



**FMC**

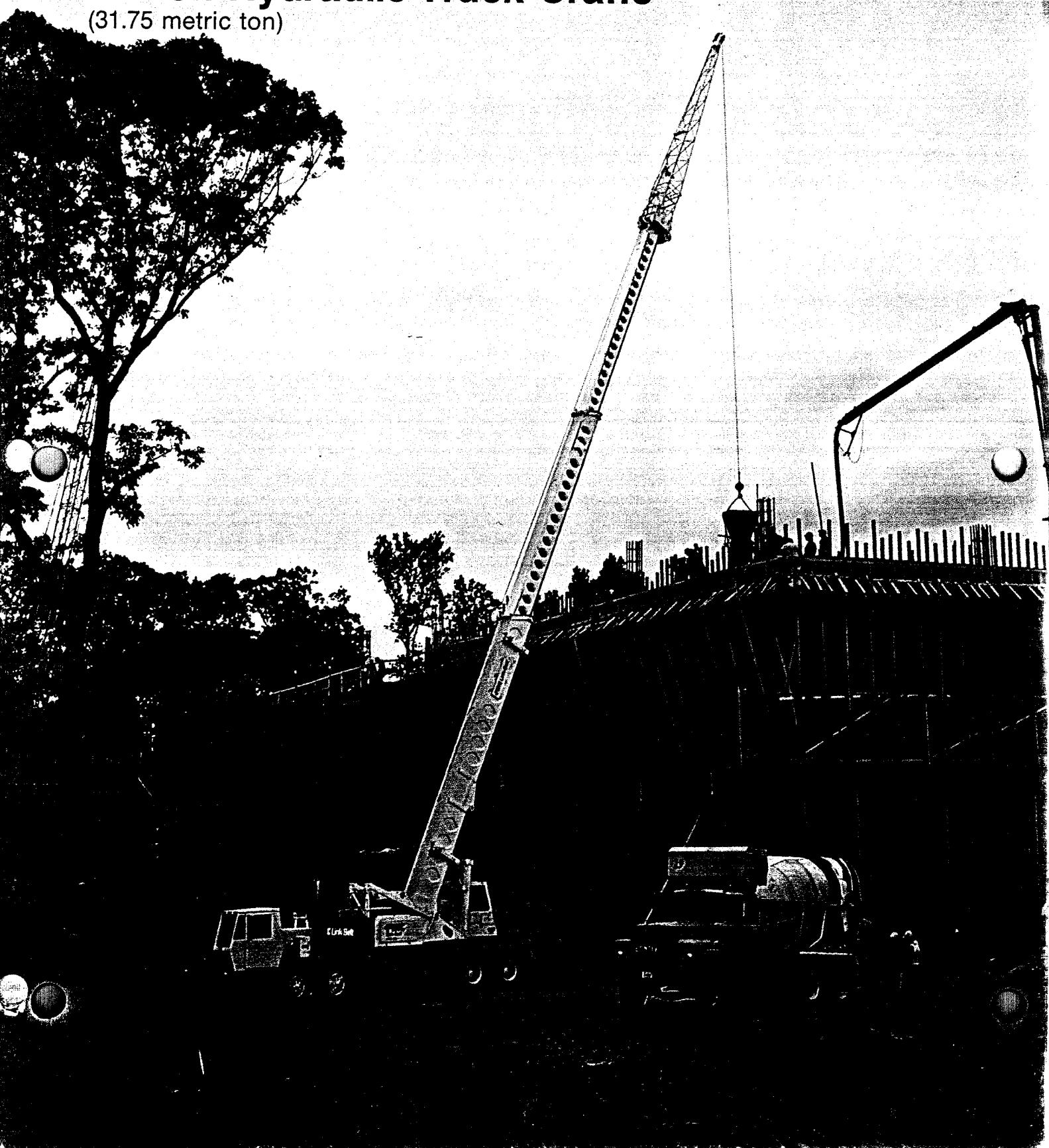
Link-Belt®

**HTC-35**

**35-Ton Hydraulic Truck Crane**

(31.75 metric ton)

