Tilt-Lock offers several models of Tip Lifts. Tip Lifts are furnished with either electric or pneumatic power. All units feature ergonomically designed handle mounted controls for combined control of the hoist and the Tip-Lift. The controls are designed for ease of operation, operator control and safety. The spring loaded Tip Lift probe is easily inserted into the core of material. Four spring activated teeth on the end of the probe grip the core firmly. This patented probe design assures that the load cannot be disengaged from the probe while the load is suspended in the air. With the probe inserted into the roll, it may be tilted and moved to the required location. When the roll has been placed on a stationary support, the teeth of the probe may be retracted using either a manual release handle or by activating a pneumatic cylinder.

**Perfomance Specifications**

- 115v AC powered, single phase, 60 Hz
- Electric actuators not to exceed 10 cycles per hour on L2 and L3 units, 35 cycles per hour on L1 units
- L1 Electric tip lift turns rolls in 6 seconds
- L2 Electric tip lift turns rolls in 15 seconds
- L3 Electric tip lift turns rolls in 18 seconds
- Air tip lifts are approximately twice as fast and supplied with flow control mufflers for adjustment. Minimum 90 P.S.I. required
- Minimum 3” wide roll required for probe to work properly
- Tip lifts are supplied with a quick release pin for interchanging probes to accommodate different core diameters as needed
- Some operators may have difficulty squeezing the handle required to retract the teeth. We offer a pneumatic tooth release package. Contact factory for details.

**Tip Lift Dimensions**

<table>
<thead>
<tr>
<th>Model</th>
<th>Probe Horz.</th>
<th>Probe Vert.</th>
</tr>
</thead>
<tbody>
<tr>
<td>LS1 Electric</td>
<td>31”</td>
<td>44”</td>
</tr>
<tr>
<td>L1 Electric</td>
<td>43”</td>
<td>56.5”</td>
</tr>
<tr>
<td>L2 Electric &amp; Air</td>
<td>52”</td>
<td>65.5”</td>
</tr>
<tr>
<td>L3 Electric &amp; Air</td>
<td>52”</td>
<td>65.5”</td>
</tr>
<tr>
<td>LS1 Air</td>
<td>31”</td>
<td>44”</td>
</tr>
<tr>
<td>L1 Air</td>
<td>43”</td>
<td>56.5”</td>
</tr>
<tr>
<td>Manual Tip Lift</td>
<td>11”</td>
<td>25.5”</td>
</tr>
<tr>
<td>LD Electric</td>
<td>25”</td>
<td>34”</td>
</tr>
<tr>
<td>LD Air</td>
<td>26”</td>
<td>35”</td>
</tr>
</tbody>
</table>

**Air Tip Lift Capacity Chart**

<table>
<thead>
<tr>
<th>Roll Width</th>
<th>Roll Weight in Pounds</th>
<th>Cylinder Bore</th>
</tr>
</thead>
<tbody>
<tr>
<td>70”</td>
<td>260</td>
<td>5” Bore</td>
</tr>
<tr>
<td>60”</td>
<td>300</td>
<td>5” Bore</td>
</tr>
<tr>
<td>50”</td>
<td>350</td>
<td>6” Bore</td>
</tr>
<tr>
<td>40”</td>
<td>430</td>
<td>6” Bore</td>
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<tr>
<td>30”</td>
<td>450</td>
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<tr>
<td>20”</td>
<td>770</td>
<td>6” Bore</td>
</tr>
<tr>
<td>10”</td>
<td>1250</td>
<td>6” Bore</td>
</tr>
</tbody>
</table>

**Electric Tip Lift Capacity Chart**

<table>
<thead>
<tr>
<th>Roll Width</th>
<th>Roll Weight in Pounds</th>
<th>Cylinder Bore</th>
</tr>
</thead>
<tbody>
<tr>
<td>70”</td>
<td>170</td>
<td>5” Bore</td>
</tr>
<tr>
<td>60”</td>
<td>200</td>
<td>5” Bore</td>
</tr>
<tr>
<td>50”</td>
<td>230</td>
<td>6” Bore</td>
</tr>
<tr>
<td>40”</td>
<td>290</td>
<td>6” Bore</td>
</tr>
<tr>
<td>30”</td>
<td>370</td>
<td>6” Bore</td>
</tr>
<tr>
<td>20”</td>
<td>510</td>
<td>6” Bore</td>
</tr>
<tr>
<td>10”</td>
<td>830</td>
<td>6” Bore</td>
</tr>
</tbody>
</table>
TILT LOCK MODEL LD1 ELECTRIC TIP LIFT

