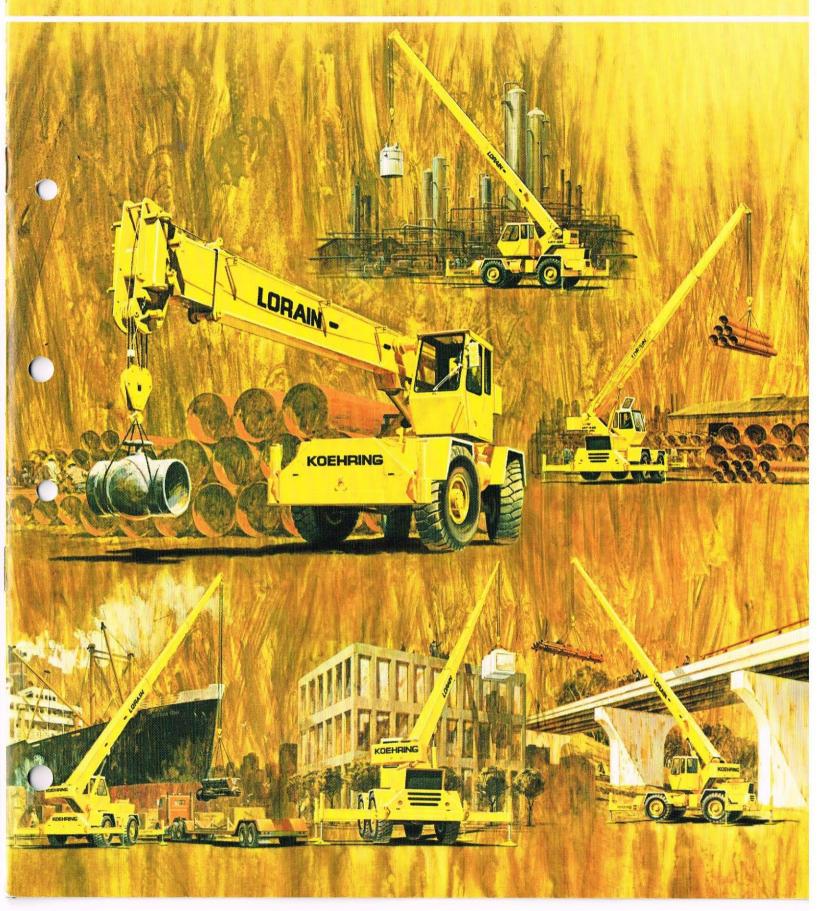


LORAIN LRT SERIES

15 ton (13.6 mt) to 27.5 ton (25.0 mt) rough terrain cranes







The widest outrigger spread in their class gives you greater lift capabilities throughout the working ranges—5% to 15% better than most competitors at every radius.



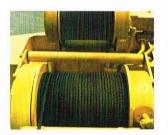
Self-proportioning boom maintains ideal strength-to-length work ratios automatically. Saves time and operator guesswork.



Exceptional control convenience gives you one of the most efficient cranes in the business. For straight lifting or pick-and-carry work, you won't find more responsive machines anywhere



Lorain LRT cranes are faster to reeve than competitive machines. Both boom head and optional hook block have quick reeve design to save you time when making line part changes.



Outstanding two speed winch performance includes faster line speed, greater line pull and drum capacity. Lorain beats competition in all *three* areas.



Lorain is the only one that offers you a limited slip differential option to help keep you going where the going is tough.

15 ton (13.6 mt) to 27.5 ton (25.0 mt) SERIES

Compare price and capabilities and you'll find the new line of Lorain LRT rough terrain cranes the best lifting value money can buy. Model-for-model, they out-perform competition in all the important areas that mean greater return on investment. You'll find Lorain offers outstanding pick-and-carry stability, improved handling ease and

a more comfortable ride. Model-for-model, you get more reach with standard boom and jib than most competitive rigs. Just take the controls and in minutes you'll know why Lorain is moving to the top fast in rough terrain cranes the world over—and you'll never find a better opportunity to own one.

six models to choose from to meet your specific rough terrain crane needs.

