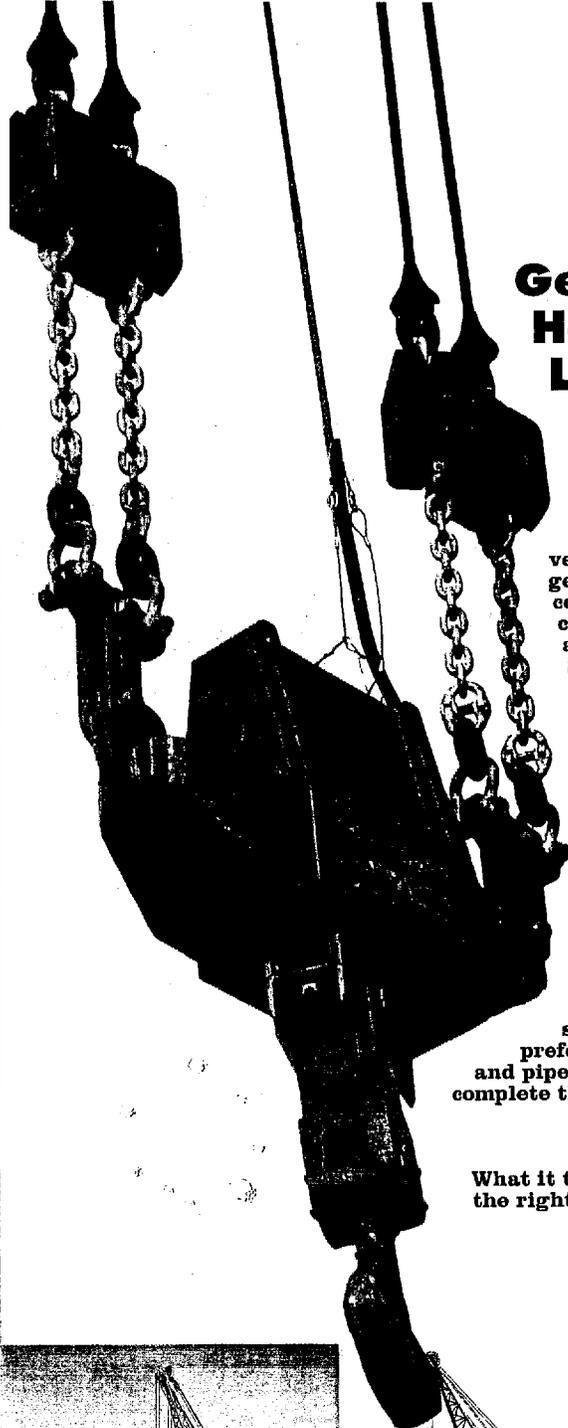
Furthermore, appropriate categorisation for the high load demands have been used in consideration of this tough type of crane operation. Liebherr has developed a cable drum including heavy duty cable which allows tremendous acceleration and speeds in motor grab operation. Through this technical advantage our customers achieve handling capacities which are unsurpassed throughout the world.

**LHM Harbour Mobile Cranes.
Leading technology from Liebherr.**





The ideal equipment - the LHM 320 unloading fertilizer fitted with special Liebherr grab control and mechanical four-rope grab.

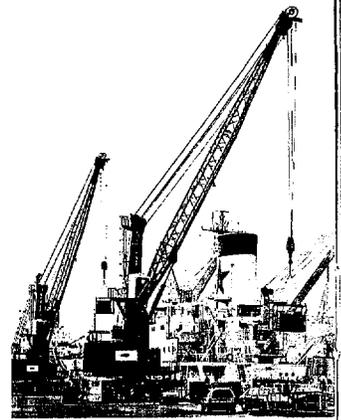


General Cargo Handling with Liebherr Harbour Mobile Cranes.

The LHM displays its unique versatility and flexibility especially in general cargo handling with continuously changing operating conditions with regard to cargo, lifting appliances and handling methods. Special controls and individual pre-selectable lifting methods, which are standard scope of supply, allow all cargo handling to be carried out without long modification times. Changing from one lifting device to another requires only minutes. Automatic recognition and pre-selection of the lifting device through Liebherr Litronic® provides the ultimate solution.

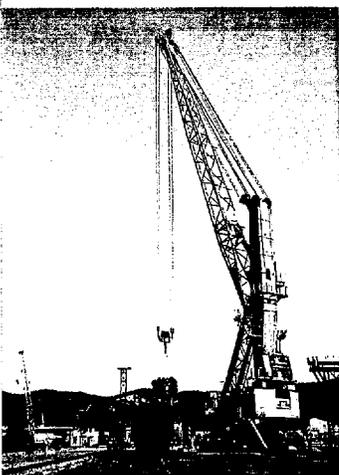
Specially adapted spreaders with automatic hook release are most suitable for the handling of cellulose, paper or sacks. A large selection of coil grabs is available for steel coils, while magnetic devices are preferred for steel plates. Pipe spreaders and pipe grabs as well as timber grabs complete the list of equipment.

What it takes to be a winner - the right decision.

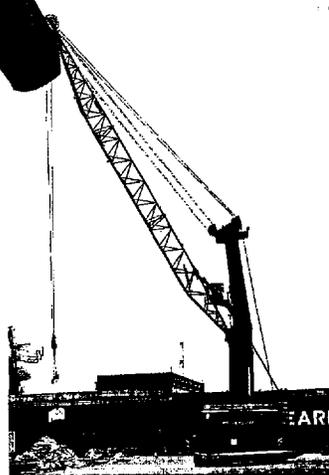


Pallet handling with an LHM 100

Pipe handling in Hamburg - LHM 400



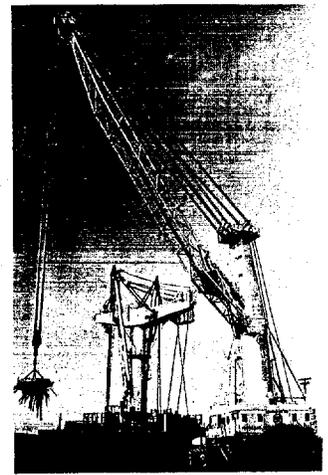
LHM 250 offloading wood



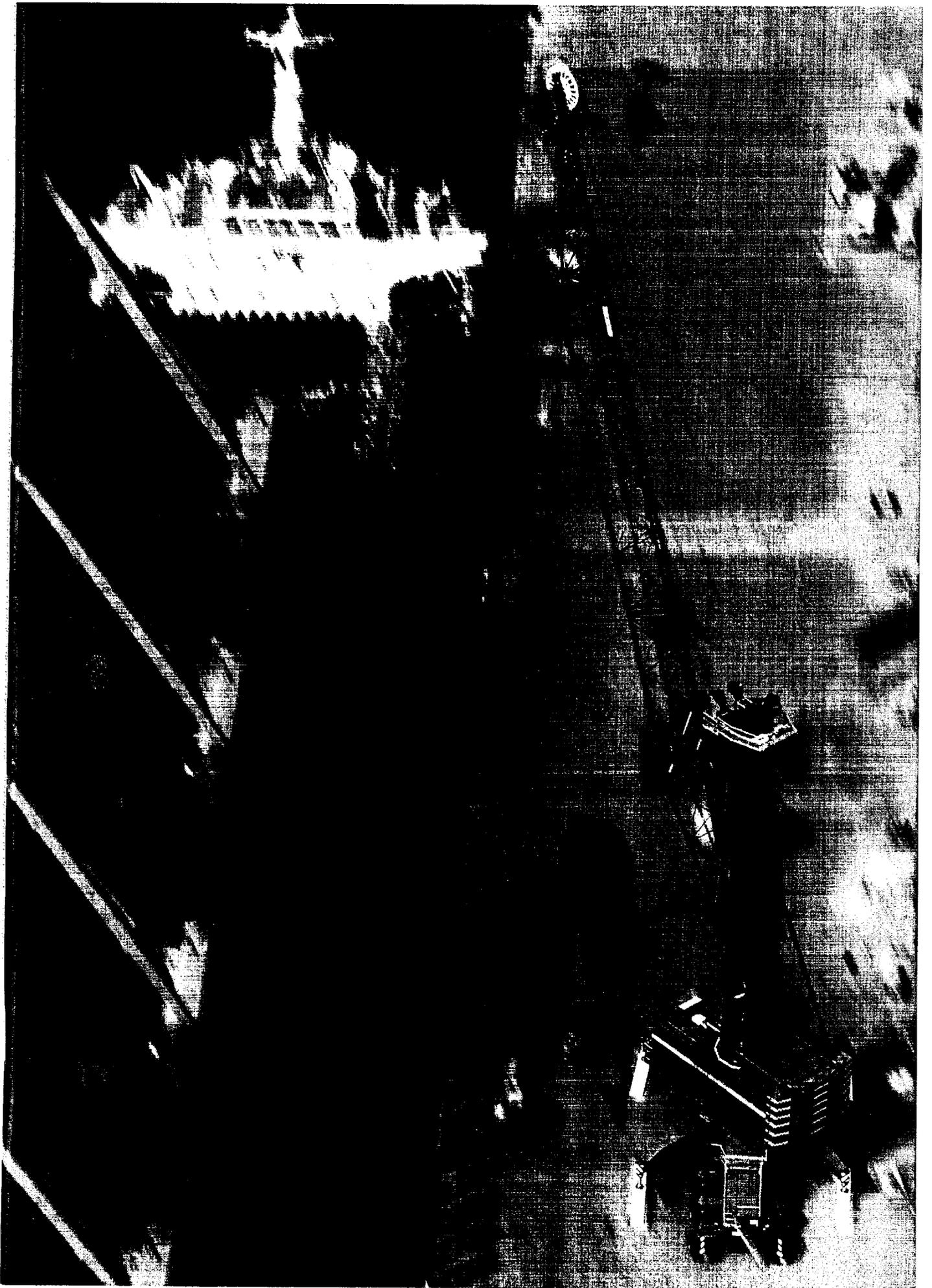
LHM 400 handling cellulose



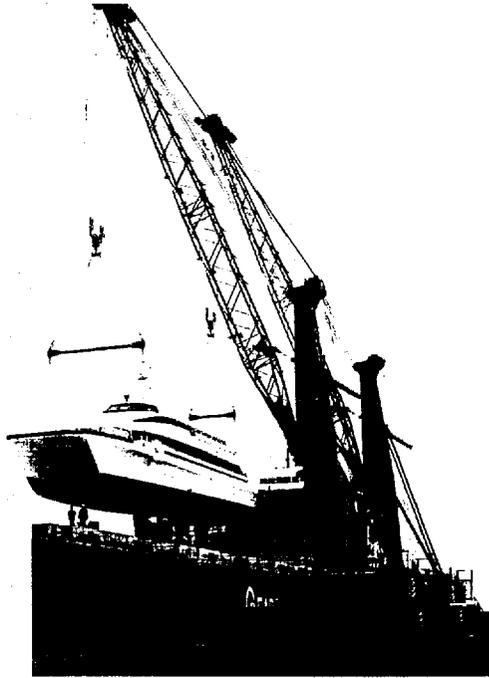
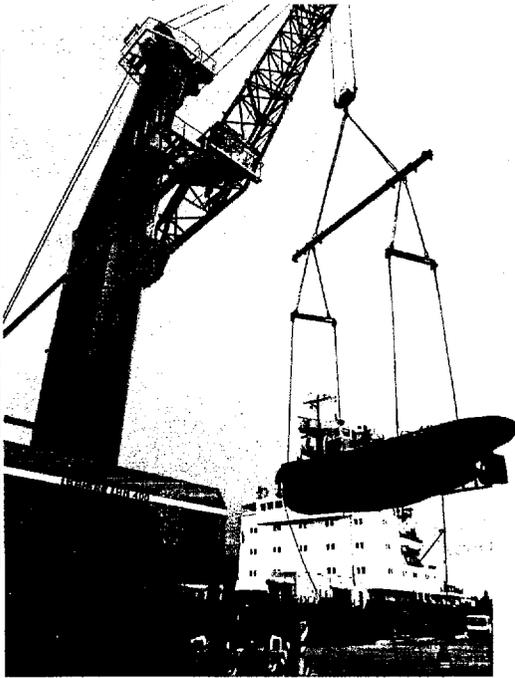
LHM 150 lifting steel plates with lifting magnets



LHM 320 scrap handling with a magnet



Heavy Lifting with Liebherr Harbour Mobile Cranes.

