

*No other machine in the work range
can compare . . . with the*

HC-108A *Zephyrcrane*

True power hydraulic control system

Smooth Speed-o-Matic power speeds work, cuts operator fatigue and needs less adjustment than other systems.

Unique full-function design permits independent machine operations

Separate shafts, gears and clutches for each function allow simultaneous performance of many operations . . . greatly reduce power train wear.

Lasting strength and stamina

The HC-108A features quality materials and precision fabrication throughout. There's far less chance for misalignment and resulting wear.

More readily accessible than most servicemen would believe possible

Machine can be easily field stripped without removing major portions of cab.

Check these standard features, many of which are obtained only as optional extras on other machines or are entirely exclusive with Link-Belt Speeder

CARRIER

- Heavy-duty custom built 3-axle carrier
- Hydraulic power steering
- Planetary rear axles
- 12 speeds forward and 3 reverse
- Tapered rear outrigger assembly
- Double box, removable front and rear outriggers with full width sliding beams
- Outrigger beams mounted on rollers
- Full fenders
- Storage type running boards
- 6 x 4 drive
- 6-wheel brakes

UPPER

- Speed-o-Matic controls
- All-welded, stress-relieved upper frame
- Involute-splined heat-treated shafting throughout
- Machine cut spur gears and pinions
- Exclusive drum shaft design
- Extended front and rear drum shafts
- Fully interchangeable clutches
- Independent rapid boomhoist
- Boom lowering clutch
- Eight adjustable conical hook rollers, mounted in four equalized pairs

- Rollers, roller brackets and roller path are heat-treated
- Pin-connected crane boom
- Two-piece, box-lattice crane boom
- Rigid boom backstops—spring loaded bumpers (standard angle boom)
- Friction type swing brake
- Heavy duty retractable high gantry
- Extender cables
- Foot-throttle
- Three boompoint sheaves on needle bearings

Get all the optional features you need to custom-tailor the machine to the job

CARRIER

- 4-axle carrier (8 x 4 drive with 8-wheel brakes)
- Electric remote control
- Screw-type outrigger jacks and light-weight pontoons
- Hydraulic outrigger beams and jacks (cab or ground controlled arrangements available)
- Choice of diesel engines

UPPER

- Wide selection of gasoline or diesel engines equipped with friction clutch, hydraulic coupling or torque converter
- Cotta two-speed transmission for gasoline engines
- Throttle control mounted on swing or hoist levers
- Reversing clutches for either or both main operating drums
- Third operating drum

- Hydraulic counterweight removal jacks
- Hydraulic jack for raising or lowering retractable high gantry
- Elevated cab
- "HI-LITE" tubular boom with telescopic boom backstops
- Crane boom cable supporting rollers
- Boomhoist lever kick-out device
- Crane boom angle indicator
- Visual drum rotation indicator

The HC-108A . . . an advance design 40-ton capacity truck crane engineered for both current and future assignments

