STRONG-BAC

Paper Roll Handling Equipment

- LIFTING BEAMS with FIXED or PIVOTING “J” HOOKS
  New QUICKSHIP Model - see page 4
- ADJUSTABLE BEAMS
- ROTATING BEAMS
- PAPER ROLL GRABS
- TONG GRABS
- MOTORIZED ROLL LIFTERS
- SPECIAL "C" HOOKS
- MOTORIZED ROLL POSITIONERS
- SPECIAL PALLET LIFTERS

Distributed By
McLaughlin Hoist & Crane
1850 Larkin Williams Rd.
Fenton, MO 63026
(636)343-9700
www.sticrane.com

Quality & Engineering

Caldwell engineered below-the-hook lifters offer the broadest range of products in the industry to give you flexibility to address your particular application requirements with the economy of a standard product, and at the same time our engineers offer innovative solutions to applications that require custom design.

Below Hook Lifters are devices (excluding slings) that attach hoists to their loads. These lifters can be categorized into three types.

1. **Supporting** - carries the load on a bearing surface(s).
2. **Pressure** - clamps the load and supports it by indenting the load.
3. **Gripping** - by conforming to the load surface (usually with pads), forming a sufficient coefficient of friction.

Caldwell lifters adhere to the highest quality standards and all lifters conform to **ASME B30.20 standards**.

**Caldwell Delivery Programs**

Items in our QUICKSHIP program will be shipped within 7 to 10 days (not including weekends and holidays). Look for the red QUICKSHIP logo on selected standard products and the specific model numbers available under QUICKSHIP, which are coded in red.

All Caldwell lifters have

- Registered Metal Tags as required by ASME B30.20.
- Rated capacities (in black) and Product Safety Labels are displayed on both sides of lifter.

**Caldwell’s Standard Quality Assurance** procedures include a random sampling of all orders for proof testing. If you want your lifter proof tested and a test certificate issued, please specify (there is a nominal charge).

**Benefits your company will receive with a Caldwell Lifter**

- Increased productivity.
- Low cost maintenance.
- Increased safety of an engineered product.
- Reliability and durability for long lasting service.
- Registered metal tags attached to each lifter for traceability.
- Rated capacities and safety warnings displayed on both sides of lifters.

**DISCLAIMER:**

All product designs subject to change without notice. Items pictured in this catalog are a representation of a specific application design. Due to variations in applications, the product you purchase could be designed differently than depicted in this catalog.
Strong-Bac® Below-The-Hook Lifters have been designed for specific tasks to withstand the particular forces imposed. Guidelines for installation, inspection, maintenance and repair, safe operation and operator training of these lifters follow:

**INSTALLATION**

Below Hook Lifters shall be assembled and installed in accordance with the manufacturer's instructions, unless other specific arrangements have been approved in writing by manufacturer. When lifter/auxiliary power supply is required, user inspection shall ensure that the power source complies with ANSI/NFPA 70, National Electrical Code and shall include a power disconnect switch as required in accordance with ANSI/NFPA 70 based on the lifter's requirements. If electrical connections are made, the power supply and corresponding power disconnects shall be connected to the line side (power supply side) of the crane disconnect or to an independent circuit as specified in the manufacturer's operating instructions.

Check for correct rotation of all pumps and power units, lubrication of moving parts, and filling of reservoirs, all in accordance with manufacturer's instructions.

**OPERATOR TRAINING**

Lifters shall be operated in accordance with manufacturer's operating instructions, and by personnel who have received instructions described in the "Operating Practices" section of these guidelines. Training shall also include instruction regarding:

1. Details of the lifting cycle.
2. Application of the lifter to the load including (according to the manufacturer's instructions) adjustments to the lifter, if any, to adapt it to various sizes and kinds of loads.
3. Instruction in any special operations or precautions that may be required.
4. Recognition of proper load configuration. For example, preferred operation requires an orderly pattern of stacking.
5. Before assuming responsibility for using the lifter, an operator shall demonstrate his understanding of the lifting procedure to the instructor. The instructor should record, for your personnel evaluation, notes of operator's demonstrated ability.