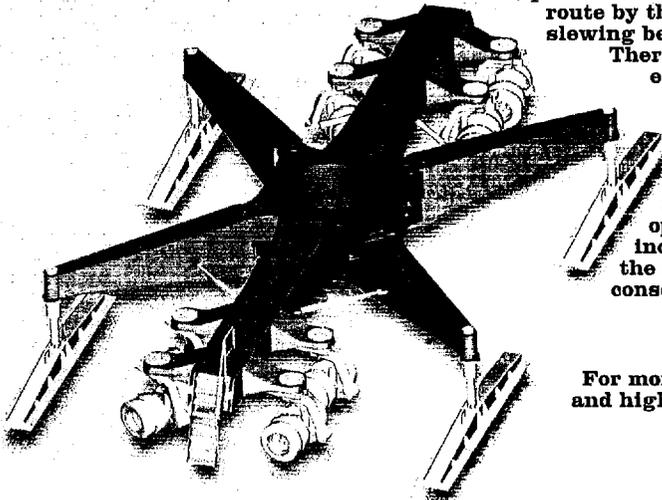


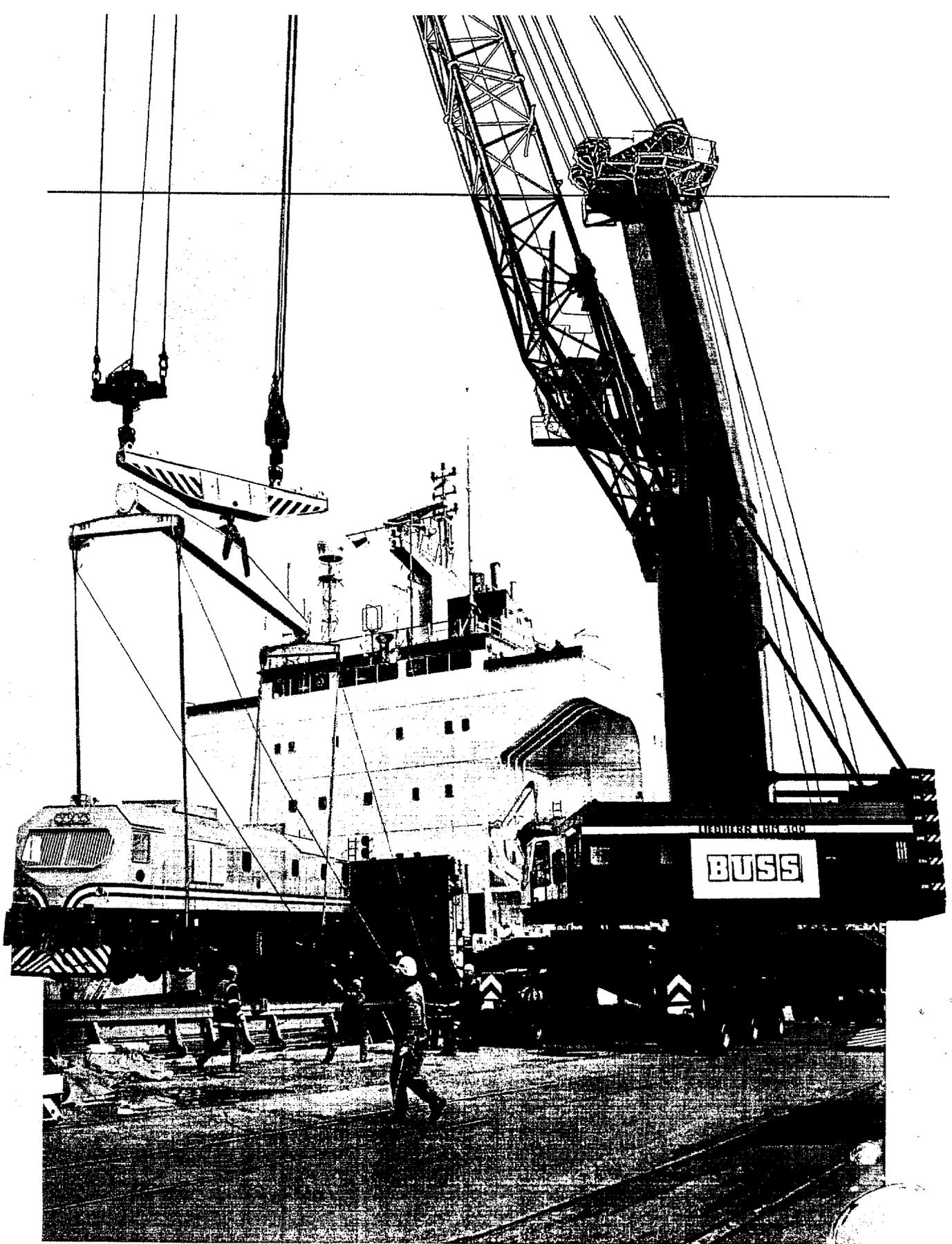
Safety and precision are the most important criteria when lifting heavy goods. Depending on the type, Liebherr Harbour Mobile Cranes can lift up to a maximum of 140 tonnes in single operation. The endurance and stability required especially in this kind of cargo handling has been strongly considered in the basic concept of the upper group of LHM cranes: The forces arising from this lifting process are diverted through the shortest route by the round tower through the slewing bearing to the supporting legs.

Therefore, a stress flow-system is established which absorbs all statical and dynamical demands resulting from travelling and crane operation. This reduces stress on all supporting parts to a minimum during working operation and at the same time increases the safety so enhancing the driver's comfort and consequently productivity.

For more operator comfort and higher returns.

Unique: The Liebherr cruciform support base creates stability. The arising forces are diverted to the surface of the pier through the shortest routes and, at the same time, the undercarriage remains free from torsion. The supporting legs and cylinders can be easily positioned from the operator's cabin so ensuring short preparation times.

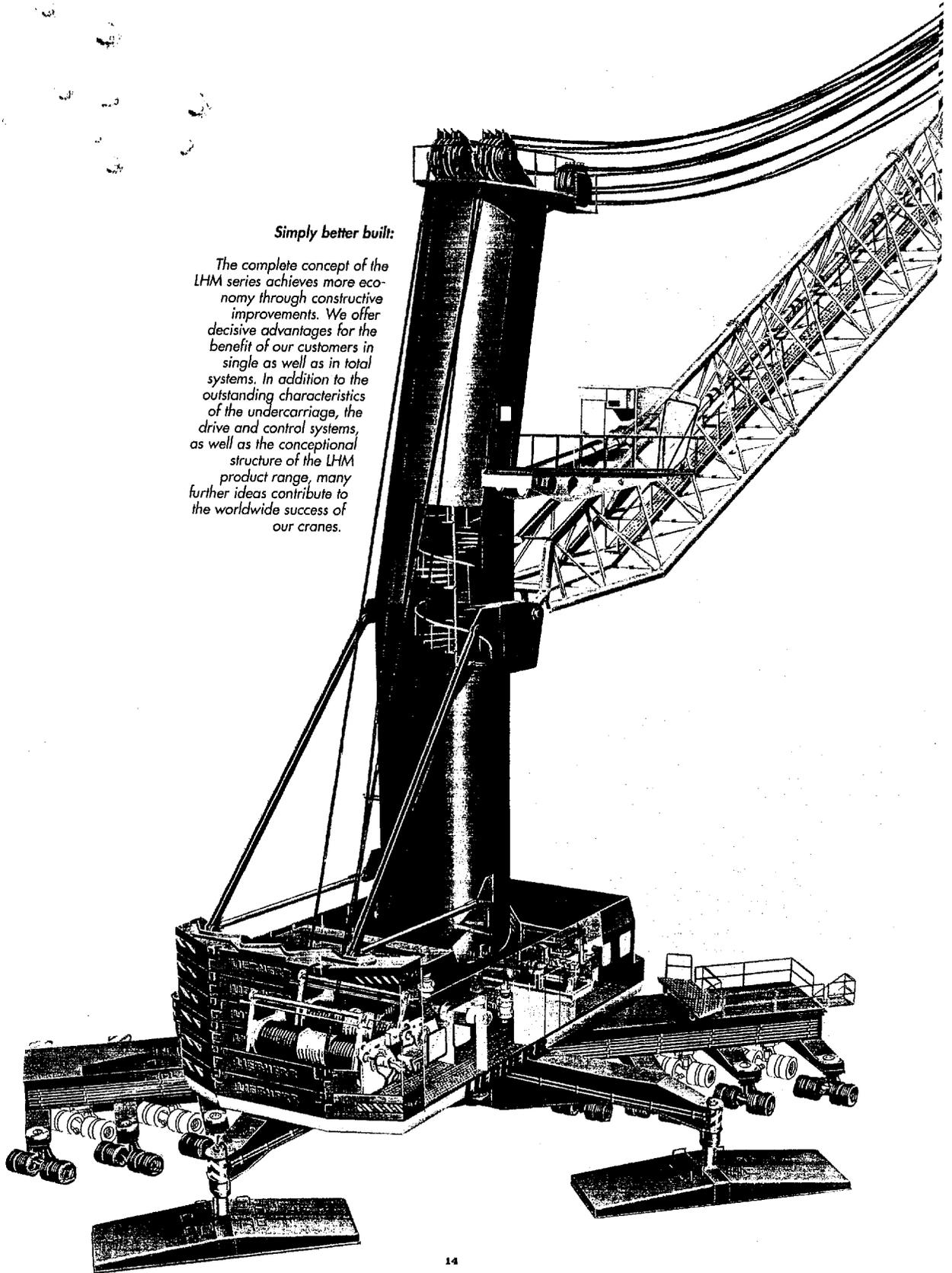




*Innovative safety aspect:
The jib cylinder uses a closed
hydrostatic circuit;
accuracy without vibration.*

Simply better built:

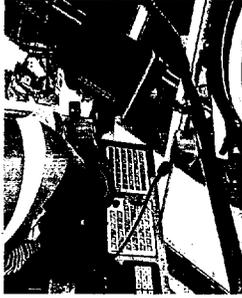
The complete concept of the LHM series achieves more economy through constructive improvements. We offer decisive advantages for the benefit of our customers in single as well as in total systems. In addition to the outstanding characteristics of the undercarriage, the drive and control systems, as well as the conceptual structure of the LHM product range, many further ideas contribute to the worldwide success of our cranes.



Liebherr Litronic® - The intelligent crane control.



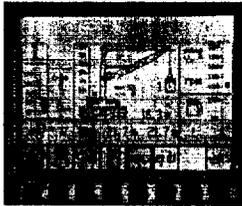
Conclusive advantage compared to standard electronics: The Litronic® has been developed and tested for the toughest of applications in the field of maritime: whether damp, tropical conditions with humidity of up to 99% or arctic conditions with extreme minus temperatures as low as -40 °C, all components and parts employed are aimed to meet these criteria and are put through extensive environmental tests. This includes temperature and climate tests, vibrations tests (up to 32 g), temperature changes and saline tests. Highly qualified specialists ensure the highest possible standards using the most modern SMD production equipment.