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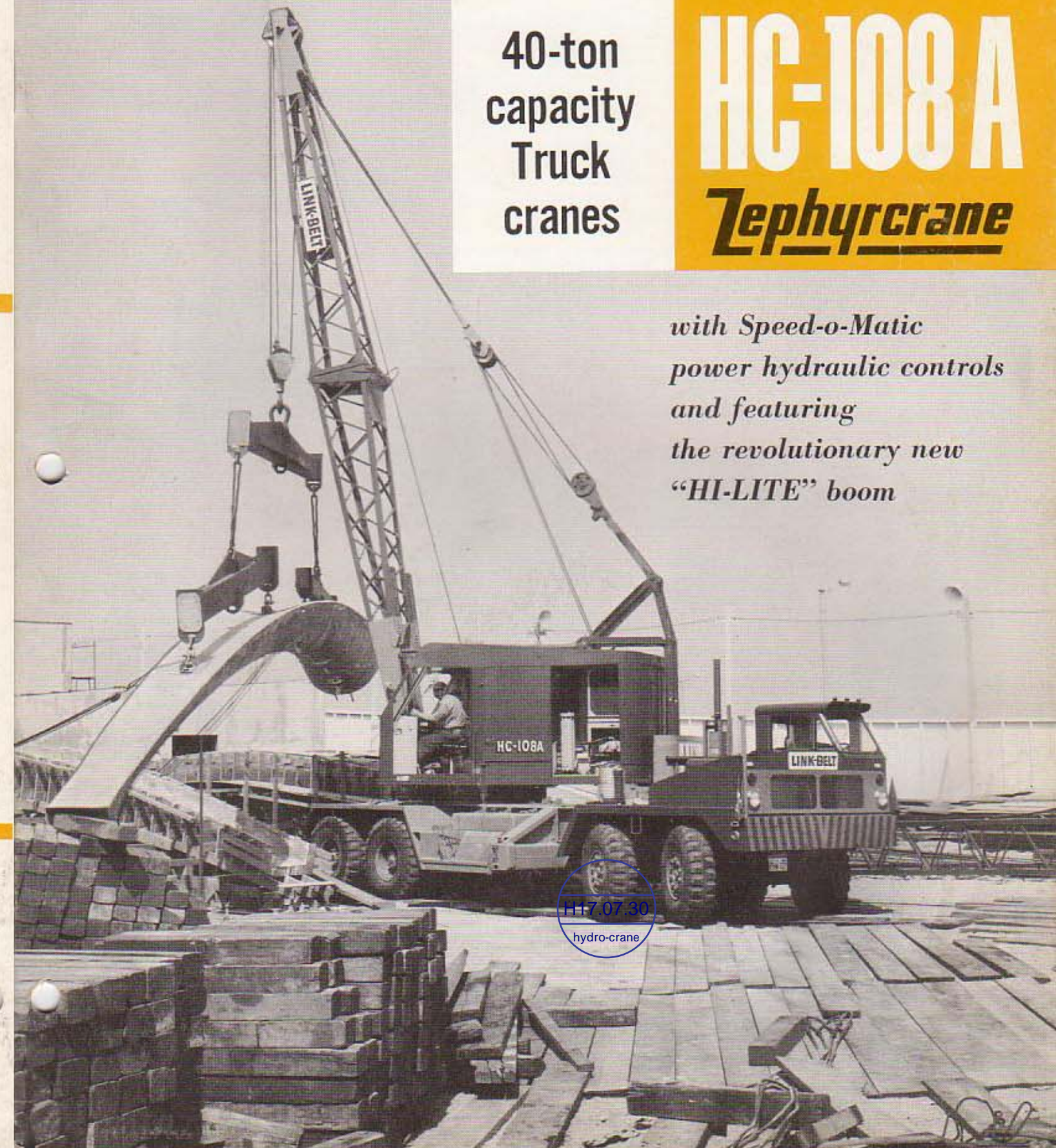
**LINK-BELT
SPEEDER**

**40-ton
capacity
Truck
cranes**

HC-108A

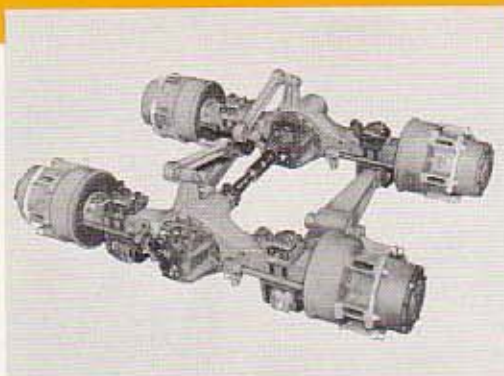
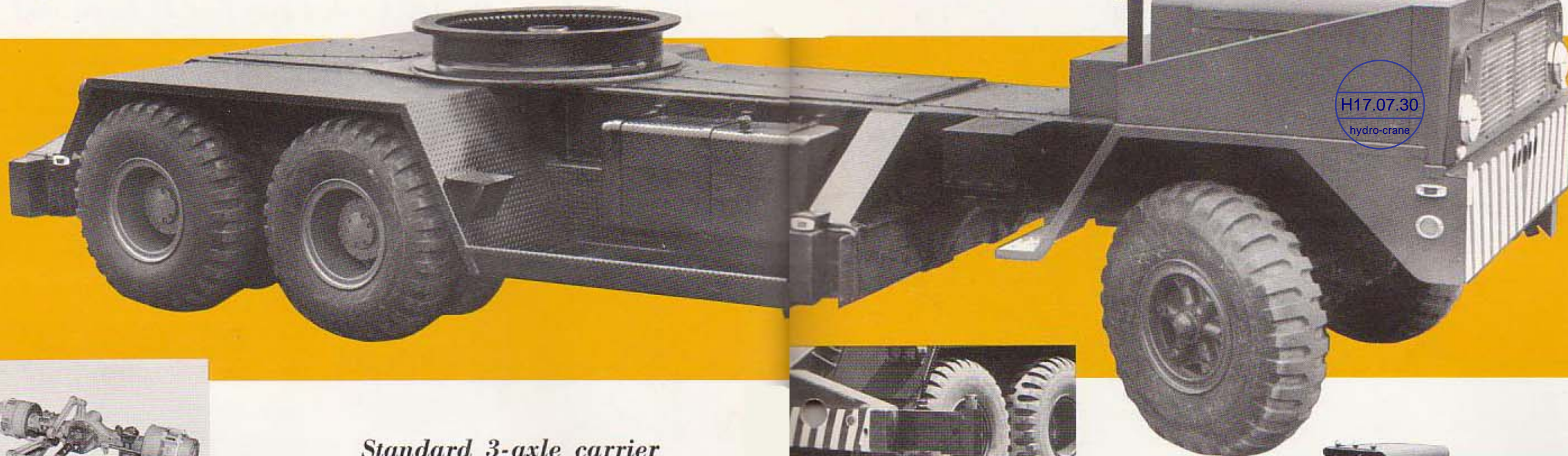
Zephyrcrane