The Tilt Lock Model LD1 Tip Lift is designed to handle light rolls of paper up to 340lbs. The lightweight model utilizes ergonomically designed handles and controls featuring interlocking safety switches and integrated controls for the hoist. The LD1 is equipped with a short probe and manual tooth release. This unit is perfect for handling small rolls in areas with low headroom. The LD1 has an overall length of 34” with the probe. Interchangeable probes are available for most sizes of cores.

<table>
<thead>
<tr>
<th>ROLL WIDTH</th>
<th>MAX WT LBS</th>
<th>ROLL WIDTH</th>
<th>MAX WT LBS</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>344</td>
<td>16</td>
<td>156</td>
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<tr>
<td>6</td>
<td>287</td>
<td>18</td>
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<tr>
<td>8</td>
<td>246</td>
<td>20</td>
<td>132</td>
</tr>
<tr>
<td>10</td>
<td>215</td>
<td>22</td>
<td>123</td>
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<tr>
<td>12</td>
<td>191</td>
<td>24</td>
<td>115</td>
</tr>
<tr>
<td>14</td>
<td>172</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

LD1 ELECTRIC TIP LIFT CAPACITY CHART

TILT-LOCK MODEL LD1 PNEUMATIC TIP LIFT

The LD1 Pneumatic Tip lift uses the same pistol grip type handles and dual interlock switches as the electric model along with integrated controls for the hoist. The pneumatic model is available with either a manual or pneumatic tooth release. Interchangeable probes are available for most sizes of cores.

<table>
<thead>
<tr>
<th>ROLL WIDTH</th>
<th>MAX WT LBS</th>
<th>ROLL WIDTH</th>
<th>MAX WT LBS</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>590</td>
<td>16</td>
<td>268</td>
</tr>
<tr>
<td>6</td>
<td>492</td>
<td>18</td>
<td>246</td>
</tr>
<tr>
<td>8</td>
<td>421</td>
<td>20</td>
<td>227</td>
</tr>
<tr>
<td>10</td>
<td>369</td>
<td>22</td>
<td>211</td>
</tr>
<tr>
<td>12</td>
<td>328</td>
<td>24</td>
<td>197</td>
</tr>
<tr>
<td>14</td>
<td>295</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
ANTI-TELESCOPING ATTACHMENT

An optional vacuum operated anti-telescoping device is available for all Tip Lift Models except the LD1 Model. This attachment prevents most non-porous materials from telescoping away from the core. The vacuum plate is custom, built to fit the customer’s roll. The plate is fabricated from Lexan and includes neoprene seal around the probe and the outside edge of the plate. The attachment is available with electric or pneumatic vacuum generators. A single maintained push button on the Tip Lift handle controls the attachment.

SHAFT LOADER ATTACHMENT

The optional shaft loader package is designed for ease of moving rolls from the probe of a Tip Lift onto a cantilevered shaft. The probe is fitted with a slotted tip, which interfaces with a disc mounted to the end of the cantilevered shaft. Tilt Lock supplies the disc, which is easily installed. This unit eliminates time consuming and dangerous manual lifting or manual shaft alignment.

The Tip Lift is fitted with dual air cylinders attached to a push plate. The operator uses a push button on the control handle to push the roll from the Tip Lift onto the cantilevered shaft. The unit may also be furnished without the pusher assembly, which requires the operator to slide the roll off of the Tip Lift by hand.
TIP LIFT WITH ADJUSTABLE HANDLES

Optional pivoting handles are available for Tip-Lifts that are used in applications where the position of the standard handles are not at a comfortable position for the operator. The handles pivot in a 90 degree arc with positive stops at 30 degree intervals. The position of the handles is controlled by the operator using a push button to control an air cylinder which locks the handles in the desired position. This option is available for all Tip-Lifts except the LD1.