Liebherr Litronic® crane control and management electronic, which was specially developed and produced for maritime use, sets new standards. It guarantees precision, safety and accurate crane operation using the most modern of electronic components and CAN-Bus technology. The Litronic® takes care of engine and hydrostatic drive management, load moment limits and load recording, controls the simultaneous operation of crane motions, indicates failures, various long distance diagnosis and also the monitor reports. It ensures the best possible turnover performance and protects all important crane systems against overloading.

A modular and open system architecture allows quick implementation of new requirements or changes resulting from practical experience. Furthermore, the special conception designed for the harsh environmental conditions in ports throughout the world and for compatibility with other systems opens up unlimited application possibilities for the future. Even today, Liebherr offers long-distance diagnosis, operation and process data recording and, upon request, calculation of the remaining life expectancy of single components. Swing reduction control systems and load path optimisation programmes go without saying.

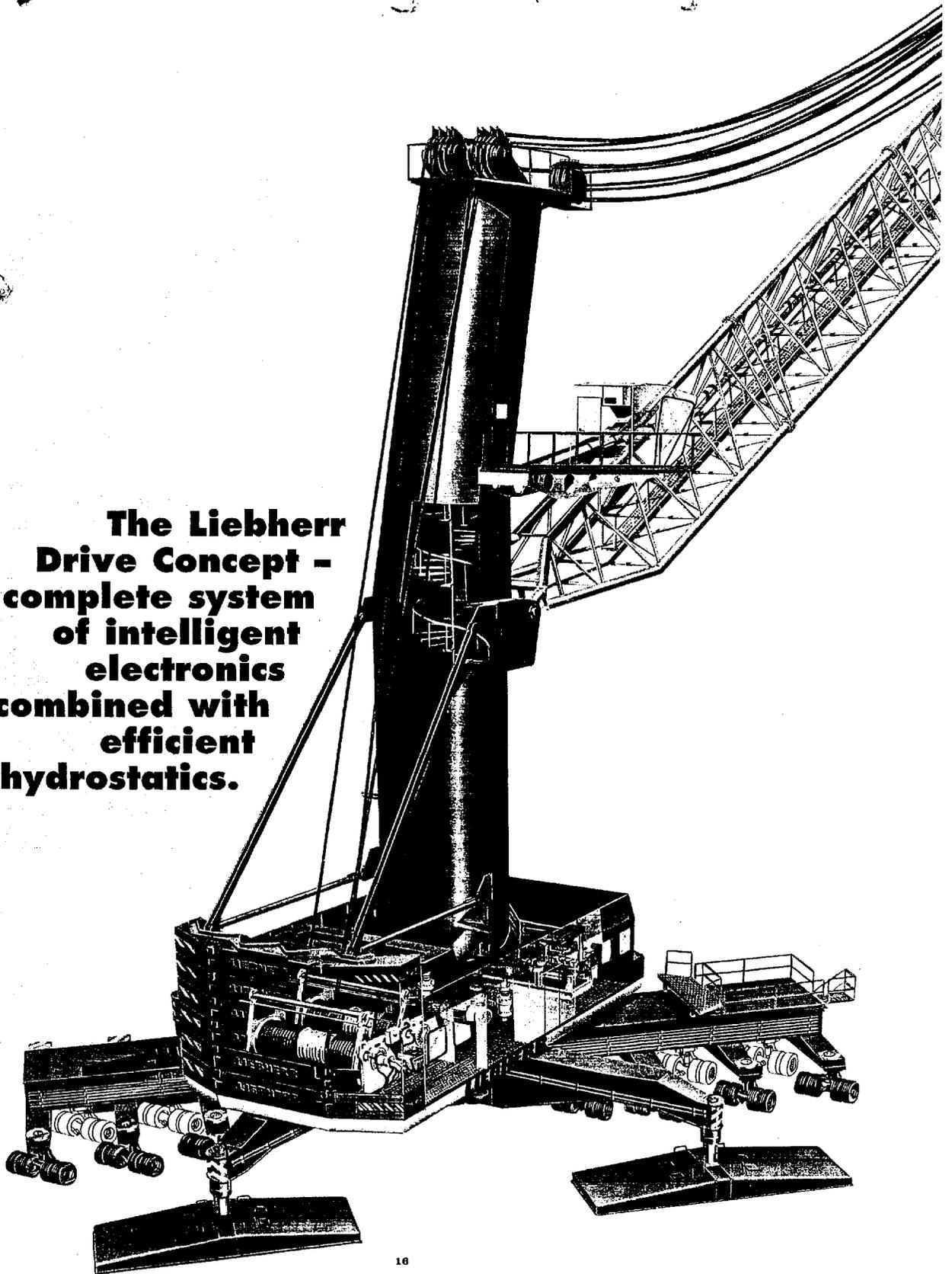
Top Quality Electronics. From Liebherr.

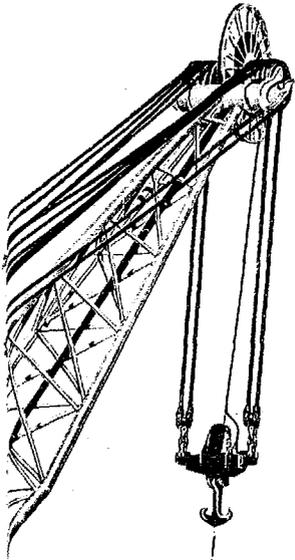


Operator's overview: The Litronic® monitor displays all the current parameters and working conditions necessary for operation. Furthermore, all crane settings and additional information can be called up.

Operational or system warning signals are displayed and saved. Error reports and sources of interference (in different languages) enable immediate solving of problems.

**The Liebherr
Drive Concept -
A complete system
of intelligent
electronics
combined with
efficient
hydrostatics.**





The Liebherr Hydrostatic Drive System. Powerful and reliable.

High efficiency, safety and the most economical variant for the customer were prime factors in the choice of drive concept. Hydrostatic drive is undeniably the most economical, high performing and reliable drive system for every harbour mobile crane due to the rapid achievement of high performance, long-term durability, low maintenance costs and a series of operation specific advantages.

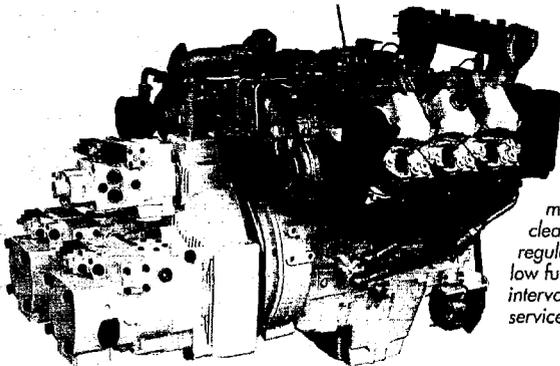
Repeatedly tested and employed in a wide variety of fields, the hydrostatic power pack underlines its outstanding advantages compared to all other systems making Liebherr hydraulic components indispensable, for example, in air space technology (Airbus, Boeing) where safety is of the utmost importance, as well as the building and construction industries. Reliability is also essential in fields with adverse conditions making high demands on personnel and equipment. Liebherr ship and offshore cranes also distinguish themselves through their above average operating availability.

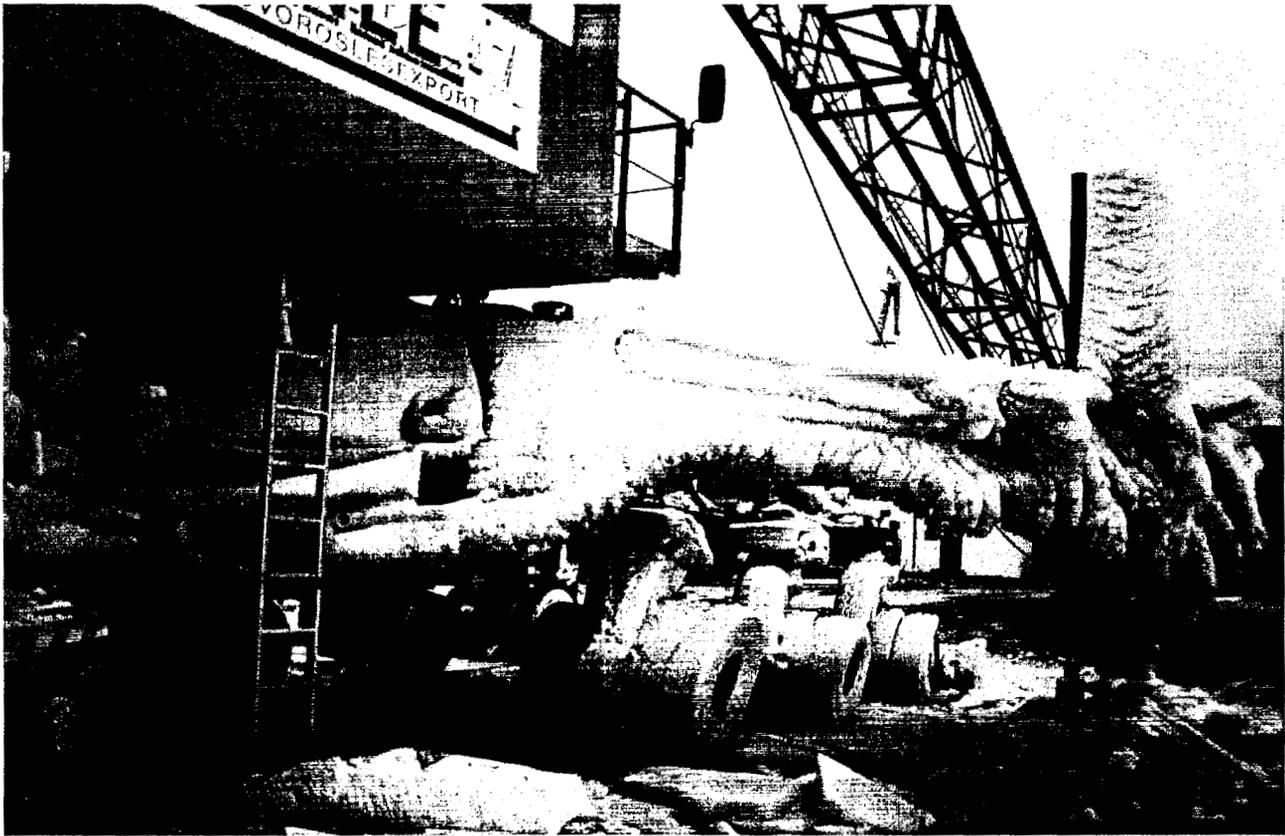
The control and monitoring of the hydrostatic drive through Liebherr Litronic® optimizes all drive and control processes and ensures the best possible combination of power and performance. All crane movements are driven simultaneously, force controlled with the utmost precision. Rapid acceleration and deceleration are distinct advantages compared to other types of drive. This means higher turnover in shorter periods and proven savings for the customer.

Optimised filter systems and constant oil temperatures by means of a generous cooling installation minimise wear and tear and prolong life expectancy. The independent, closed circuits maximise the operating safety even in continuous operation or high ambient temperatures. All motions are hydrostatically braked - this is absolutely wear free and, therefore, reduces the maintenance costs.

Higher performance through better technology: in reality, up to 15 % higher turnover.

Liebherr Harbour Mobile Cranes are fitted with high performance Liebherr or Mercedes-Benz diesel engines. All drive aggregates use the most modern of diesel technology, therefore, they operate cleanly and environmentally friendly. They fulfil all regulations according to EURO II with their exemplary low fuel usage and emission values. The long maintenance intervals and high accessibility of all aggregates reduce the service and maintenance costs to a minimum.