LRT 150

15 ton (13.6 mt) lift capacity standard boom and maximum jib: 86' (26.21 m)

LRT 180

18 ton (16.3 mt) lift capacity standard boom and maximum jib: 103' (31.54 m)

20 ton (18.1 mt) lift capacity standard boom and maximum jib: 103' (31.54 m)

LRT 230

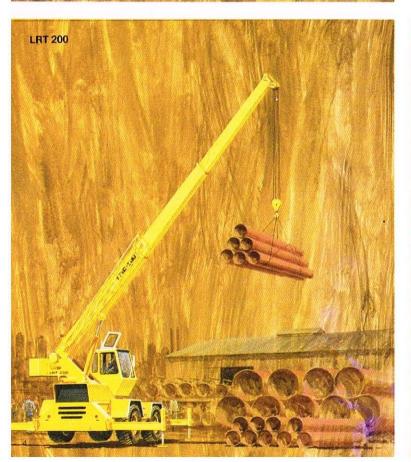
23 ton (20.9 mt) lift capacity standard boom and maximum jib: 114' (34.99 m)

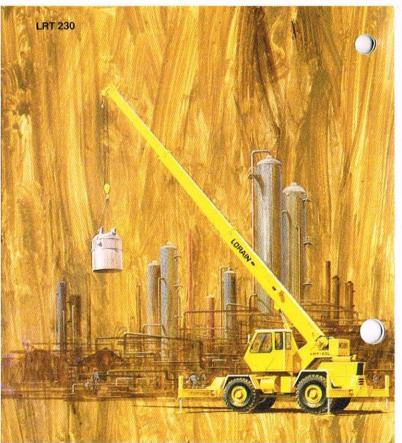
LRT 250

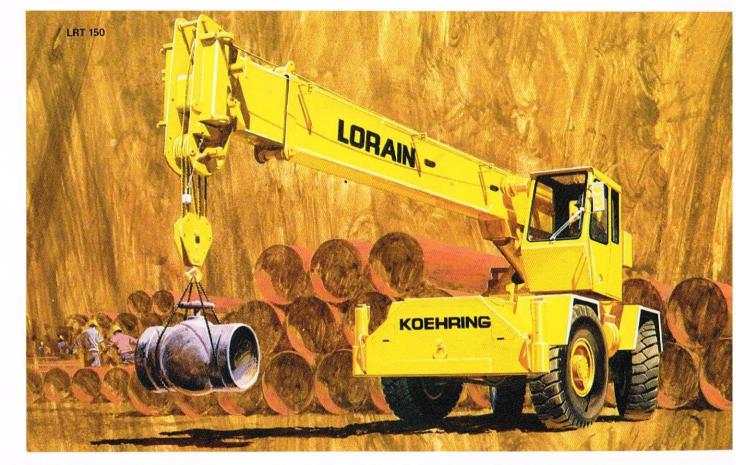
25 ton (22.7 mt) lift capacity standard boom and maximum jib: 136' (41.58 m)

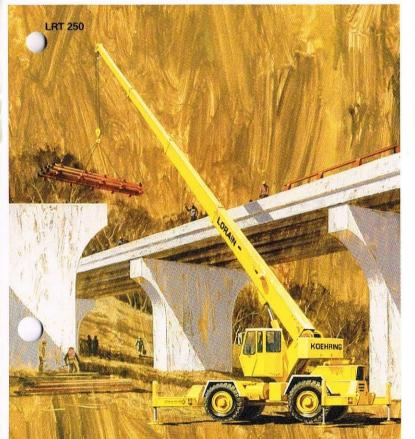
LRT 275

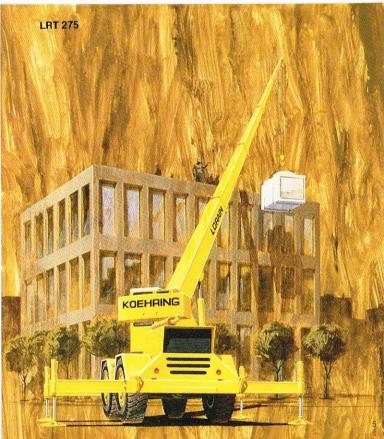
27.5 ton (25.0 mt) lift capacity standard boom and maximum jib: 136' (41.58 m)











move up to the best in reach capabilities

Model-for-model, Lorain LRT cranes feature a heavy-duty boom design that pound-for-pound gives you more lift with less weight. Most models offer a standard telescoping boom that is significantly longer and much easier to erect than competitive models of equal capacity. This gives you greater hook height and far more versatility in meeting day-to-day lifting assignments. If you need greater hook height (or less), Lorain has a number of boom options and jibs to fit your requirements. Lorain winch design is the best in the business and performance proves it. Lorain gives you more rope on the drum, greater line speed and line pull, plus easier control.