GENERAL INFORMATION ONLY





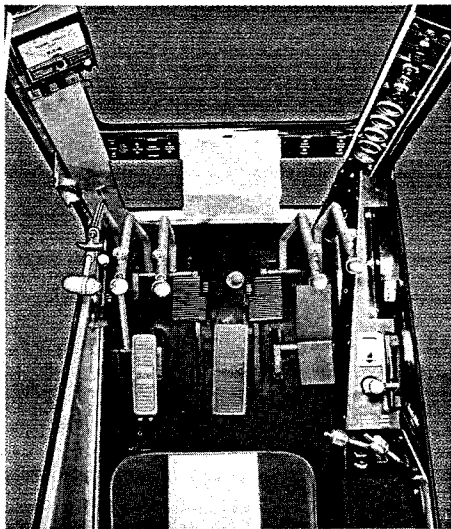
## FMC's unique boom design embossed with diamond-shaped depressions

*Free spooling rope drums allow "free-fall" load lowering*

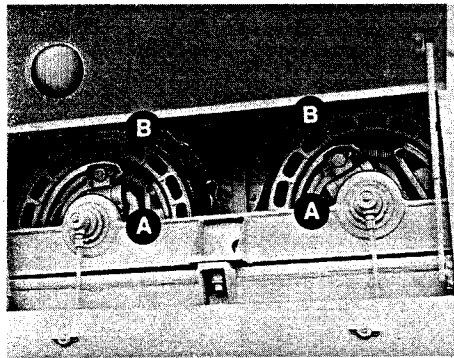
The 35-ton (31.75 metric ton) HTC-35 is one of a line of Link-Belt® carrier-mounted hydraulic cranes available from FMC's Crane and Excavator Division.

The Link-Belt model HTC-35 was designed to meet the contractor's need for a 35-ton (31.75 metric ton) hydraulic truck crane with minimum over-all machine weight for mobility, good lifting capacity, long reach, and price.

The modular and humanized **operator cab** is isolated from the machinery frame by rubber mounts and has optimum visibility. The cab interior features sound-absorbing upholstery. Major control levers are adjustable and mounted in front of the operator for convenience.



Operator cab



Free spooling rope drums

The HTC-35 is available with two wire rope drums (front drum optional). Power is from a 2-directional hydraulic motor through FMC gear reduction. Two-speed hoisting is standard.

Load hoisting/lowering is possible in one of two methods:

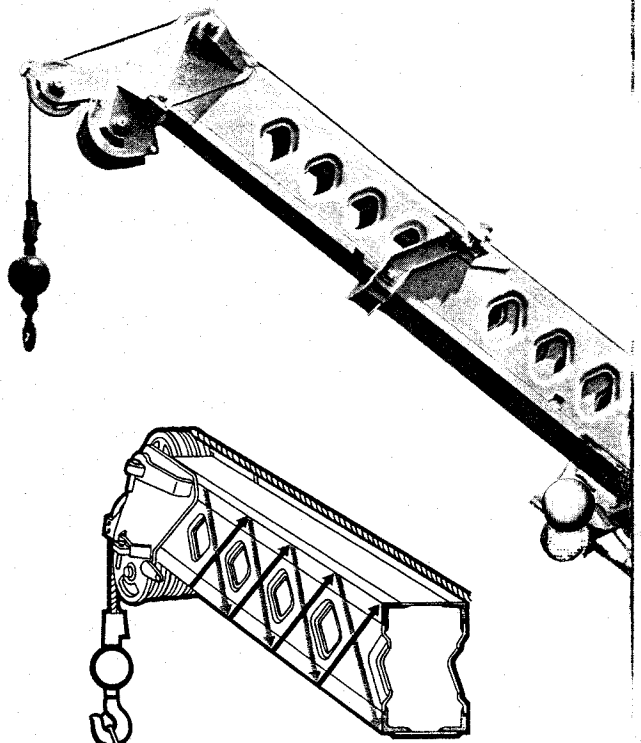
1. With 2-shoe clutch (A) **engaged**, drum brake (B) **released**. Allows for hoisting, holding, and lowering the load with hydraulic motor power.