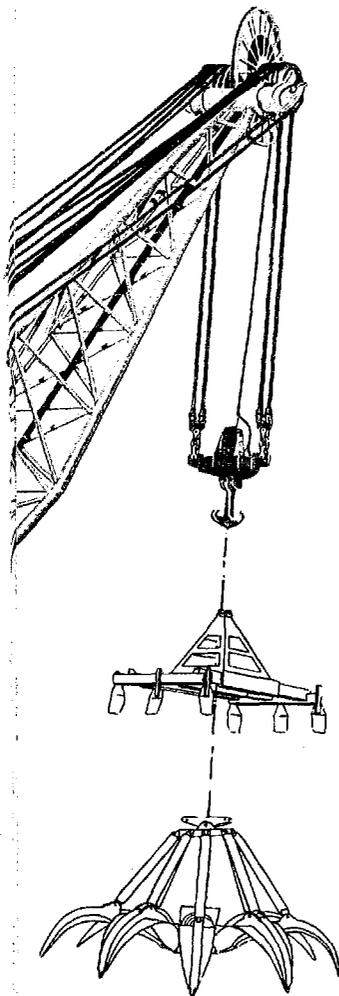




Advantages of Liebherr Hydrostatics

- **Only closed circuits for maximum performance and minimum loss of energy**
- **High performance density requiring a minimum of fuel and energy**
- **Immediate and short system reaction times for rapid and safe working cycles**
- **All crane motions are applied continuously, precisely and simultaneously with maximum speed and load**
- **First class and practically maintenance free hydraulic components for enormous cost savings and long-term endurance**
- **Only one drive system simplifies and reduces the service and maintenance costs**
- **The hydrostatic system brakes without wear, therefore, no costs for expensive service brakes**
- **All components standardised and often uniform throughout the LHM series for reduced repair costs**

The outstanding advantages of hydrostatic drive: arctic temperatures mean no compromise.



Liebherr Design Quality. Innovations for more benefits.

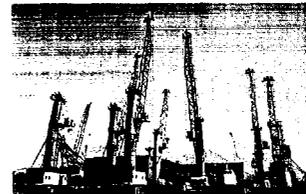
LHM harbour mobile cranes are developed and calculated using the most modern computer programmes. Each single part is designed for long-lasting durability and analysed and assessed using finite element programmes. This ensures that possible weaknesses and problems are discovered at the outset and can be eliminated immediately. It goes without saying that all Liebherr Harbour Mobile Cranes meet the requirements of the relevant standards e.g. F.E.M., DIN, ISO, BS etc.

The first-class Liebherr product and production quality is monitored by a proven and certified quality assurance system according to ISO 9001. This process commences with the qualitative selection of suppliers of steel and components and continues through to the maritime painting up to the erection of each individual crane at our factory and subsequently on the customer's site.

All parts and components are tested and analysed for long-term durability and continuous use through our own examination and test methods. Therefore, more attention is paid to uniformity and standardisation of single components. For example, today only one size of hydraulic aggregate is used within the whole LHM series eliminating superfluosity and ensuring high component availability in case of service.

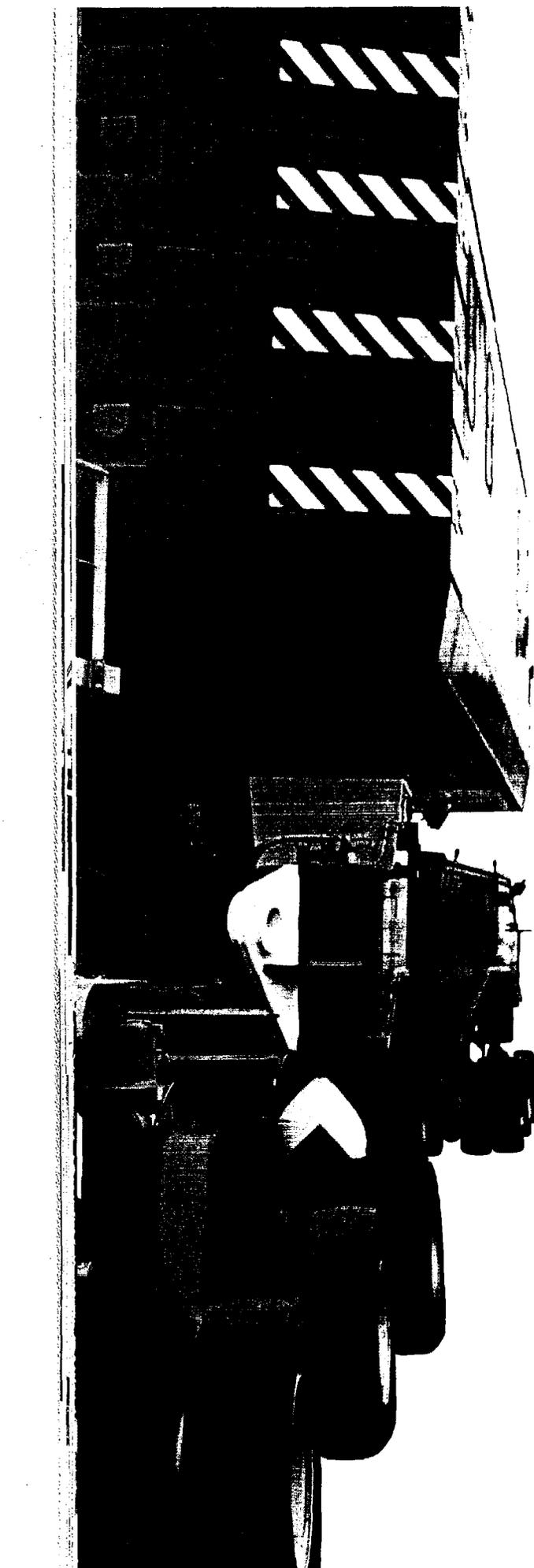
Service and maintenance costs are reduced to a minimum for our customers through extended intervals between checks, improved accessibility to all aggregates for maintenance purposes, a central greasing system throughout and the active service support of the Litronic® crane control system. Machine data recording (MDE), which is installed throughout the series, and worldwide mobile communication with the LHM's worldwide long-distance diagnosis and preventive maintenance measures.

**Decidedly better in every
detail.**



Precision: Before delivery, every Liebherr crane – without exception – goes through a tailored test and safety programme on our specially designed LHM teststand. This includes the adjustment and recording of all crane operation values, testing of planned crane operating conditions and, if necessary, the nationally required inspection is carried out.





Mobility. Newly defined.

It doesn't matter how or where, the Liebherr Harbour Mobile Crane travels with ease and is available in the shortest possible time anywhere in the port where cargo handling is necessary. Where conventional undercarriages fail, whether due to high axle loads or inadequate manoeuvrability, the LHM just begins.

Varying design and construction methods of quays and terminals throughout the world have lead us to a unique undercarriage design. The LHM can travel in all directions, whether straight ahead, backwards, sideways, diagonally or even on own its on axis, knowing no limits. The axle load is reduced by up to 50% allowing mobility and operation even on hitherto limited quay surfaces. Singularly mounted sets of four wheels each enable movement in all directions. This means the wear and tear on the tyres is reduced to a minimum. Incidentally, the tyres are standard for the industry and obtainable worldwide reducing the cost of spare tyres.

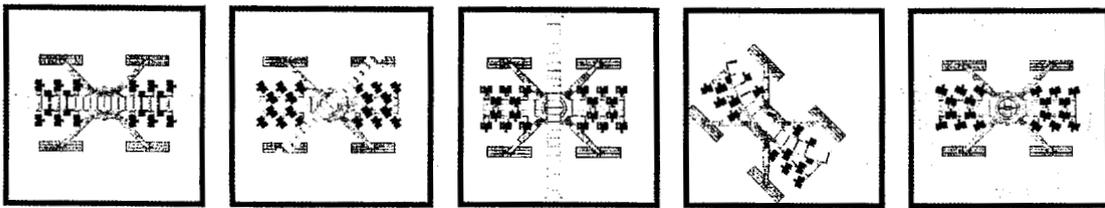
Automatic load compensation distributes loads equally over the axles and chassis, therefore, controlling and avoiding overloading of single parts which means unevenness, gradients or rails on the quayside are no obstacle for the LHM. The tyres correspond to those used for heavy goods vehicles making requisition of spares economical and time-saving.

Through this stability, the LHM can be manoeuvred effortlessly from the cabin with excellent vision of the surrounding traffic and obstacles. Various driving situations, depending on the application, can be pre-selected by the operator at the press of a button. All steering manoeuvres are precisely controlled using the joysticks.

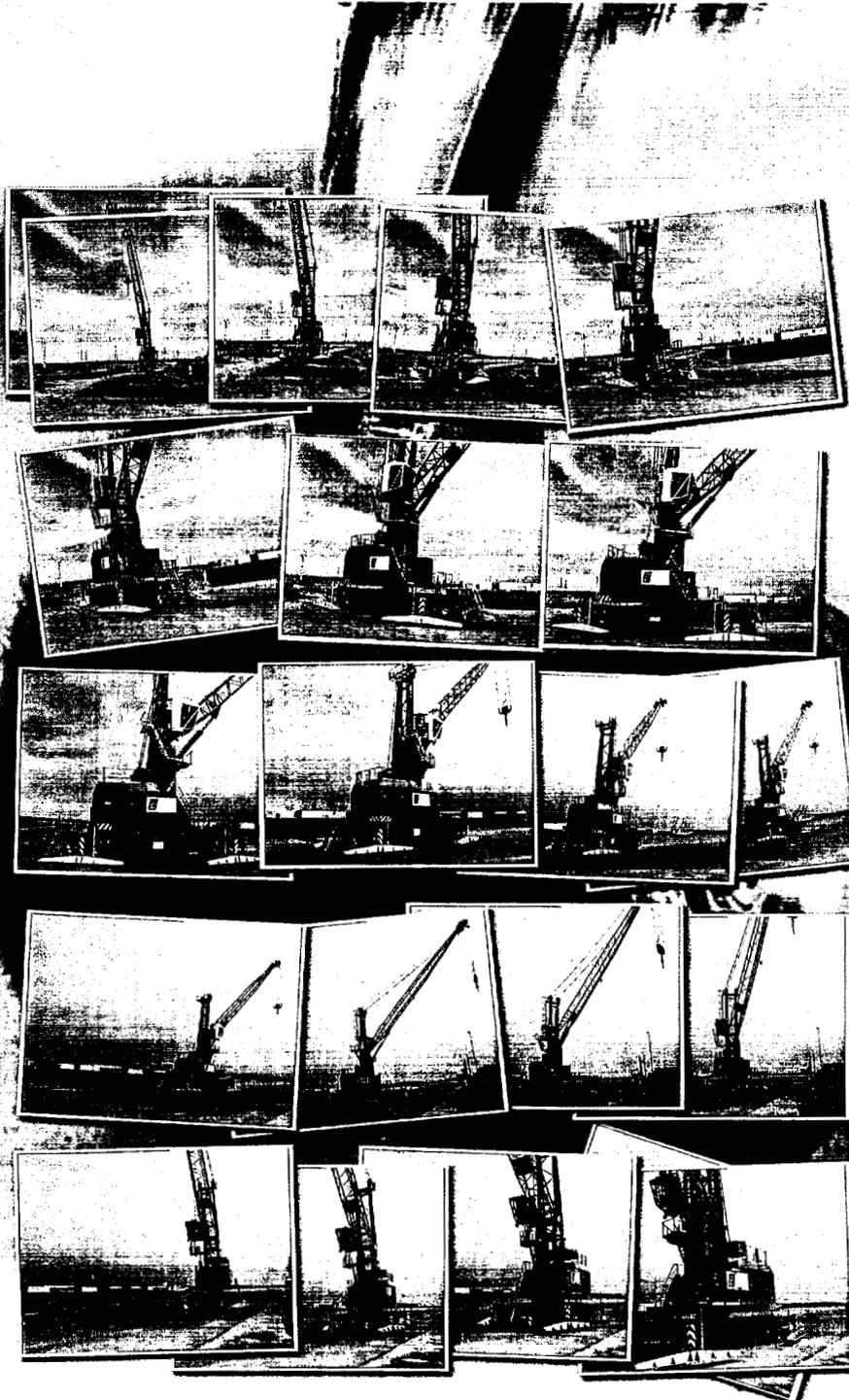
More advantages through state-of-the-art technology.