37% faster line speed than the closest competitor

Lorain's main winch offers exceptional load control and outstanding pull power. Maximum line speed is 562 fpm. It's 37% faster than its nearest competitor and 240% faster than other competition. Drum capacity is greater, too: 815 ft. (248 m). Simple one lever, two speed control makes operation more efficient. Optional auxiliary winch provides good line pull and line speed, too.



two-block warning system

dard equipment.



interchangeable

iibs fit all

25' (7.62 m)

(7.62 to 12.80 m)

Lorain LRT boom options

A-frame jib 15'-20' (4.57 to 6.10 m)

side stow swing-on jib

side stow swing-on jib 25'-42'

One lever control of the telescoping action means you get the boom up fast and easily. Self-proportioning design maintains ideal strength-to-length working ratios automatically. Eliminates guesswork. Saves time. Boom elevation is from -5° to 76°.



quick-reeving design saves time

There's no need to remove the wedge and socket with Lorain's hook block. Just remove rope guards and you're ready to reeve. Lorain's boom head gives you faster reeving too, and is designed to make jib installation easier.



boom telescope

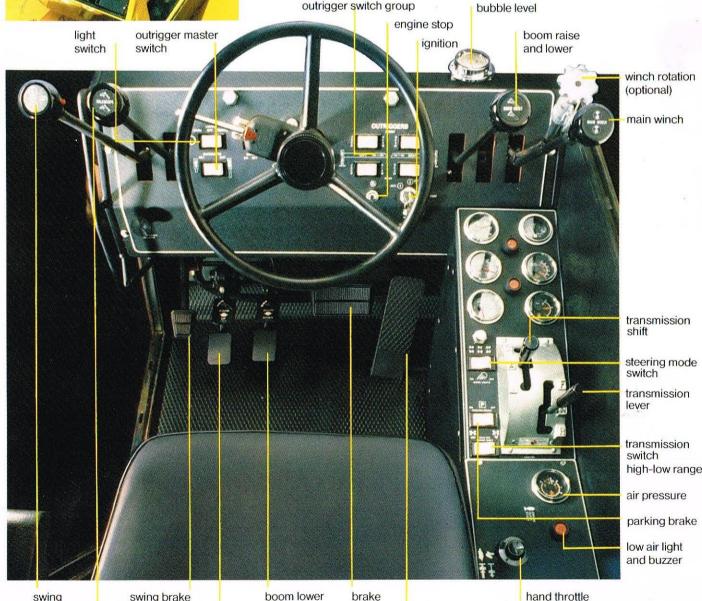
a great place to work

Environmental cab provides outstanding visibility up, out, and all around. It's a quiet place: thick, acoustical foam padding is used inside cab panels. Rubber floor matting is mounted over vibration absorbing pads. Deluxe six-way adjustable seat includes head and arm rests. For better visibility and ventilation, the tinted, Lexan® skylight is hinged, front window is removable, cab door and right side window slide open, too.

control center is a productivity center

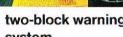
outrigger switch group

All controls and pedals are positioned for the most efficient operation. You won't find a crane that's easier to work with. Crane controls give you simultaneous command of four functions: swing, boom telescope, boom hoist and main winch.



boom raise

accelerator



Lorain gives you a Krueger™ visual and audio warning system to indicate an approaching two-block condition as stan-



Lorain LRT models deliver increased stability and far better lift ability from the widest outrigger spread in 15 ton (13.6 mt) to 27.5 ton (25.0 mt) rough terrain cranes: 18 ft. (5.5 m)!