2. With 2-shoe clutch (A) **disengaged** and drum brake (B) **released**, but with hydraulic motor and gear train only in motion (drums stationary). Allows for hoisting the load through engagement of the 2-shoe clutch (A). To hold the load, the drum brake is applied and the 2-shoe clutch is released. Releasing the drum brake (B) will permit "free-fall" load lowering.

**FMC's exclusive boom design (patented)** is an engineering achievement. It is the result of extensive research and testing of innumerable boom configurations and designs. FMC's boom design utilized minimum gauge steel plate. The boom side plates are embossed with diamond-shaped depressions. This allows the use of lighter weight plate while increasing boom strength and stiffness. The purpose of the diamond shape is to allow the natural flow of boom stresses (both compression and tension) and thus, avoid high stress risers when a load is being lifted. To eliminate undesirable boom corner welds, the steel plates are welded to specially machined corner angles for greater strength and reliability.

Comprehensive stress analysis tests indicate this unique and patented boom design concept to be one of the most effective boom designs available today.

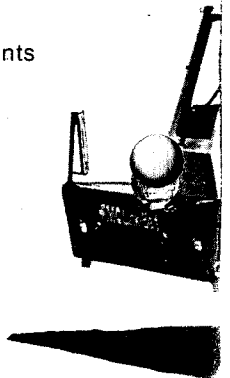
## GENERAL INFORMATION ONLY



■ Compression  
■ Tension

### FMC's exclusive boom design (patented)

FMC designed and constructed the Lexington, Kentucky plant specifically for the purpose of manufacturing the line of Link-Belt hydraulic truck cranes. The most advanced manufacturing technology, numerically controlled and specially designed machine tools, including the boom corner angle milling machine and embossing press, all assure the ultimate user of more accurately manufactured components and long machine service life.



**FMC**

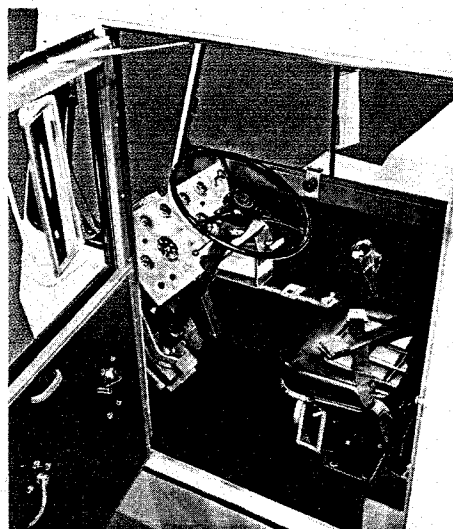
## Lightweight carrier primary design consideration

*Carrier cab with a touch of luxury*

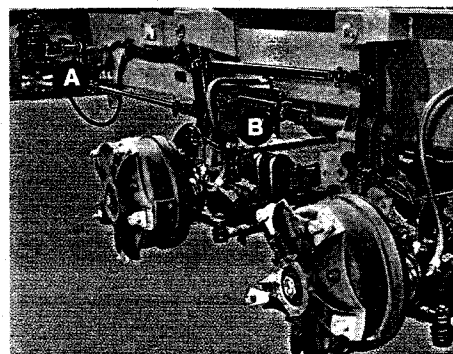
The 4-axle carrier was especially designed by FMC for mobility and on-the-job durability. The box-type high-strength alloy steel frame (100,000 p.s.i. minimum yield strength steel between outrigger boxes) results in a desirable weight-to-strength ratio — an important consideration in axle loadings for machine transportability.

The **carrier cab** is mounted on rubber mounts for noise and vibration reduction. Cab interior with vinyl upholstery provides the operator a touch of luxury. Adjustable, spring cushioned seat with air shocks is provided.