- variable number of axles can be installed – even after crane erection – for optimum load distribution
- variable gradient capability
- optimised power induction

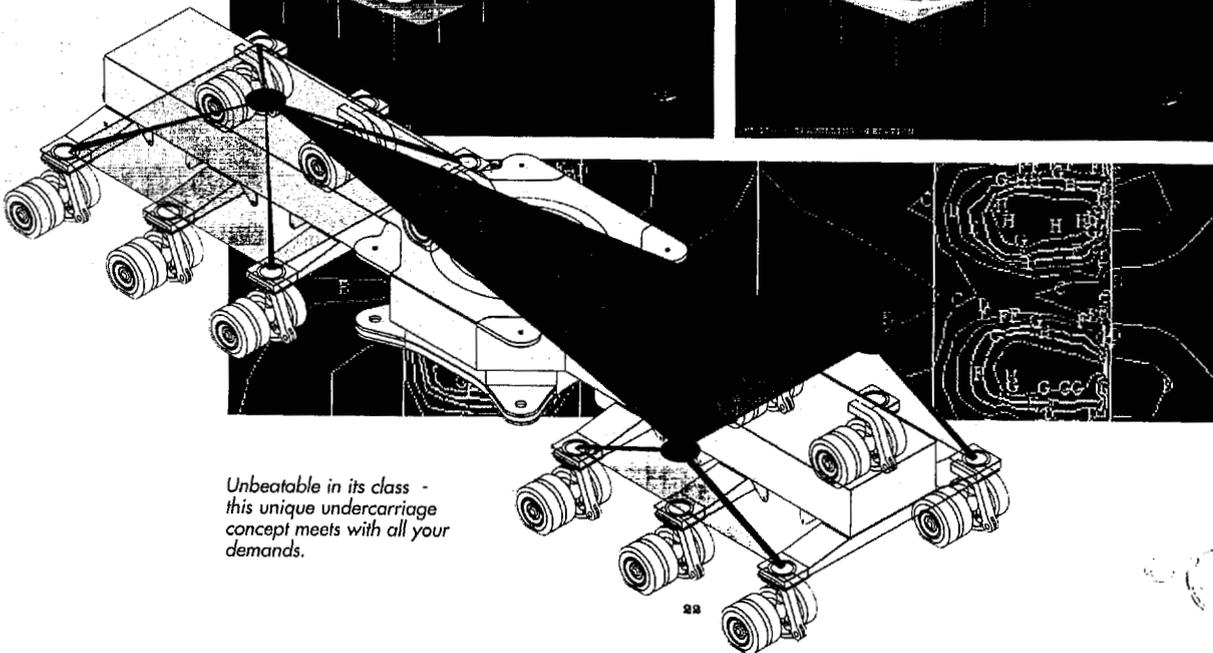
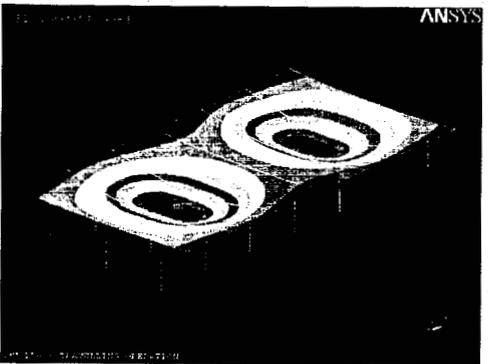
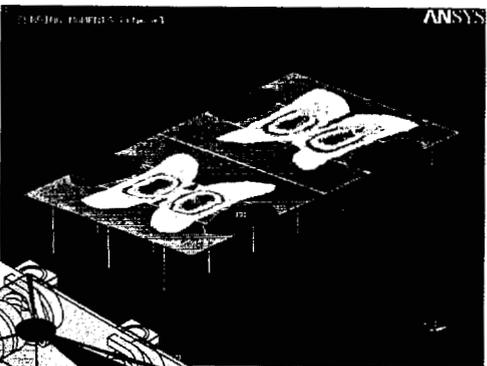
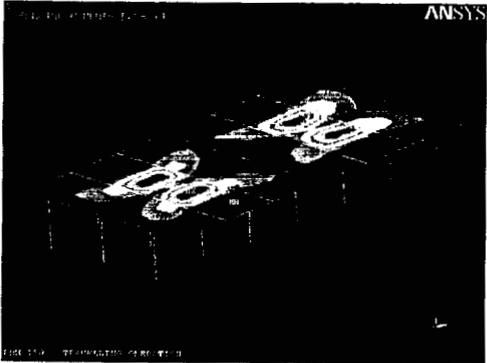
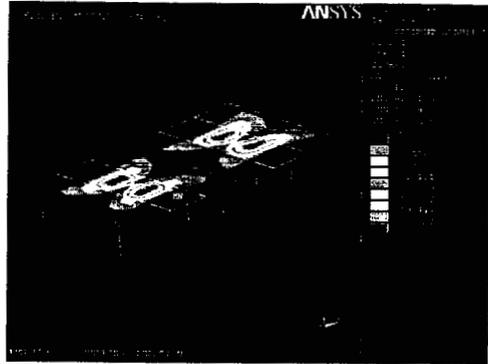
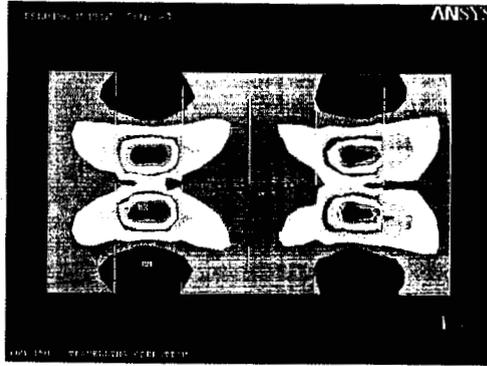




Quick and manoeuvrable – mobility newly defined. The supporting plates can be swung in and locked when travelling or removed in order to save space. Different sizes and formations of plates can be chosen in accordance with the composition of the surface.



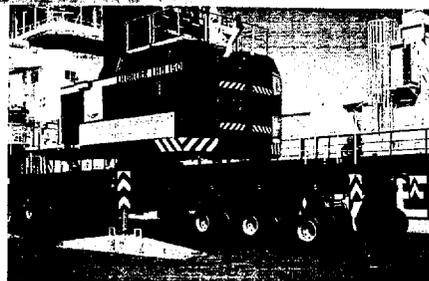
Accepting responsibility: Examination of load distribution on the quay for guaranteed safety.



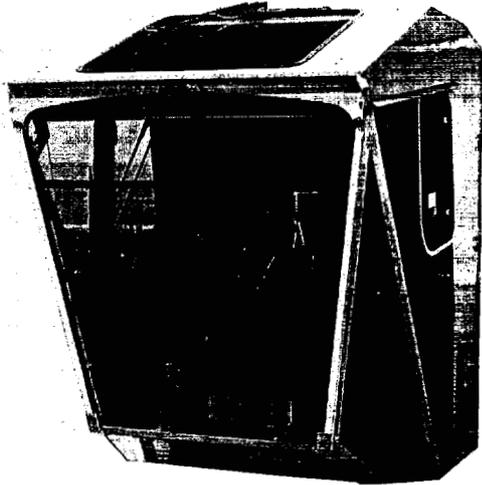
Unbeatable in its class -
this unique undercarriage
concept meets with all your
demands.



*Technology synergies for best benefits to the customer -
Liebherr Airbus Undercarriage A300*



Driver Comfort. A decisive element of success.



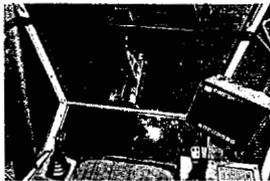
The advanced design of the newly fitted operator's cabin achieves the best conditions for productive combination between personnel and technology and, therefore, the basis for maximum handling capacity. A cockpit, which is of the same high standard as upper-class automobiles as far as comfort is concerned, ensures relaxed, comfortable and fatigue-free working conditions.

The tower cabin as well as the slewing platform cabin (optional) are fully fitted allowing the operation of all crane functions including travel and supporting options. The cabin is generously glazed on all sides which, combined with its high position on the crane tower, offers the operator an unrestricted and reliable view of his working surroundings. Any vibration is reduced to an almost unnoticeable minimum through an active swing equaliser.

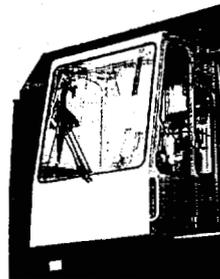
The internal fitting leaves no room for improvement: All operating elements are clearly and ergonomically laid out. As a standard, the noise resistant cabin is fitted with air-conditioning, an operator's seat with adjustable arm rests and which itself can be adjusted in seven different ways, tinted glass and control panel with integrated Litronic® monitor showing actual values and information. A closed-circuit video system on the jib head with coloured monitor in the cabin further assists the operator when working in the holds of the vessel. (Optional)

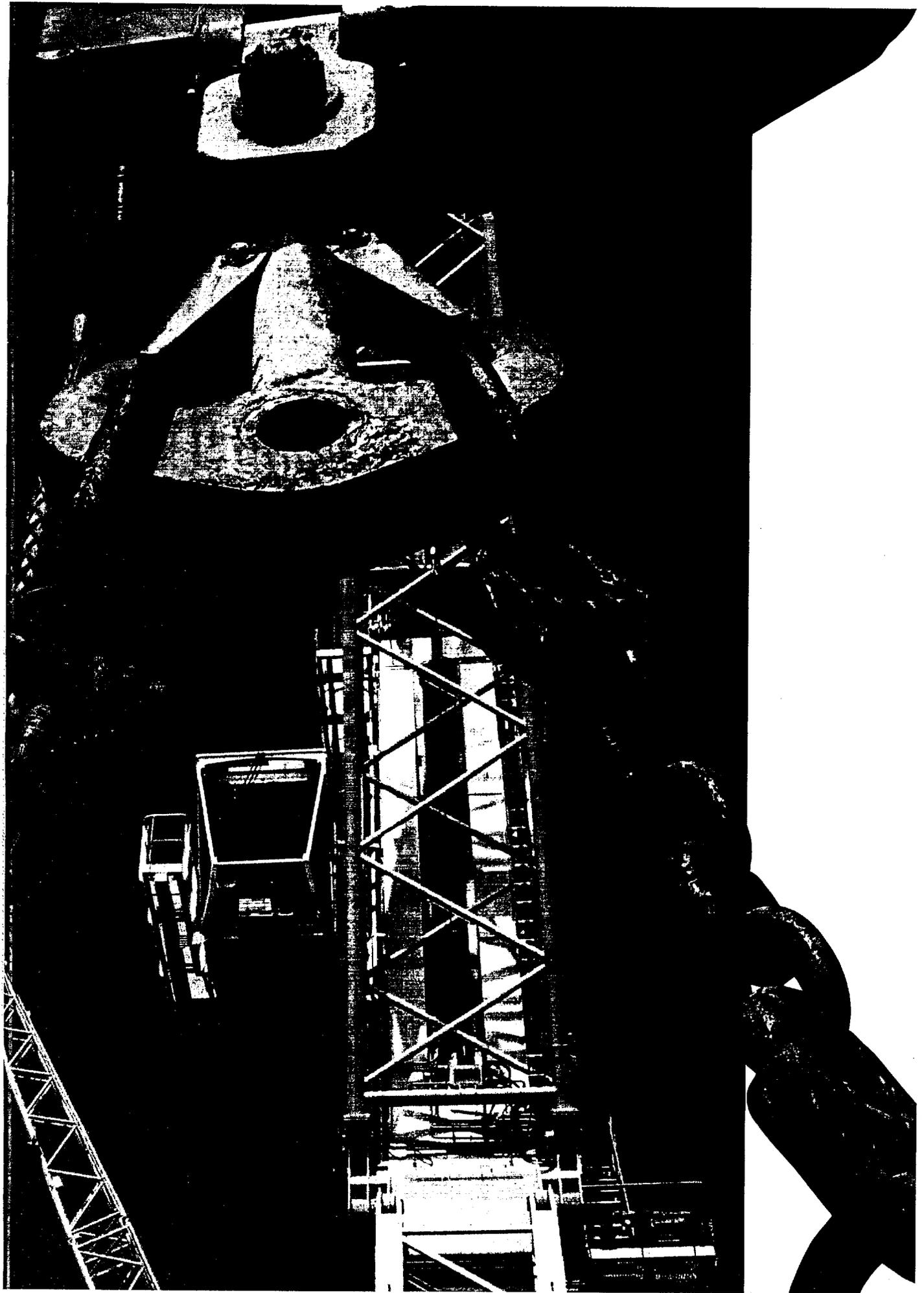
Clear vision is ensured through generously proportioned windscreen wipers and access for cleaning is guaranteed by a special platform.