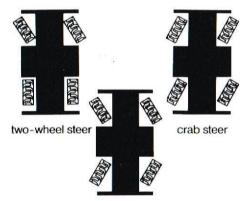
The rear of the superstructure is always within the outrigger spread and the compact tailswing makes it easier to position the machine properly everywhere you work.

A 126" (3200 mm) wheelbase gives Lorain rough terrain cranes outstanding pick-andcarry stability, improved handling ease and a more comfortable ride. When you need tractive effort, you've got more to work with Lorain rough terrain cranes, too: 48,352 lbs. (21 932 kg).

stopping power to match mobility

Heavy duty disc type emergency brake is provided. Wheel mounted brake shoes are self-adjusting.





easy to handle

Four-wheel power steering controlled solely by steering wheel simplifies job-site maneuvering, especially in pick-and-carry work. Choose 2-wheel, 4-wheel or crab-steer to get you where you have to go. Auxiliary steering system is available as an option.

four-wheel steer

	Drive/Steer	
	Standard	Optional
LRT 150, 180	4 x 2 x 4	4 x 4 x 4
LRT 200, 230, 250, 275	4 x 4 x 4	4 x 2 x 4

a chassis unitized to last

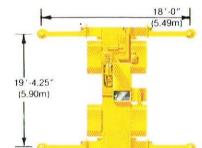
Box-type construction with reinforcing cross members give you maximum strength and horizontal rigidity. Precision-machined turntable mounting plate and integrally-welded outrigger boxes complete the design.



swings smooth and easy

Lorain's turntable connection uses a single row, ball-type swing bearing. Keeps load forces distributed evenly throughout the continuous 360° work circle. Swing hydraulics are smooth and precise. Lorain LRT cranes have a foot pedal actuated heavy-duty multiple disc swing brake. The brake can be locked to hold superstructure at any desired point of rotation.





the biggest lifting base in 15 ton to 27.5 ton (13.6 to 25.0 mt) rough terrain cranes

You get increased stability and more effective lifting capabilities with Lorain's big 18 ft. (5.5 m) outrigger spread.



great traction action

Tractive effort is substantially better than competition. Limited-slip differential and no-slip differential options are available for those who require it.

POWRSPAN" outriggers make set-up easier

POWRSPAN outriggers are out-and-down fully independent outriggers. They extend fast and save set-up time, every time. Removable steel floats provide 254 square inches (1639 cm²) of area per float. Stow easily on carrier frame. Complete controls, master switch and bubble level are located in operator cab.



14:00 x 24-20 P.R. (LRT 150/180) 16:00 x 25-24 P.R. (LRT 200/230/250/275)

Optional tires: 16:00 x 25-24 P.R. (LRT 150/180)

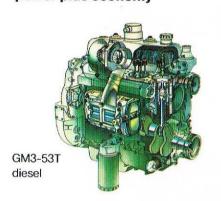
Using higher-ply rating tires provides better "on tire" capacities and longer tire life.







power plus economy



verse. Automatic

reverse alarm.

The standard engine is the GM3-53T diesel. It's a 2-cycle turbo-charged engine that offers greater fuel economy, quiet operation and excellent high altitude performance. For those who prefer a 4cycle diesel, a CAT engine is available as an option.

important options to consider when ordering your

LORAIN LRT crane.

CARRIER OPTIONS 4-wheel drive axles rear planetary

Rear Planetary Drive/Steer Axle. Provides for four-wheel drive capability and substantially improves gradeability for true rough terrain application.

No-spin Rear Planetary Drive/Steer Axle. Provides full power transfer from spinning wheel to the wheel with traction.



Limited slip for front and rear planetary drive/steer axle. Provides for transfer of a portion of the lost power from a spinning wheel on either axle to the other wheel. This feature avoids wear and tear of axle drive shafts encountered by locking type differentials on hard surfaces.

auxiliary steering

Automatically provides emergency steering in the event of engine stall while traveling. Pump is driven off transmission gears which remain in motion as long as the wheels are turning.

fenders

Front and rear.

pintle hook

Pintle hook available for front and/or rear.



lights/mirror

Headlights, tail lights, clearance lights, turn lights and hazard flashers. Back-up lights. Right-hand rear-view mirror.

cold weather starting aid

Measured shot ether injection system to aid engine start-up in cold weather. Temperature switch protects hot engine.