LOAD LEVELER

The load leveler is an attachment that is designed to fit all models of Tip-Lifts except the LD1 model.

The Load Leveler assures that the frame of the Tip Lift is held in a plumb position while handling rolls of material up to 2000 pounds in weight. The Leveler adjusts the hoist hook attachment point horizontally as the position of the lifted roll changes to maintain the proper position of the Tip-Lift.

The Load Leveler features a ball screw and nut coupled to an electric motor. The Load Leveler is controlled automatically by two level sensing switches. These switches sense when the Tip-Lift is out of level and activates the electric motor to move the hoist hook in the proper direction to correct position of the Tip-Lift.

For dimensions and weights of Tip-Lifts with a Load Leveler attachment, please consult the factory.
ELECTRIC CART ATTACHMENT

The electric cart attachment is ideal for moving rolls in a small area. The attachment is designed for 12 or 24 VDC operation and is used to lift, carry and tip rolls 90 degrees. The unit is equipped with a self contained air compressor for operation of the pneumatic tooth release mechanism. The approximate total cycle time to tip a roll is 12 seconds both directions. The controls for the attachment will be an enclosure box mounted adjacent to the fork truck controls. This attachment will accommodate various diameter probes utilizing quick release pins for fast probe changes.

ELECTRIC FORK TRUCK ATTACHMENT

STANDARD FEATURES
- Structural steel frame
- High capacity nylon wheels
- Brakes for rear castors
- Electric winch with automatic brake, heavy duty cam carriage bearings roller type wheel bearing
- 12 volt sealed cycle battery
- On board automatic battery charger

TL800 ATTACHMENTS
- Electric tip-lift with pneumatic tooth release
- Swivel cradle
- Ridgid Tilt-lock probe
- Roller boom

Weight: 260 lbs. without attachments, 550 lbs. as shown.

TL800 ROLL HANDLING CART

The TL800 Roll Handling Cart is designed for efficient, safe and ergonomically sound transportation of rolled material.

TL 800 ELECTRIC TIP-LIFT CAPACITY CHART

<table>
<thead>
<tr>
<th>ROLL WIDTH INCHES</th>
<th>10</th>
<th>20</th>
<th>30</th>
<th>40</th>
<th>50</th>
<th>60</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAX ROLL WT LBS</td>
<td>800</td>
<td>515</td>
<td>372</td>
<td>291</td>
<td>239</td>
<td>203</td>
</tr>
</tbody>
</table>
FORK TRUCK MOUNTED TIP LIFT

The fork mounted tip lift is equipped with a 12 VDC hydraulic power unit. The unit is designed to lift and tip rolls 90 degrees. Control of the unit is by a four button pendant station with a 10 foot long cable. This Tip-Lift comes complete with a 12 volt deep cycle battery, automatic charger, and a hydraulic tooth release mechanism. A clevis is provided for securing the unit to the fork truck carriage. The overall length with the probe in the horizontal position is 40” and the weight of the machine is approximately 400 lbs.

This attachment will accommodate various diameter probes utilizing quick release pins for fast probe changes. The Hydraulic Fork Mounted Tip Lift is designed to be used on fork trucks only.

HYDRAULIC FORK TRUCK ATTACHMENT CAPACITY CHART

<table>
<thead>
<tr>
<th>ROLL WIDTH INCHES</th>
<th>32</th>
<th>36</th>
<th>40</th>
<th>50</th>
<th>60</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAX ROLL WT LBS</td>
<td>2000</td>
<td>1818</td>
<td>1660</td>
<td>1364</td>
<td>1157</td>
</tr>
</tbody>
</table>

HYDRAULIC CART ATTACHMENT

The Hydraulic Cart Attachment is designed for handling large rolls in a limited area. The attachment is equipped with a 24 volt hydraulic power unit. It is used to lift, carry and tip rolls 90 degrees. A push button station is mounted conveniently on the fork truck for the control of the tilt and tooth release functions. The attachment will accommodate various diameter probes and utilizes quick release pins for fast probe changes.