**INSPECTION**

The lifter shall be visually inspected by or under the direction of an appointed person on a daily or weekly schedule depending on the nature of the lifter and the severity of the service.

Details to look for include but are not limited to:

1. Structural deformation.
2. Cracks in the structural frame, welds, hoist hook attachment points, mechanically operating parts, any attached slings, clevises and hooks.
3. Malfunctions during operation of a mechanically operating lifter.
4. Loose covers, fasteners and stops.
5. Faulty operation of automatic hold and release mechanisms.
6. Wear of hoist hooking points, load supporting clevises, pins, slings, linkages and mechanical parts.
7. Missing nameplates and markings. Contact Caldwell for replacements.

**MAINTENANCE AND REPAIRS**

1. A preventive maintenance program should be established for each lifter by a qualified person based on recommendations made by its manufacturer.
2. A qualified person should have responsibility for repairs. Dated records and details of repairs and parts replacement should be carefully maintained by a qualified person, and copies kept in your possession.
3. Replacement parts shall be at least equivalent to the original manufacturer's specifications.

**OPERATING PRACTICES**

**DO'S**

1. The operator shall have received, read and understood the manufacturer's operating instructions.
2. The operator shall watch carefully that the lifter is performing properly during the lifting procedure.
3. The operator shall be familiar with the standard crane directing hand signals.
4. The operator shall respond to signals from an appointed person only. However, stop signals from anyone shall be obeyed.
5. The operator shall notify a designated person when he considers a load to be unsafe.
6. The operator shall observe the lifter before using. A defect observed shall be examined by a qualified person to determine if it is a hazard.

**DON'TS**

1. The operator shall not operate a malfunctioning lifter or one with an "out of service" tag attached.
2. The operator shall not use the lifter for any purpose(s) other than those designated by the manufacturer's operating instructions.
3. The operator shall not use a lifter when the capacity, weight or safety markings are missing or are no longer legible.
4. No one shall make alterations or modifications to lifters without consulting the manufacturer.
5. No one shall obscure or paint over the manufacturer's capacity, weight or safety markings.
6. Loads shall not be lifted higher than necessary or be left suspended unattended.
7. The lifter shall not lift a load that is not properly balanced for safe lifting.

**HANDLING THE LOAD**

1. The lifter shall not be loaded in excess of its rated load.
2. The combined weight of the lifter and load shall not exceed the rated load of the crane or hoist.
3. The lifter shall be applied to the load in accordance with the manufacturer's recommended operating procedure.
4. Lifter ropes and chains shall not be kinked, and multiple part lines shall not be twisted about each other.
5. The lifter shall not touch obstructions during load movement.
6. The lifter shall not be loaded with loose material that might fall during movement.
7. The operator or other personnel shall not place themselves or any part of their bodies beneath suspended loads.
8. The load or lifter shall not be slid on the floor or other surface.
9. The lifter shall not be used for loads for which it is not designed.
10. If suspended loads are moved manually, they shall be pushed, not pulled.
11. A preliminary lift of a few inches shall be made to establish that the load is stable.
12. All loads shall be accelerated and decelerated smoothly.

**Modifications:** Any plans for modification of a Caldwell lifter shall be submitted to Caldwell for prior approval to determine if modification is proper, and to ensure conformity with your Caldwell warranty.
**SPECIFICATIONS**

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<th>Capacity In Tons</th>
<th>Max. Spread (ft.)</th>
<th>Hook Thickness (in.)</th>
<th>Bail (in.)</th>
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<tr>
<td>Min. Spread (in.)</td>
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**Operation**
Model 23 - Roll Lifting Beams

ROLL LIFTING BEAMS: Used to lift rolls with plate style or bent bar "J" Hooks. Hooks are designed to support the core mandrel which is through the I.D. of the roll. Fixed beam lengths can be used for single roll widths. Maximum roll diameters will determine length of "J" Hooks.

