New HC-48A Heavy-Duty Carrier

The new HC-48A heavy-duty carrier incorporates the world's most advanced engineering and design. It is 100% designed and manufactured by Link-Belt Speeder. The carrier is specifically designed to include the frame strength and matching of drive train components for not only the 20-ton rated capacity but also for the optimum over-all working capacities on both tires and outriggers. Turning radius is 36' 4" over corner of bumper.

The standard HC-48A carrier features a 6 x 4 drive with 9:00 x 20 10-ply rated tires. Also available are 10:00 x 20 12-ply rated tires. The gasoline or diesel engine drives through a 5-speed main and 2-speed auxiliary transmission which offer the flexibility of 10 forward speeds for negotiating steep grades, maneuvering through traffic or traveling at highway speeds. For fast moves between jobs, top highway speed is 46.9 mph with gasoline engine.

The rear axle is equipped with an inter-axle differential to eliminate wheel fight and increase tire life. Cab-controlled inter-axle differential lock-out provides positive traction between tandem axles. The carrier is equipped with four-wheel air brakes. Six-wheel air brakes are available for heavy duty or special situations where greater than normal braking ability is desired. Front and rear double-box outriggers are integral with main frame. Outrigger beams can be equipped with manual, screw-type jacks and pontoons to speed setting of outriggers. As an option, a carrier with a 6 x 6 drive is offered where greater off-highway tractive effort is desired.

For short, on-the-job moves, remote control is available for "driving" the carrier from the crane upper. The carrier remote control panel is located at the crane operator's position.

Fast crane set-up is assured with
optional Link-Belt hydraulically operated outrigger beams and jacks.

Ground-controlled, separate out-and-down movement of beams and jacks contour the HC-48A to rough terrain. Diverter valve, controlled by the crane operator, directs oil from the upper power hydraulic control system to the carrier outrigger control system. Once the outrigger jacks are set, a check valve fixed to the jack cylinder "locks" the oil in the cylinder.

The crane upper is mounted to the truck by a turntable bearing with integral swing gear providing the ultimate in smooth swings and reliability. The turntable bearing outer race bolts to the crane upper and the inner race is welded to the carrier.
The Original Full-Function Upper Machinery Design

1. **Boomhoist**: Independent, gear-driven boomhoist features power hydraulic two-shoe clutch for both precision raising and lowering of the boom.

2. **Swing Clutches**: Two-shoe swing clutch transmits power smoothly to the swing shaft.

3. **Load Lowering**: Independent front and rear drum power load lowering clutches for powering down light loads and controlled lowering of heavier loads.

4. **Hoist Clutches**: Two-shoe hoist clutches for front and rear rope drums.

5. **Drum Brakes**: Mechanical drum brakes, separated from drum clutches, result in cooler brakes and clutches for longer lining life.

6. **Controls**: Exclusive Speed-o-Matic power hydraulic control system.

7. **Engines**: Gasoline or diesel engines available.

8. **Frame**: All-welded, stress-relieved and line bored frame.
The unique power train in the HC-48A makes possible extraordinary performance and savings for its owner. Permits tailoring your truck crane to the job. All upper machine functions are gear driven, completely independent and controlled by two-shoe power hydraulic clutches. Power load lowering clutches are available for either or both operating drums. Clutch shoes are interchangeable and mounted outside the side housings for easy and fast accessibility. Mechanical drum brakes are separated from drum clutches, thus eliminating harmful heat transfer, increasing lining life. Shafts are mounted in line bores on anti-friction bearings for long gear and shaft life. Link-Belt Speeder Full-Function

Design is an exclusive power train design proven on the job, year after year, to be far superior to conventional crane designs.

The fully independent boomhoist features power hydraulic clutch control for both precision raising and lowering of the boom. An automatic spring applied drum brake is power hydraulically released from boom raising or lowering. Also, a manually controlled drum locking pawl holds boom at fixed operating radius.