HYDRAULIC CART ATTACHMENT CAPACITY CHART

<table>
<thead>
<tr>
<th>ROLL WIDTH INCHES</th>
<th>10</th>
<th>20</th>
<th>30</th>
<th>40</th>
<th>50</th>
<th>60</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAX ROLL WT LBS</td>
<td>1538</td>
<td>1330</td>
<td>1171</td>
<td>1047</td>
<td>946</td>
<td>863</td>
</tr>
</tbody>
</table>
**CENTRAL LIFT**

Tilt Lock center lifts provide a simple, safe and effective method of handling rolls with cores that are in the vertical position.

Center Lifts utilize gravity activated teeth that grip the core to lift the roll. Center Lifts may not be disengaged until the roll is placed on a stationary surface. Once the weight of the roll has been removed from the Center Lift, the teeth are locked into the retracted position with a twist of the knob and the center lift may be removed from the core.

Center lifts are available for cores from 3 inches to 14 inches diameter.

**STEP CENTER LIFT**

The step center lift has two sets of teeth mounted on different sized diameter cylinders. It is designed for use with 2 different core sizes, saving time by not having to change out equipment when switching rolls with different sized cores.
The “AR” model center lift is activated by a remote control solenoid which is controlled by a pendant. This center lift is designed for use with an overhead chain hoist and in situations where the operator will not be able to reach the center lift to disengage it from the roll.

Tilt Lock Manual Tip Lifts provide a simple, safe and effective method of tilting rolls from the horizontal to the vertical position and transporting the roll in the vertical position. The weight of the roll must be supported by a stationary surface in order to disengage the probe. Manual Tip Lifts have a maximum capacity of 2000 pounds and are offered for a variety of core sizes. The unit is furnished with a quick release pin for changing probes. A pneumatic tooth release is offered as an option.

The Manual Tip Lift DOES NOT LOCK IN A HORIZONTAL POSITION.
TILT LOCK MECHANICAL CHUCK

Save time in roll changes, assure precise concentricity, obtain positive, instant lock up and release without tools.

Tilt Lock offers the widest range of chucks to choose from. Chucks to accommodate core I.D.’s from 1” to 12” incorporating a variety of desirable features for specific operations are available as standards.

Tilt Lock teeth automatically engage to the core by the relative motion of the roll to the shaft or the shaft to the roll. Tooth lock up is instant, no tools are needed.

Tilt Lock offers engineering designs that combine maximum strength with the lightest weights for handling. Maintenance costs are virtually eliminated.

R3-3 Shoulderless Core Chuck
R1-3 Flanged Core Chuck
RO-3 Rim Clamp Core Chuck
R5-3 Dualock Core Chuck

Step Core Chuck
**HORIZONTAL ROLL LIFTING BEAM**

Tilt Lock Horizontal Roll Lifting Beams are designed to carry rolls of material in the horizontal position. Standard units are available in capacities up to 6000 pounds. The unit is designed to balance both with or without a roll on the shaft. Multiple hook attachment points are provided when balancing multiple sizes of rolls. The shaft is knurled full length for added reliability.

**Available options include:**
- Pneumatic powered balancing
- Handle mounted controls for hoist
- Tilt Lock probe type shaft with manual or pneumatic tooth release mechanism
- Interlocking shaft feature

**ROLL OVER**

Tilt Lock Roll Overs provide a simple, safe and effective method of tilting rolls where a Tip Lift is not suitable.

The unit may be used to either load or unload rolls from pallets. The operator controls the hydraulic tilt function from a push button station.

- **Capacity:** up to 10,000 pounds
- **Power:** 460/230 volt 3 phase
- **Control Voltage:** 110 volts for operator safety
- **Rotation Time:** 15 to 20 seconds
- **Control:** 2 button station with magnetic disconnect with 10 feet of cable
- **Hydraulic Control dual operated check valves**
  - hold the table stationary in case of system failure
- **Low Maintenance**
- **Optional Equipment:** pallet clamp, ramps and notched table for use with C Hooks
CUSTOM DESIGNED SOLUTIONS FOR YOUR APPLICATION

CUSTOM ROLL CART

CUSTOM SPREADER BEAM

PROVIDE FAST, EASY, SAFE HANDLING • ELIMINATE PRODUCT DAMAGE AND WASTE
INCREASE PRODUCT SAFETY • REDUCE INSURANCE COSTS

TILT-LOCK
THE ROLL HANDLING PEOPLE FOR OVER 30 YEARS.

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