Automatically Control Clamp Force Proportional to Load Weight

APPLICATIONS
Excessive clamp force caused by too much hydraulic pressure is a common cause of damage. Mechanical 3-position relief valves are under-utilized or primarily left on the high setting. HFC (Hydraulic Force Control) solves these issues by automatically adjusting clamp force. HFC is a hydraulically controlled automatic clamp force system that senses the hydraulic pressure necessary to lift the load and adjusts clamping pressure proportional to the load weight. The patented system operates without any special actions on the part of the driver.

BENEFITS
- Damage Reduction across a wide range of products being handled.
- Hands-Free clamp force adjustment.
- Backhand force control.
- Sideshift force control proportional to load weight.
- No need to change driver habits.
- Installation only requires tapping into the Hoist, Clamp and Open lines.

FEATURES
- Infinite adjustment of clamp force in the normal operating range of the attachment. The system adjusts clamp force proportional to the load weight.
- Conveniently sized hydraulic valves mount easily onto the lift truck.
- Clamp force remains constant between Freelifit and Mainlift with the use of a Freelifit or Mainlift sensor.
- HFC is flexible, allowing easy adjustment for:
  - All clamp force settings
  - Maximum pressure
  - Balancing clamp force between Freelifit and Mainlift.
  - Balancing clamp force when the size of the truck and clamp are not ideally matched.
- Patented system compatible with all J-Series & D-Series Cascade Carton Clamps.

OPTIONS
- Arm speed overdrive (Both Manual and Automatic available).
**HOW IT WORKS**

Uses hoist pressure to control clamp force based on load weight, which reduces product damage from excessive clamp force.

**OTHER RECOMMENDED DAMAGE REDUCTION OPTIONS:**

- **Optional Arm Speed System**
  - **System** drives the arms to close at full speed (used in applications where very low clamping pressure is required, resulting in lower arm speed).

- **Two Versions Available – Manual & Automatic**
  - **Manual**: Drives the arms to close at full speed while the driver holds the button down. To switch to HFC mode, the driver must release the button.
  - **Automatic**: Drives the arms to close at full speed until a sensor determines that the pad is within one inch of the load. The system then automatically switches to HFC mode (low clamp force mode).

- **WPM™ - Wireless Pressure Monitor**
  - Wireless Pressure Monitor is a system to monitor the hydraulic pressure in the clamping cylinders of an attachment on a real time basis. Perfect for allowing drivers to see the actual pressure during the clamp cycle to determine if the load holding components are malfunctioning.

---

**Catalog Order No.**

<table>
<thead>
<tr>
<th>Order No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>6891922</td>
<td>12 volt HFC Kit, Non-Side Shifting</td>
</tr>
<tr>
<td>6890308</td>
<td>24-48 volt HFC Kit, Non-Side Shifting</td>
</tr>
<tr>
<td>6891917</td>
<td>12 volt HFC Kit, Side-Shifting</td>
</tr>
<tr>
<td>6886951</td>
<td>24-48 volt HFC Kit, Side-Shifting</td>
</tr>
</tbody>
</table>

- For Carton Clamps only.
- All HFC Kits include a Return-to-Tank Line Kit that fits all hose sizes. #6807816.
- HFC Presale Worksheet available online. Completed worksheet required at time of order.