Cockpit Design by Liebherr: Optimum vision and simple operation support the operator and ensure high performance and levels of return.

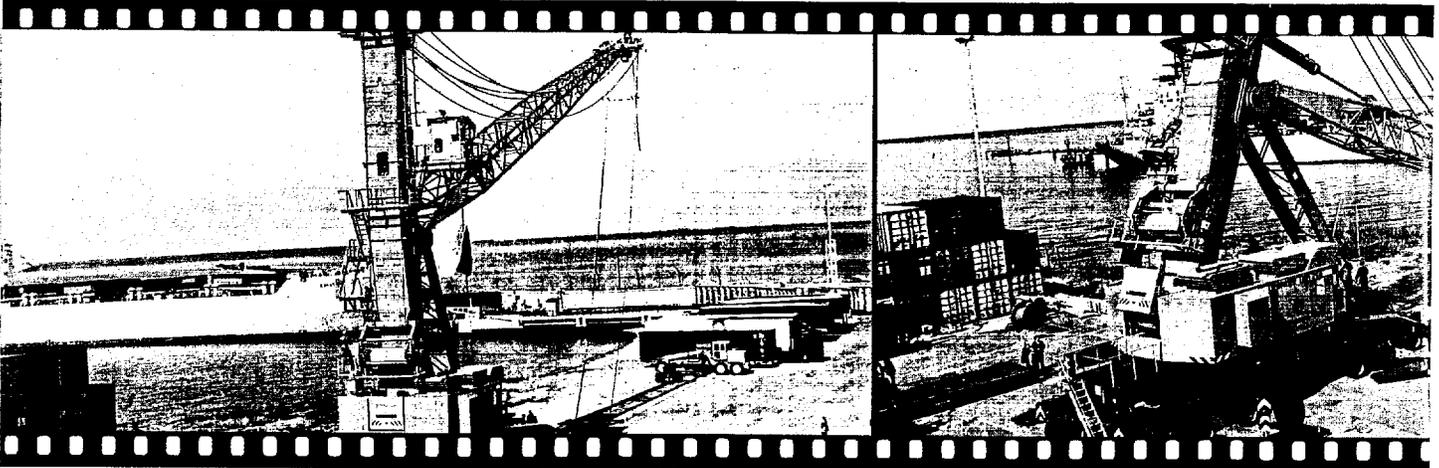


*For maximum vision and safety
- the new operator's cabin from
Liebherr.*





Practical Experience. Solutions from Liebherr.



Our range of harbour mobile cranes is suited exactly to the demands of the ship, port and transport industries.

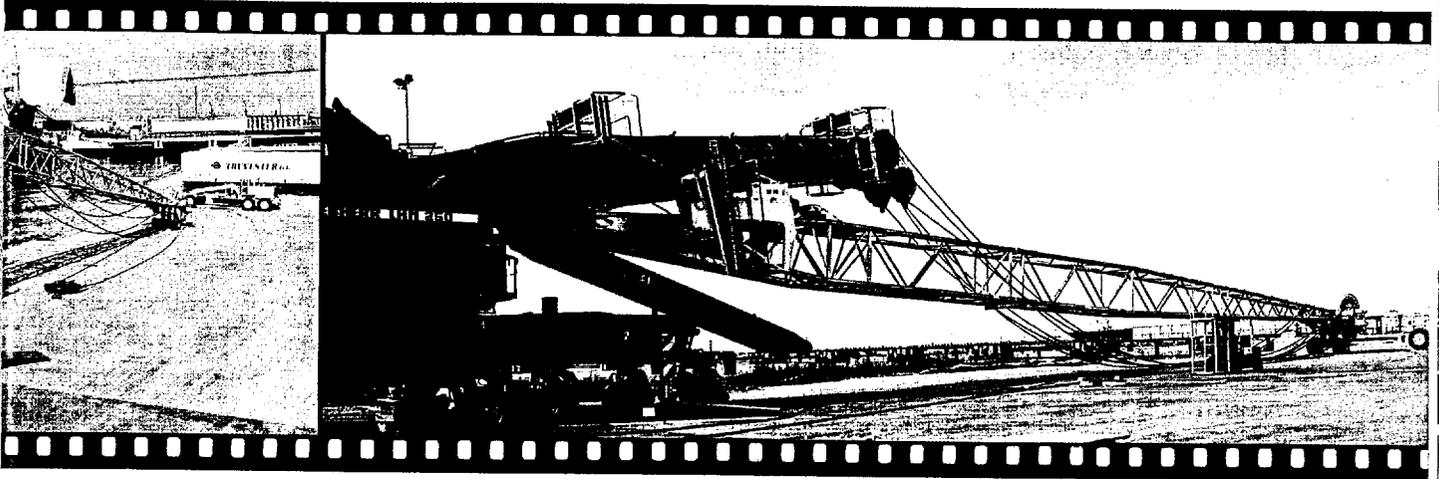
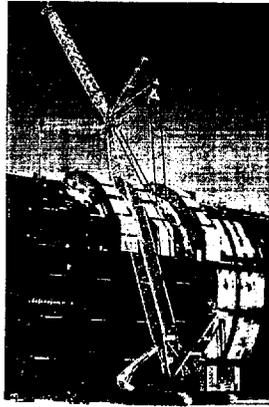
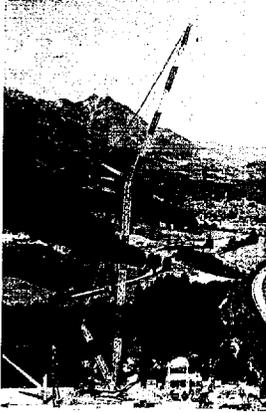
We offer an optimum solution for every regular type of vessel, for every cargo and every size of port or stevedore.

Furthermore, we develop and produce special designs and solutions to meet particular requirements outside the norm, supplemented by a wide variety of lifting appliances and equipment. You will definitely make the right decision.

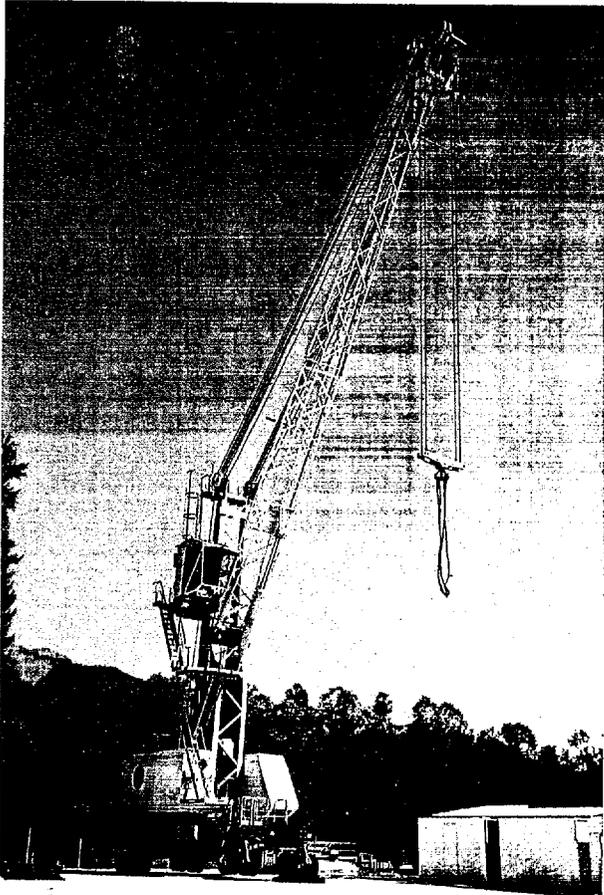
The Liebherr Portal Crane LPS: For use where limited space means that cargo can only be brought and taken away on the crane path. An efficient combination of space-saving portal undercarriage and flexible and quick harbour mobile upper carriage. Available for all regular types of LHM.



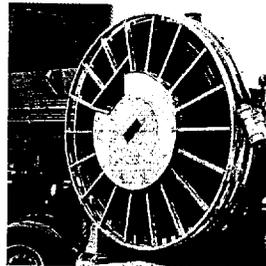
The newest development in LHM: The LHM 70 with 26 tonnes capacity. The ideal equipment for rapid general and bulk handling. It includes patented supports and new corrosion-free machine house design.



Practically orientated: Automatic lowering of the tower and jib for even more flexibility and mobility when travelling under bridges or objects such as overhead wires. (Optional)



Tried and tested: Pallet handling with the Liebherr crawler crane HS 843 in extended version – quick and economical.