Independent Boomhoist

Precision All-Welded Frames

Self-adjusting power hydraulic two-shoe clutches are used for all functions. These clutches can be partially engaged for smooth acceleration and deceleration of swing, hoist and boomhoist. For maximum line pull, they can be fully engaged.

For increased machinery life, the precision all-welded upper frame is stress-relieved, then line bored for the swing, boomhoist and operating drum shafts. Shafts are mounted on anti-friction bearings. The properly aligned bearings, shafts and gears result in less wear, less downtime and lower maintenance cost.

The Link-Belt exclusive Speed-o-Matic power hydraulic control system permits use of two-shoe clutches for all machine functions. Oil under pressure does the work. This system is unaffected by day-to-day atmospheric variations and does not require priming or bleeding. Only seasonal oil changes are necessary. By means of variable pressure control valves, the operator can meter the oil under pressure to each two-shoe clutch for prompt, positive and smooth response.

Two-Shoe Clutch

Speed-O-Matic Power Hydraulic Controls
The HC-48A angle boom is quality-built with alloy chord angles. The basic boom is two-piece, 25-ft. length. Boom extensions of 5 ft., 10 ft. and 20 ft. lengths are available. All boom sections are equipped with pin connections to permit easy removal and addition of extensions. Boomhoist jib-mounted units are standard. High capacity jib available in 20-ft. and 30-ft. lengths. For fast jib-to-boom hook-up, jib strut is pinned to the jib base section.

Tubular, telescoping jib backstopping and strut deflector sheaves are mounted on needle bearings, eliminating the need for daily lubrication.

The boom angle indicator serves as a handy reference to the operator. Mounted on the boom, it is clearly visible to the operator at all times.

With the boomhoist clutch limiting device, when the boom is raised closer than minimum radius, the boom will actuate a control that disengages boom raising clutch and automatically engages spring applied boomhoist brake.
Pin connections facilitate fast, simple erection, dismantling or folding of the boom. Boom-carrying lugs are provided for boom set-up and for carrying the folded boom. They also provide substantial time savings when inserting or removing boom extensions.

Spring-Loaded Boom Backstops

Spring-loaded boom backstops are standard equipment on the HC-48A. These back-stops offer cushioned boom support at minimum radius.

For maximum economy of operation, the HC-48A is designed throughout to require a minimum of daily servicing. Three boompoint sheaves mounted on anti-friction bearings eliminate the need for daily lubrication.

The mechanically operated swing brake holds upper and boom at any swing position. Or, it can be set to engage partially for a slight drag in ultra-precision work. The HC-48A also features a mechanical swing lock as standard equipment.

A full-revolving fairlead rotates to insure front drum rope support in all positions. All moving parts are mounted on anti-friction bearings, lengthens inhaul rope life, permits greater economy.
HC-48A Easily Adapts To Meet Exact Job Needs

The HC-48A is a versatile and adaptable tool. It can be used with outstanding success in a great variety of working situations. For dragline work, drum shafts are mounted on anti-friction bearings permitting bucket casting with little drag; full revolving fairleader with anti-friction bearings throughout lengthens inhaul rope life and eliminates daily lubrication.

Equally at ease with a clamshell where power hydraulic controls and two-shoe clutches permit smooth, positive hoisting and swinging of upper and boom; independent gear-driven boom hoist with automatically spring applied brake for accurate spotting of the bucket.

With a lifting magnet attachment, the HC-48A truck crane becomes an ideal tool for the scrap yard operator. Power hydraulic controls do not demand costly daily maintenance; all two-shoe clutches are mounted outside the side housings for easy accessibility; drum clutches are separated from drum brakes, eliminating heat transfer and resulting in longer lining life. The HC-48A is available with belt-driven generator, controller, volt meter, combination tagline winder and take-up reel and push-button controls at operator's position with magnet over-excitation.

The HC-48A is designed to satisfy your 20-ton truck crane needs.

We are constantly improving our products and therefore reserve the right to change designs and specifications. For certified dimensions, consult factory.

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