The **power assist hydraulic steer** components are mounted to the side of the carrier frame for protection and this results in equal power assist force when steering right or left. Operator controls steering gear and linkage (A) and hydraulic control valve actuated by steering gear directs oil from engine-driven pump to hydraulic cylinder (B) for power assist hydraulic steer.



Carrier cab



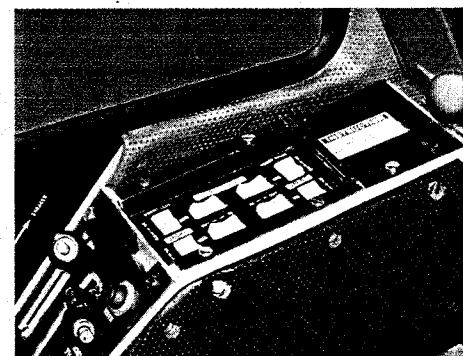
Power assist hydraulic steer

Outrigger boxes are welded to the carrier frame. **Outrigger controls** are conveniently located in the crane cab for control of the beams and jacks.

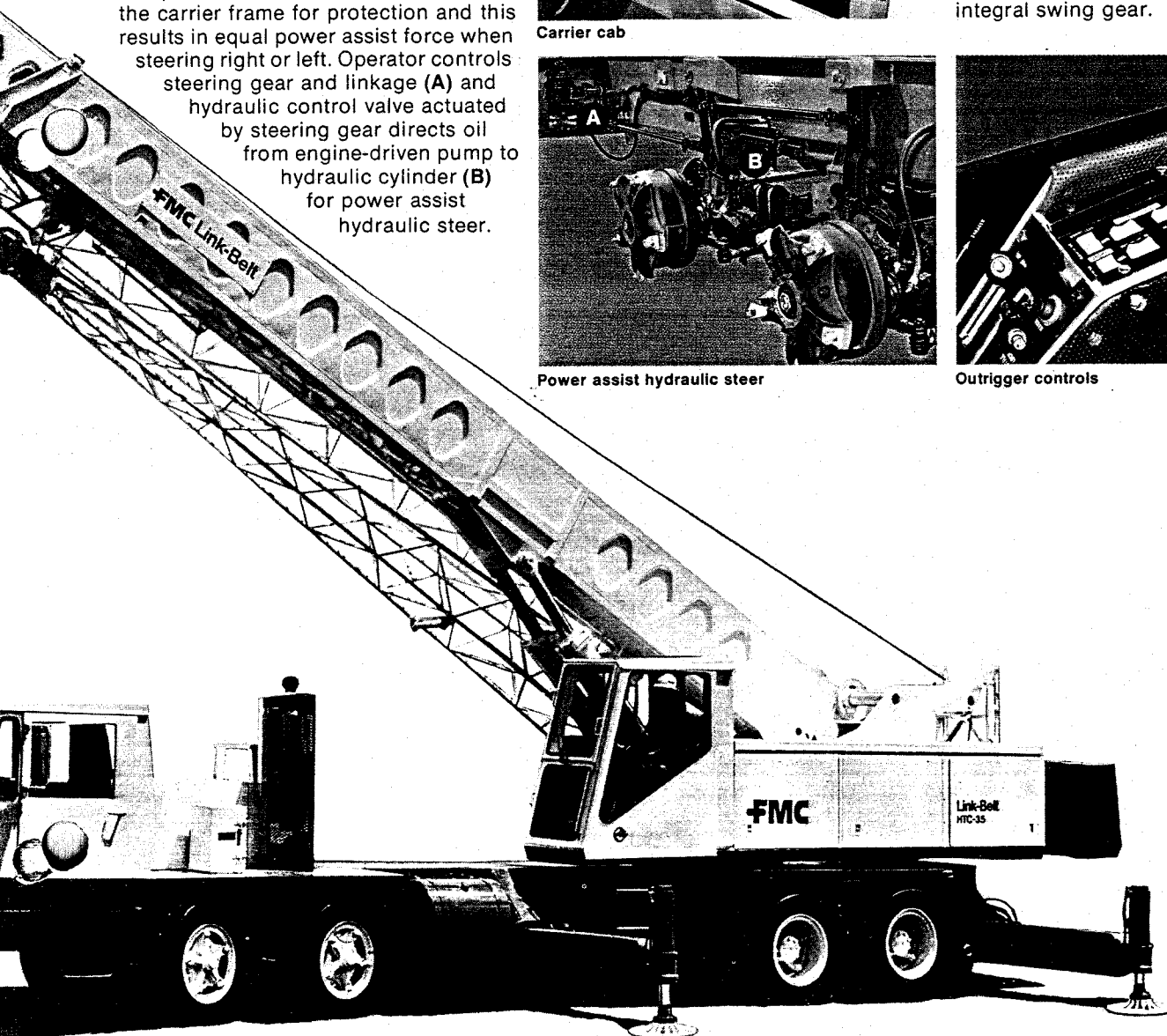
The carrier engine driven pumps supply hydraulic power for all the crane functions. Oil from the pumps flows through a rotating joint mounted on the center of rotation which routes oil into the upper hydraulic systems.