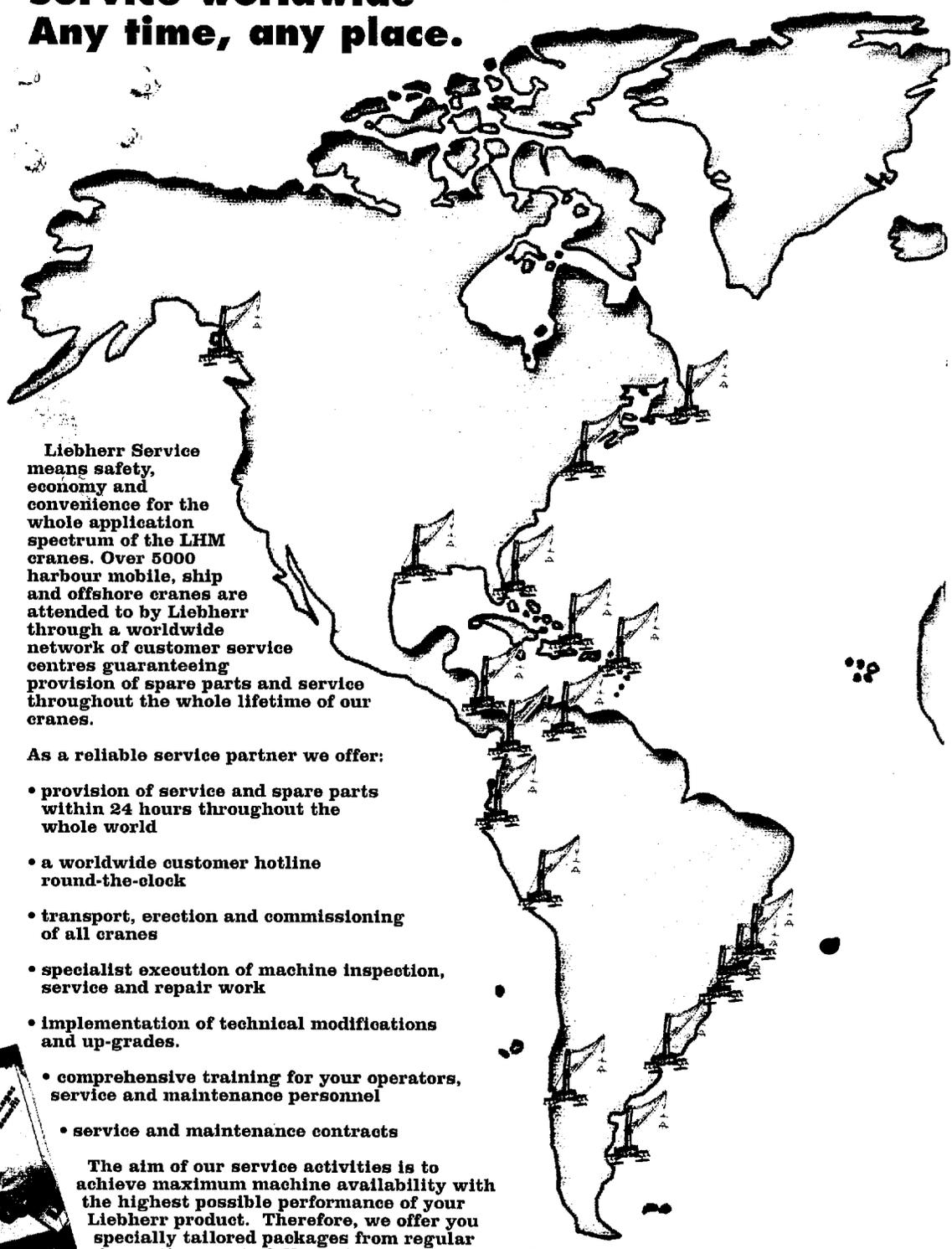


For special purposes: The LHM with diesel-electro-hydraulic drive cable for alternative fixed power supply. (Optional)



For smaller and medium vessels: Liebherr industrial cranes A 954 for efficient cargo handling.

Service worldwide Any time, any place.

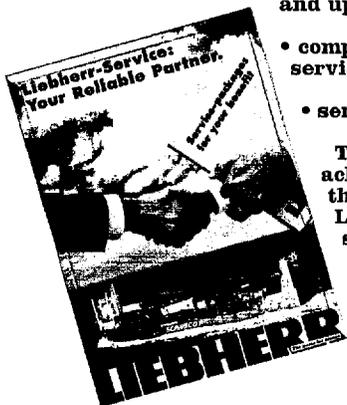


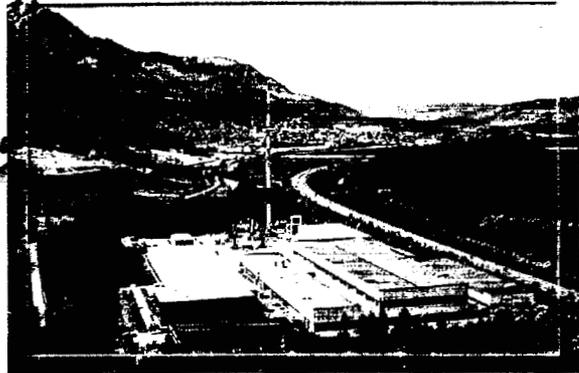
Liebherr Service means safety, economy and convenience for the whole application spectrum of the LHM cranes. Over 5000 harbour mobile, ship and offshore cranes are attended to by Liebherr through a worldwide network of customer service centres guaranteeing provision of spare parts and service throughout the whole lifetime of our cranes.

As a reliable service partner we offer:

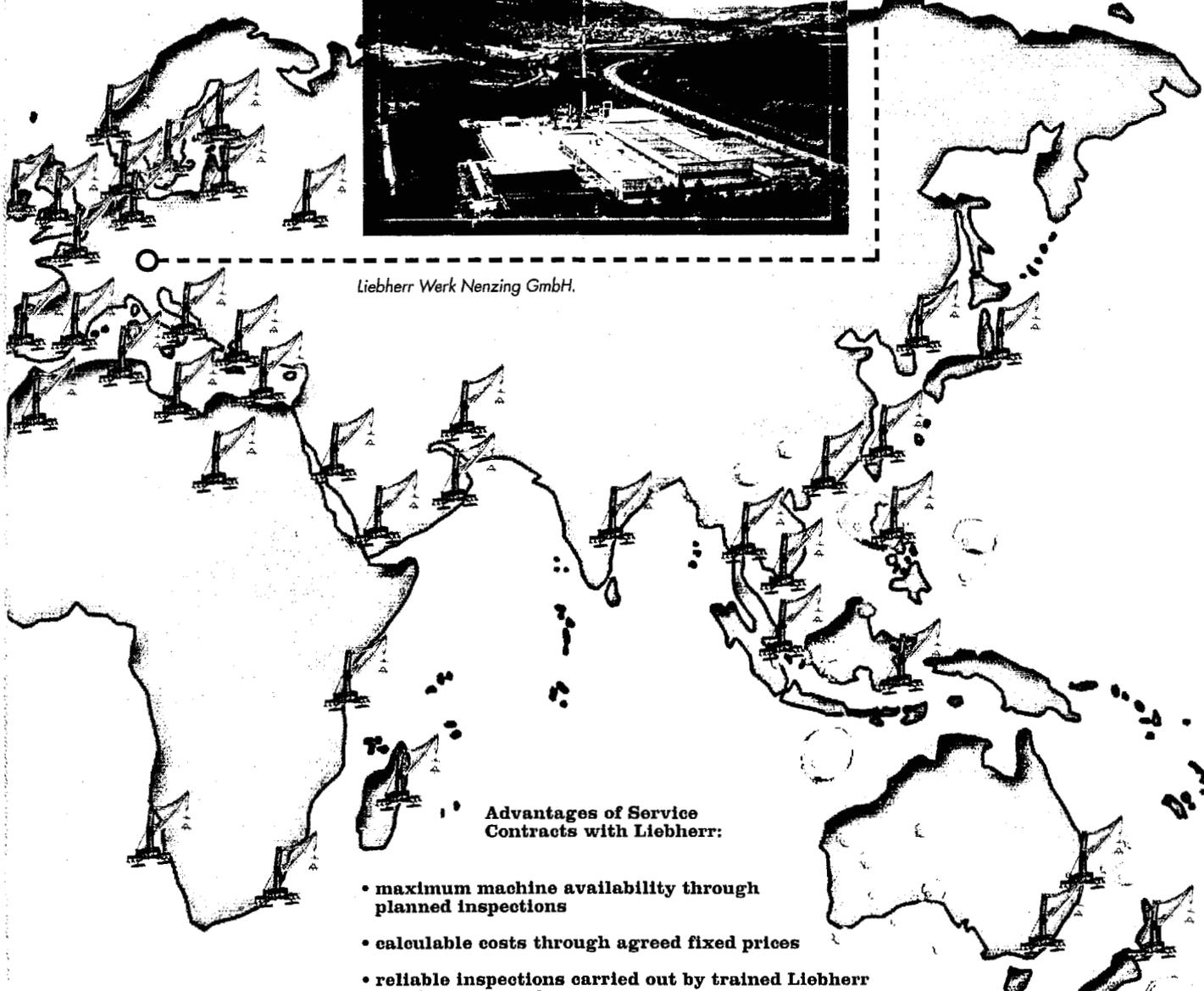
- provision of service and spare parts within 24 hours throughout the whole world
- a worldwide customer hotline round-the-clock
- transport, erection and commissioning of all cranes
- specialist execution of machine inspection, service and repair work
- implementation of technical modifications and up-grades.
- comprehensive training for your operators, service and maintenance personnel
- service and maintenance contracts

The aim of our service activities is to achieve maximum machine availability with the highest possible performance of your Liebherr product. Therefore, we offer you specially tailored packages from regular inspections up to full service contracts carried out by continually trained service and maintenance personnel.





Liebherr Werk Nenzing GmbH.



Advantages of Service Contracts with Liebherr:

- maximum machine availability through planned inspections
- calculable costs through agreed fixed prices
- reliable inspections carried out by trained Liebherr service personnel
- high resale values through specialist maintenance and servicing
- reduced standing time through preventive maintenance and quick reaction
- high returns through maximum crane availability and low costs

Liebherr Service - clear and economical advantages.



Service and Sales Centres

Liebherr-International AG
CH-1630 Bulle/Fribourg

LIEBHERR

Liebherr-Holding GmbH
D-88386 Biberach an der Riß

Liebherr-Austria-Holding GmbH
A-5500 Bischofshofen

Liebherr-Swissholding AG
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D-88396 Biberach an der Riß

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A-6780 Schruns

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A-1201 Wien

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D-76259 Ettlingen

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Liebherr-Investment AG
CH-1630 Bulle/Fribourg

Liebherr-Wohnungsbau GmbH
D-88396 Biberach an der Riß

Liebherr-Gutsverwaltung GmbH
D-88396 Biberach an der Riß

Liebherr-Nenzing Service GmbH
D-21079 Hamburg

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F-68005 Colmar

Liebherr-America, Inc.
Newport News, USA

Liebherr Brasil Ltda.
12500-000 Guaratinguetá S.P., Brasil

Liebherr-Aerospace Toulouse S.A.
F-31016 Toulouse

Liebherr Mining Equipment Co.
Newport News, USA

Liebherr-Africa (Pty.) Ltd.
Springs, Republik Südafrika

Liebherr-Nederland B.V.
NL-3800 BB Amersfoort

Liebherr Construction Equipment Co.
Newport News, USA

Liebherr-Australia Pty. Ltd.
Adelaide, Australien

Liebherr Italia S.p.A.
I-34074 Montfalcone

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Balikpapan 76116, Indonesien