immersion heater

110 volt, 60 cycle, 2500 watt heater for hydraulic oil reservoir. Heats oil in very cold weather conditions for easy start-up operation.

hydraulic cooler

Fin and tube air-cooled type with bypass protection from high oil pressure caused by cold weather conditions. Recommended for continuous dutycycle applications. Tilt-out feature allows easy cleaning of oil cooler and radiator.

tires

 $16:00 \times 25-24$ P.R. (lug type) tubeless $20.5 \times 25-24$ P.R. (lug type) tubeless

SUPERSTRUCTURE OPTIONS

auxiliary winch

Lorain hydraulic winch, power up and down, equal speed, plan-



etary reduction with integral automatic brake.

winch cable rollers

Available for either main or auxiliary winch and is equipped with spring applied tension. Improves cable spooling.

drum rotation indicators

Touch-type, mechanical system with indicator knob mounted on winch control lever available for either main or auxiliary winches.

swing lock

360° positive gear sector-type swing lock engages external swing gear for locking super-structure in any desired position. Actuated by lever located in cab.

Swing bearing protective dust cover aids in protecting the external gear teeth.

automatic function disconnects for two-block warning system

Lorain automatic solenoid disconnects of main winch hoist and telescope functions to prevent a two-block condition.

Lorain automatic solenoid disconnects of auxiliary winch and boom down functions to prevent a two-block condition used in combination with the automatic disconnects of the main winch and telescope functions.

load moment indicator

Krueger LMI System Mark III includes visual and audio warning system; electronic boom angle indicator with angle presets, boom length, and relative load moment indications with automatic function disconnects.

comfort options

20,000 BTU propane heater and defroster (less tank). Improves visibility, productivity and operator comfort during cold weather operation.

20,000 BTU diesel fuel type heater and defroster. Recommended for ambient temperatures below -25° F. (-32° C). Tinted safety glass. Vandal and scratch resistant glass. Tinted vandal and scratch resistant glass. Torsion suspension for six-way adjustable seat increases operator comfort and productivity. Seat belt. Air conditioner:21,500 BTU, recirculating or fresh air. Improves operator comfort and productivity during hot weather operation. Roof window electric wiper. Windshield washer. Tachometer.

work lights

Three sealed-beam work lights; one each mounted on boom, cab, and superstructure. All are 60 watt with 60,000 maximum candlepower. Increases machine productivity by making night-time operation possible. Cab mounted spot light, revolving amber beacon, also available.

interior dome light

Eases reading of capacity charts, range diagrams, etc. during night operation.

BOOM OPTIONS 2 section

26.5-44 ft. (8.08-13.41 m) two section, full power boom, adjustable rollers, single boom hoist cylinder, integral hold valves, and standard quick-reeving boom head. Boom elevation: -5° to 76° .

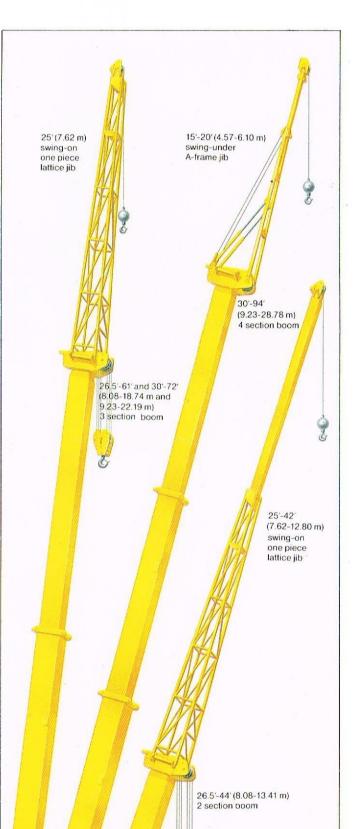
3 section

26.5-61 ft. (8.08-18.74 m) three section, full power, self-proportioning boom with single lever control. Automatically maintains ideal strength-to-length ratio since telescoping sections extend and retract simultaneously. Adjustable rollers for top and intermediate sections provide for easier telescoping, less maintenance and less wear. Single boom hoist cylinder. All cylinders equipped with integral hold valves. Boom elevation: -5° to 76° .