The 8 x 4 carrier features a diesel engine, 13-speed transmission, 8-wheel service brakes and parking and emergency brakes on the rear wheels.

The crane upper is mounted to the carrier by a turntable bearing with integral swing gear.



Outrigger controls





## 3-Section power boom plus maximum jib to 130 ft. (39.62 m)

*HTC-35 counterweight extends/retracts hydraulically*

GENERAL INFORMATION ONLY

The Link-Belt® HTC-35 hydraulic truck crane is equipped with a 3-section power boom with a retracted/extended length 32' — 80' (9.75 — 24.38 m). The boom head is equipped with three sheaves, all mounted on anti-friction bearings to eliminate the need for daily lubrication. An auxiliary sheave is available.



Photo #1

The basic 2-piece jib is 28' (8.53 m) long, (5' (1.52 m) base and 23' (7.01 m) head section), and will swing into the stored position as shown in **photo #1**. 22' (6.71 m) jib extension is available for a total jib length of 50' (15.24 m). The 50' (15.24 m) jib can be stored and carried on the machine as shown in **photo #2**.

The jib mast is utilized with the 50' (15.24 m) jib as shown in **photo #3**.



Photo #2

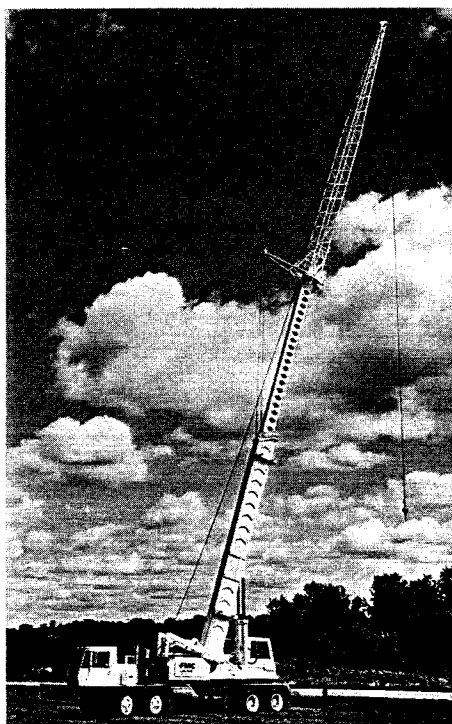


Photo #3

The HTC-35 truck crane **counterweight is hydraulically extended or retracted**. The counterweight must be extended when lifting and retracted for job-to-job travel.



Counterweight — hydraulically extended/retracted

The HTC-35 was specifically designed to meet industry's need for high mobility, low over-all weight, coupled with high rated capacity.

We are constantly improving our products and therefore reserve the right to change designs and specifications.

**FMC Corporation Crane and Excavator Division** World Headquarters Cedar Rapids Iowa 52406

Plants in: Cedar Rapids Iowa (2) • Lexington & Bowling Green Kentucky • Ontario Canada • Milan Italy • Queretaro Mexico & Nagoya Japan (under license)