PRODUCT FEATURES:
- Ideal where headroom is limited.
- Easy lifting and positioning of rolls.
- Adjustable spread options.
- Twin hoist capability.
- Motorized rotation available.
- Designed and manufactured to ASME B30.20.

Options Available

OPTION A
ADJUSTABLE SPREADS.
Used when handling rolls of varying widths.

OPTION B
HOOK LININGS.
a. Bronze/Brass
b. Urethane
c. Brake Lining
(Min. Shaft Dia. = 6"

OPTION C
TWIN HOOK HOIST.
Used when two hoists are required to stabilize a lift, when capacities exceed a single hoist or when load rotation is not desirable.

OPTION D
MOTORIZED ROTATION.
Allows remote positioning of a load. For additional information, see Model 21 in our Strong-Bac® Catalog.

OPTION E
SPREADER WITH RIGGING.
Offers greater stability when required headroom is not a consideration.
Model 74P - Roll Gripping Tongs

Used to grip the O.D. of a roll. The diameter range can vary up to 25%. A double leg design will provide additional roll stability, however, single leg models are available for narrower rolls. Recommend double leg for rolls wider than 48”.

Features: Automatic latching mechanism for single-person operation. Tong saddles with protective covering to prevent roll damage are available.

 Capacities: Double leg to 4 ton.
 Single leg to 2 1/2 ton.

Model 75P - Roll Grabs

Used for side lifting of rolls by gripping on the ends. A wide range of roll lengths or widths can be accommodated. Motorization is recommended when handling a wide range of roll widths.

 Capacities: To 5 ton.

Model 85P - Motorized Roll Lifters

Used to lift rolls by positioning lifting pins in the I.D. of the roll. Arms actuate in and out to clear and lift roll. This model will handle a variety of widths with minimal aisle clearance requirements. Motorization is recommended; however, chainwheel operation is available.

 Capacities: To 10 ton.
Model 81P - Roll Lifting "C" Hooks

This Caldwell Model 81 Roll Lifter is designed to handle rolls by inserting a round arm into the roll I.D. This unit is counterbalanced to hang level when empty for ease of insertion into the roll core. Guide handle is standard. Lifter parking stand can be furnished if required.

**Capacities:** To 5 ton.

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Model 88 - Roll Positioners

This Caldwell Low Platform Roll Upender/Downender allows rolls to be repositioned by 90° rotation. The low platform is desirable in those applications where headroom is restricted. Hydraulic controls are standard.

**Capacities:** To 71/2 ton.

The heavy duty Model 88 Roll Positioner is available with a mechanical drive. This model requires additional platform height.

**Capacities:** To 30 ton.

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Model 90P or 90 - Pallet or O.D. Lifters

**Model 90 - Pallet Lifters**

The Caldwell Model 90 Pallet Lifter allows your overhead crane to be converted into an overhead lift truck. Models are available with pry bar and/or hand wheel adjustment for fork widths.

**Capacities:** To 10 ton.

**Model 90P - Roll Lifters**

The Caldwell Model 90P Pallet Type Roll Lifter has been designed to lift and transport a roll by supporting it underneath its diameter, leaving the core open if required.

**Capacities:** To 10 ton.
Application Information Required

Please specify the desired model number: ________________________________

Roll Information:
Minimum: Length _______ Diameter _______ Weight _______
Maximum: Length _______ Diameter _______ Weight _______

Shaft / I.D. Information:
Minimum: Length _______ Diameter __________
Maximum: Length _______ Diameter __________

Any clearance requirements: i.e., headroom, machinery obstructions, etc.

“J” Hook Information (For Model 23’s)
Is shaft turning when roll is lifted: Yes ☐ No ☐
Hook style: Pivoting ☐ Fixed ☐

Power Requirements (For Motorized Units)
DC ☐ AC ☐ Voltage _____ Phase _____ Cycle _____

Additional application information or option requirements:

To have us review your application, please fill out this Application Information Required form and fax to 815-229-5686.

Print (Select Current Page) and Fax to 815-229-5686  Submit Form by Email

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