30-72 ft. (9.23-22.19 m) three section, full power, self-proportioning boom, adjustable rollers, single boom hoist cylinder, integral hold valves and standard quick-reeving boom head. Boom elevation: -5° to 76° .

4 section

 $30\text{-}94 \, \text{ft.} \, (9.23\text{-}28.78 \, \text{m})$ four section boom. Three sections offer full power, self-proportioning action. Fourth section is power extended and pinned into place. Boom elevation: -5° to 76° .



auxiliary boom head

Removable auxiliary boom head has single metallic sheave with 12.125 in. (308 mm) pitch diameter, mounted on an anti-friction bearing. Has removable pintype rope guard for quick reeving. Installs to main boom peak only. It is not necessary to remove when jib is erected.

3 jib options

A-frame jib 15'-20' (4.57-6.10 m).

Side stow swing-on jib 25′ (7.62 m).

Side stow swing-on jib 25'-42' (7.62-12.80 m).

hook blocks

Lorain hook blocks have either two, three or four metallic sheaves and a hook latch. Quick reeving design complements boom head and allows reeving to be altered without the need to remove the wedge and socket from the wire rope. 18 ton (16.3 mt), 22 ton (20.0 mt), and 30 ton (27.2 mt) capacity hook blocks are available.



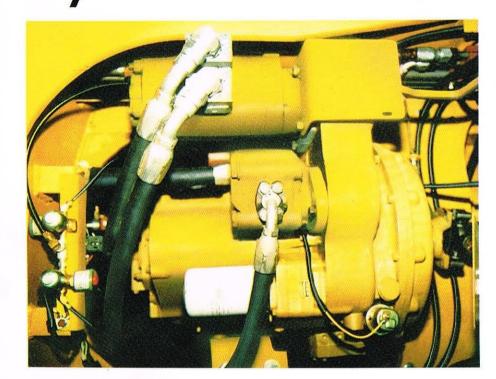
hook and ball

6.25 ton (5.7 mt) top swivel ball with hook and hook latch can be ordered as an option.



10

greater hydraulic efficiency is yours with LORAIN. ...you



...you can operate all four crane functions simultaneously

Lorain has designed its LRT hydraulic system to deliver the response, control and flexibility required of today's rough terrain cranes. In the normal operating mode all four crane functions - main winch, swing, boom hoist and telescope—may be operated simultaneously. When fast cycling is called for, main winch and boom extend are provided with two-speed (operation. Hydraulic system is pressurized to reduce potential pump cavitation and help keep contaminants out. To further extend operating life, there's a full flow oil filtration system with bypass protection which includes a removable 100 mesh (140 micron) suction screen-type filter and a 3 micron replaceable return line filter.

talk to your LORAIN distributor soon

Get all the facts about the Lorain LRT rough terrain cranes, standard and optional equipment from your Lorain distributor. He has a complete background in lifting plus a line of cranes that offer the capabilities you need in today's construction environment. Whatever your specific lifting requirements may be, your Lorain distributor can deliver what you need. He's another reason why you get better value when you buy Lorain. And value is our first specification.

Rough terrain cranes

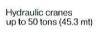
Lorain has a crane to fit your lifting needs

In addition to Lorain's new series of LRT models in 15 ton to 27.5 ton (13.6-25.0 mt) lift capacities, Lorain offers three larger size LRT models: the LRT 330 with a capacity of 33 tons

(30.0 mt), and LRT 450 with a capacity of 45 tons (40.8 mt), and the LRT 550 with a capacity of 55 tons (49.9 mt). Plus, there's a full range of sizes of other types of cranes to meet the full range of today's lifting needs. Match them to your needs soon.



Wheel-mounted lattice boom cranes up to 165 tons







WE RESERVE THE RIGHT TO AMEND THESE SPECIFICATIONS AT ANY TIME WITHOUT NOTICE. THE ONLY WARRANTY APPLICABLE IS OUR STANDARD WRITTEN WARRANTY APPLICABLE TO THE PARTICULAR PRODUOT AND SALE. WE MAKE NO OTHER WARRANTY, EXPRESSED OR IMPLIED.



KC&E-295-1 © Koehring Company 1984 Litho in U.S.A. 5C884LKP