Liebherr Industrias Metálicas, S.A.
E-31014 Pamplona

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Saline, USA

Liebherr-Thailand Co., Ltd.
Rayong 21180, Thailand

Liebherr-Great Britain Ltd.
Hatfield, England

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Medley, Florida USA

Liebherr-Singapore Pte. Ltd.
Singapore

Liebherr (Ireland) Holding Ltd.
Killarney, Republik Irland

Liebherr Nenzing Crane Co.
Houston, Texas USA

Liebherr (HKG) Ltd.
Chai Wan, Hongkong

Liebherr Container Cranes Ltd.
Killarney, Republik Irland

HL Farm Corp.
Newport News, USA

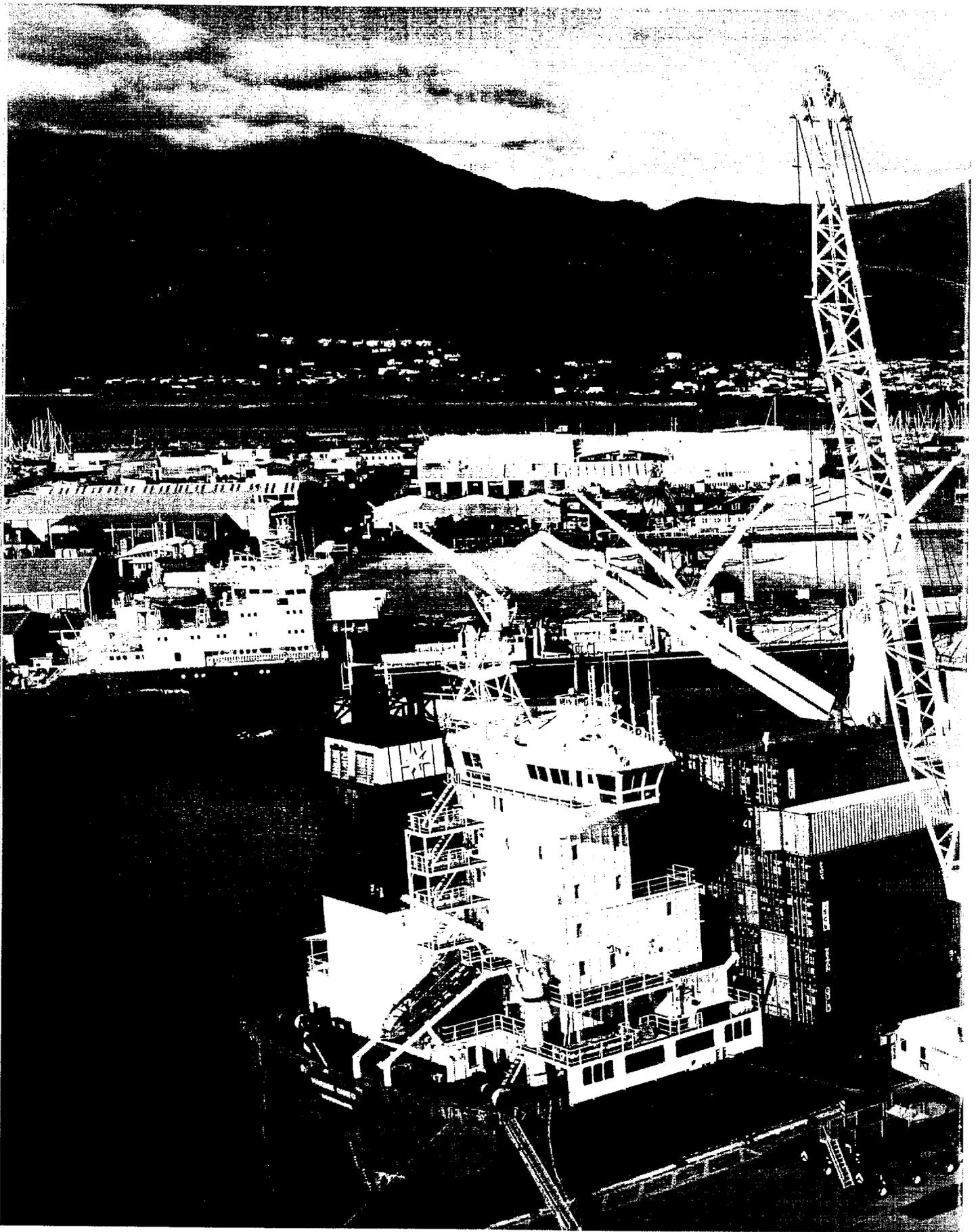
Shanghai Liebherr Machinery Equip. Co., Ltd.
Shanghai 200434, VR China

Killarney Hotels Ltd.
Killarney, Republik Irland

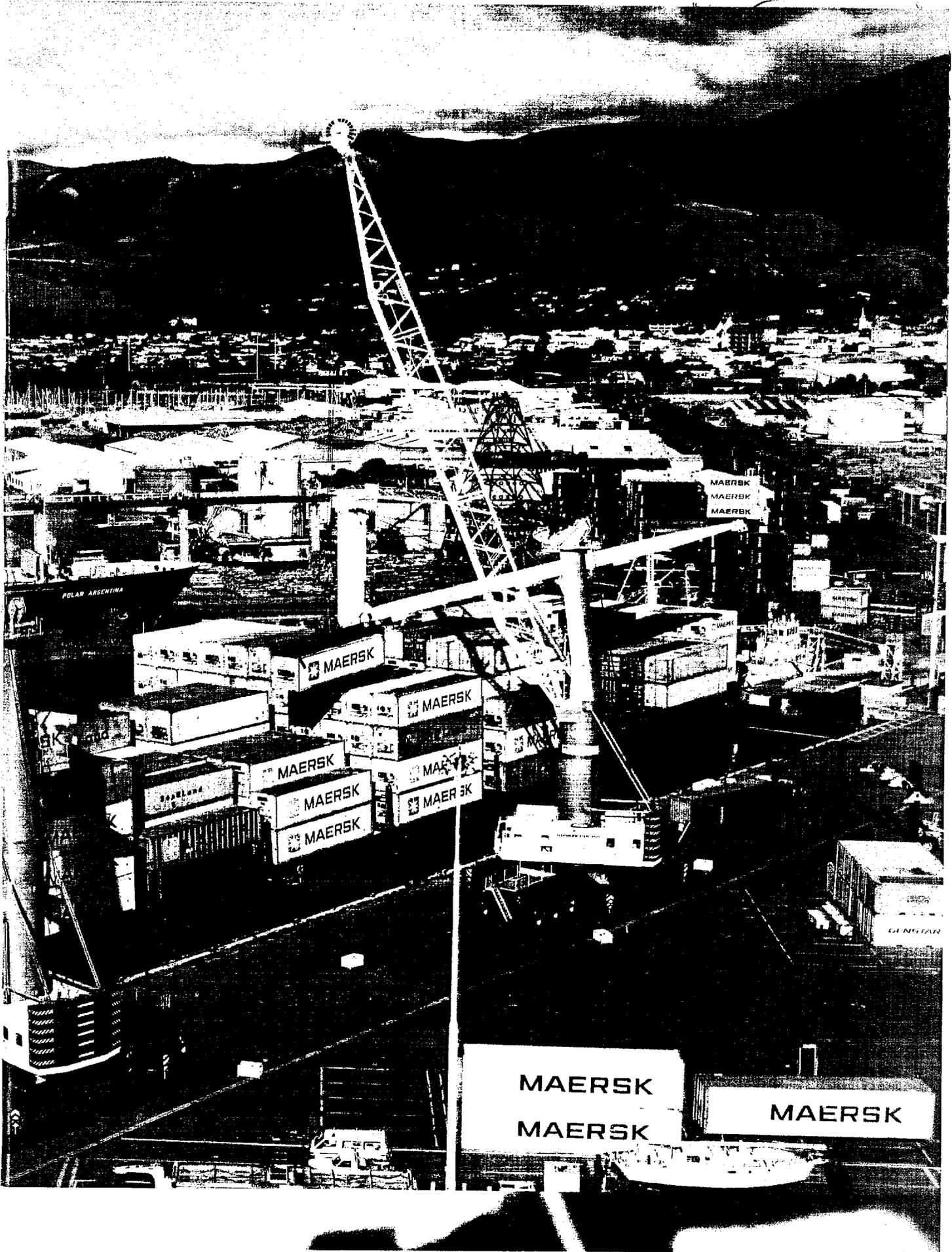
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Burlington, Ontario Kanada

Xuzhou Liebherr Concrete Machinery Co. Ltd.
Xuzhou City, VR China

Saudi Liebherr Co Ltd.
Jeddah, Saudi-Arabien



Your sole partner for the shipping industry.



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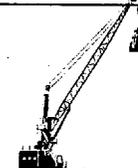
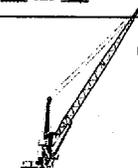
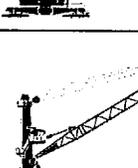
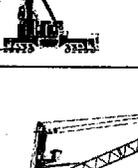
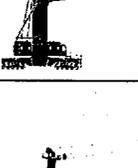
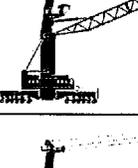
MAERSK

GENSTAR

POLAR ARGENTINA

THE RIGHT CRANE FOR ALL OPERATIONS.

- Optimum application
- Additional application

		Lifting Capacity	Radius
LHM 70		26 t	26 m
LHM 100		40 t	30 m
LHM 150		40 t	32 m
LHM 250		64 t	38 m
LHM 320		104 t	43 m
LHM 400		104 t	48 m
LHM 500		140 t	55 m

Super Post Panamax Liners / Bulkcarriers

Post Panamax Liners / Bulkcarriers

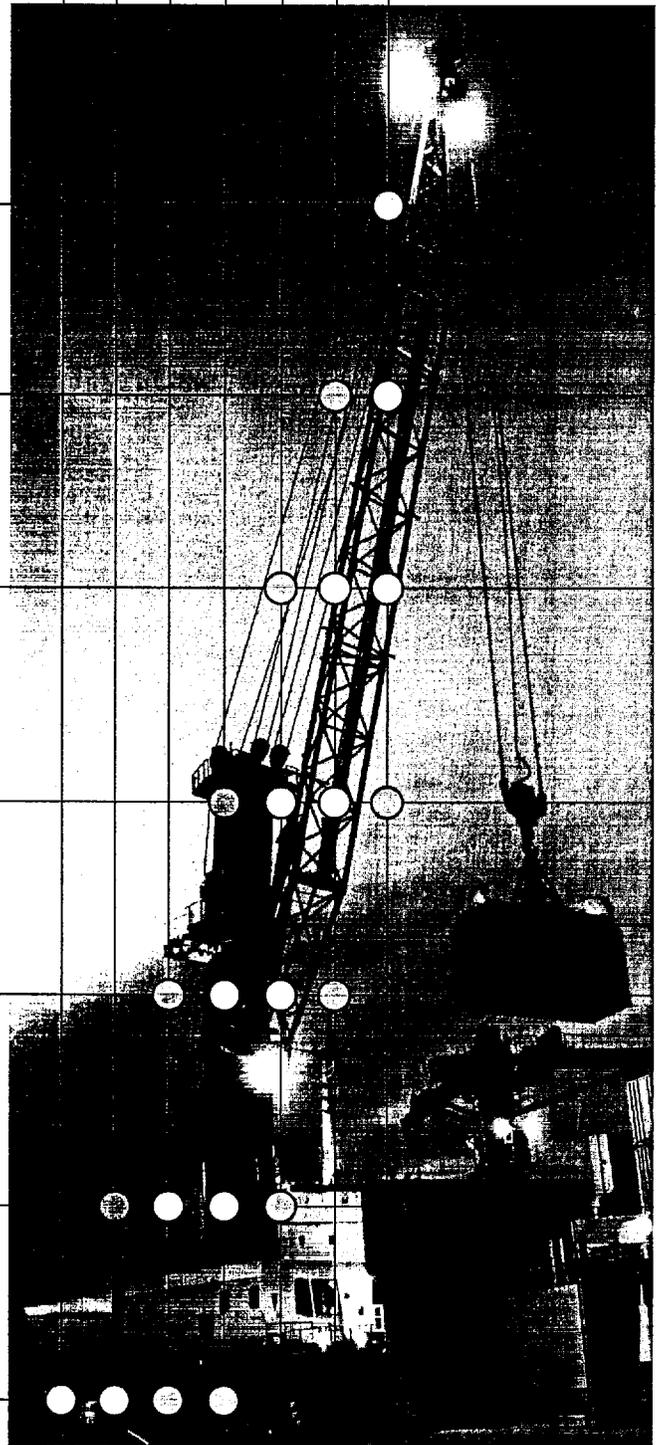
Panamax Container Liners / Bulkcarriers

Feeder Vessels, Handy size / Bulkcarriers

Feeder Vessels / Bulkcarriers

Coaster Vessels / Bulkcarriers

River Vessels / Bulkcarriers



Presented by:

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 Internet: www.liebherr.com

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