*with Speed-o-Matic
power hydraulic controls
and featuring
the revolutionary new
"HI-LITE" boom*

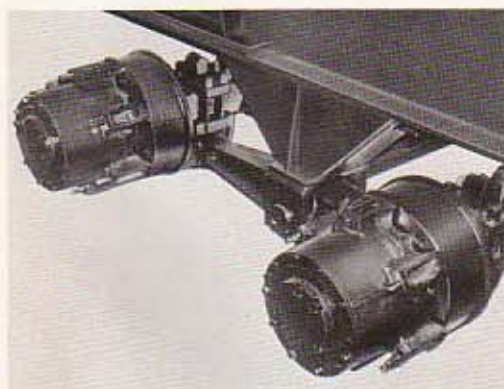


HI 17 07 30
hydro-crane

cat-quick on the road... tigers on the job



PLANETARY AXLES are well suited for truck-crane carriers because they provide high mechanical efficiency and place the final force at the rim of the wheel for greater traction effort. Additional advantages are their relative lightweight, low maintenance record and high ground clearance.



BOGIE OR WALKING BEAM SUPPORT for rear axles on 3-axle carrier or both front and rear axles on the optional 4-axle carrier, allows tandem wheels to follow uneven terrain for maximum traction and mobility.

Standard 3-axle carrier

Custom-built to Link-Belt Speeder's specifications, this specially designed carrier provides a sturdy, stable working platform for all lifting crane jobs... offers the quality construction needed for many years of trouble-free service.

It features these outstanding customer benefits as standard equipment:

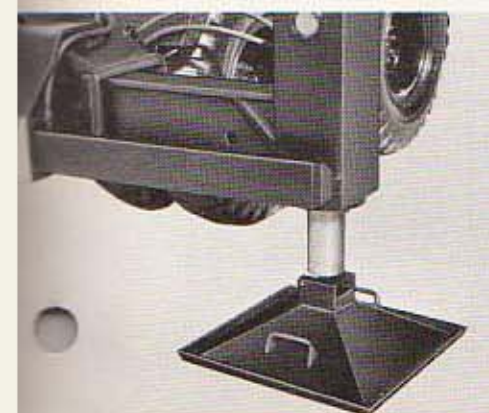
- Hydraulic power steering
- Full-floating walking beam support for tandem rear axles
- 12 speeds forward and 3 reverse provide a wide range of speeds for both on and off-highway travel
- 6 x 4 drive
- Planetary rear axles
- 6-wheel air brakes
- Removable front and rear outrigger boxes and beams
- Diamond plate rear fenders

Optional features include:

- Diesel engine
- Electric remote control
- Screw type outrigger jacks and lightweight pontoons
- Hydraulically controlled outrigger beams and jacks



REMOVABLE FRONT AND REAR OUTRIGGER BOXES AND BEAMS add to the ease of stripping weight from the HC-108A for highway travel. Full-width, double sliding beams in both front and rear boxes are mounted on rollers for fast, easy extension or retraction. Screw-type outrigger jacks are optional and the lightweight pontoons, also optional, feature a quick connect and disconnect socket.



HYDRAULIC OUTRIGGER JACKS AND BEAMS (optional). Power hydraulics, instead of muscle power, quickly extends or retracts outrigger beams and jacks for faster set-up or get-away. Result—actual work time is increased. Two arrangements are available:

- Two-point contact (rear only) with individual cab controls for both beams and jacks.
- Four-point contact (front and rear) with individual ground operated controls for beams and jacks at all four contact points.



Optional 4-axle carrier

This sturdy, highly mobile carrier was designed specifically to distribute axle loadings more evenly over the full length of the carrier. Front and rear tandem axles are bogie mounted. Standard features include 8 x 4 drive with 8-wheel air brakes, 12 speeds forward and 3 reverse, power steering, planetary rear axles, removable front and rear outrigger boxes and beams and diamond plate rear fenders. Optional equipment is the same as listed for the 3-axle carrier.

Introducing the revolutionary

Less weight + double

new "HI-LITE" tubular boom*

strength = more capacity, longer reach

HC-108A CRANE

Unassisted, the HC-108A raises 200 feet of boom and jib from ground to sky . . .

The ancient Greeks had a word for it—tetrahedron—and Link-Belt Speeder has developed a unique application for it . . . the result is a revolutionary design change in the conventionally styled crane boom.

TETRAHEDRON IS STRONGEST GEOMETRIC FIGURE

The tetrahedron is the only solid geometric figure made up of just four sides. And because the four sides are all triangular in shape, this pyramid-like structure offers the greatest resistance to stresses or loadings from all directions.

APPLIED GEOMETRY AND NEW STEELS PAY OFF

Use of this age-old geometric figure, plus high strength, light weight steel tubing, explains how it's possible for the 40-ton HC-108A to pick up 150 feet of main boom and 50 feet of jib *unassisted*. More important, it explains how this boom can handle greater loads at longer reaches . . . can be swung, hoisted and lowered at a brisk pace all day long with only a minimum of whipping, twisting or deflection. Now, an operator can take on any long-boom job with confidence . . . no need to fight off nervous fatigue.

Link-Belt Speeder has added this important geometric principle to an otherwise conventionally styled boom in the form of internal cross bracing. Hundreds of triangles combine to form scores of tetrahedrons throughout the length of the boom. All work together to fully brace the boom against the combined forces of compression, torsion and tension.

A STUDY IN SYMMETRY is this end view of the optional "HI-LITE" tubular boom. Pyramid-like, tetrahedral cross bracing design cuts long boom deflection and whipping action to a safe minimum. The four main chords are sealed square tubes of high strength, light weight alloy steel. Lattice-work and internal cross bracing are of sealed, round tubing.



MIDPOINT SUSPENSION CABLES—This cable arrangement furnished with "HI-LITE" boom gantry lends support to extra long booms at mid-point . . . reduces boom deflection when raising boom from ground. Required with all "HI-LITE" booms over 130 feet long and optional for use with booms of lesser lengths.



SPECIAL "HI-LITE" BOOM GANTRY is required for "HI-LITE" booms over 130 feet long to increase the angle of support between boom-hoist cables and boom, thereby reducing compression loadings.

PIN CONNECTIONS are standard for both the angle-type boom and the optional "HI-LITE" boom. They permit fast, simple folding . . . save time when inserting or removing boom extensions. Because chords are butted together, boom stresses are not on the connecting pins. All boom section butt plates are precision machined to eliminate possible high spots . . . assure proper, full-face mating of sections.

Other job-tailored crane features include

spring-loaded rigid boom backstops for angle booms and telescopic backstops for "HI-LITE" booms, extender cables for both booms and hydraulic controlled swing brake. Among optional features are boom angle indicator, drum rotation indicator and cable supporting rollers for top side of long crane booms. Also, roller type boom-point cable guards for angle booms.

*Optional extra.

THREE SHEAVE HEAD MACHINERY for either standard angle boom or optional "HI-LITE" boom features three boom-point sheaves mounted on anti-friction bearings. No need to lower boom for daily greasing. Triple sheaves permit multiple reeving of hoist line for extra fine control in spotting loads. Jib peak sheaves also on anti-friction bearings.

STANDARD ANGLE-TYPE BOOM—Ideally suited to all general purpose lifting crane applications is the standard angle-type boom. It's of two-piece, box lattice construction, with alloy chord angles. By means of 5, 10, 15 and 20 foot extensions, the basic boom can be lengthened to the recommended maximum of 100 feet. And, with high capacity jibs in 20, 30 and 40 foot lengths, a total recommended reach of 140 feet is possible.

BOOMHOIST LEVER KICK-OUT (optional) makes close radius booming extra safe. No danger of booming up to, or beyond, the balancing point since the boom will first strike the bolt head that triggers release of the boomhoist lever. Once the boomhoist clutch is disengaged, the automatic spring-applied boomhoist brake holds boom at that position until lowering is desired.

PATENTED RETRACTABLE HIGH GANTRY, standard equipment for both booms, can be quickly raised or lowered under power. Also available is a hydraulic jack device that permits one-man power raising or lowering. For "HI-LITE" main booms over 130 feet long, a specially designed "HI-LITE" boom gantry is required. (See photo on opposite page.)

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hydraulic crane