The BHS Automatic Transfer Carriage (ATC) is a portable forklift battery changer that mounts to the user’s pallet truck, providing cost savings by using existing equipment. The ATC’s hydraulic-powered extraction reduces the time needed to change-out forklift batteries in side-extraction applications, and provides OSHA-compliant safety benefits, so you can get your forklifts back to work quickly and safely. The ATC is available in a variety of models with many flexible options to satisfy unique battery handling requirements.

BHS provides custom battery handling equipment to meet any challenge.
Contact BHS at bhs@bhs1.com to learn more about fully customized solutions for the battery room and beyond.
The ATC provides safe, efficient battery changes anywhere in the facility. That makes it the ideal choice for operations that only run one or two lift trucks, park & charge applications, and/or larger fleets in need of a versatile backup system.

Automatic Transfer Carriages feature a range of optional features to match any application. Custom options include:

- Multiple extraction methods: magnet extraction (ideal for narrow batteries) or vacuum extraction (ideal for cold-storage use), both of which include hook-and-chain extraction for backup.
- Cantilever and extended beds for servicing trucks with outriggers.
- Drop-in, extended height roller beds for battery compartments outside the mounting pallet trucks’ maximum lift range.
- Three-way fork pockets (for side-access with a sit-down counterbalance truck or rear-access with a pallet truck), bolt-on mounting, permanent factory-weld mounting, and more.
- Dual electric quick-disconnect harness, rubber flap kits, extra service capacity, and other convenience modifications.

Forklift users often supplement Operator Aboard Battery Extractor Systems with one or more ATCs. These backup battery changers keep the fleet active during maintenance downtime on the frontline system as the ATC can continue servicing batteries stored on single level stands or on the lowest tier of multi-level stands. (Choose the three-way fork pocket option to access the ATC within narrow battery-room aisles.)
Efficient Forklift Battery Exchange*

1. Simply mount the ATC onto a spare pallet truck and connect the battery (12 volt and 24 volt DC power available). The ATC’s extractor arm is operated entirely by the pallet truck battery, removing the need for an auxiliary power source.
2. Position the ATC against the forklift battery compartment; rubber bumpers allow close contact without damaging the lift truck’s finish.
3. Operators use easy-access, center-mounted controls to extend the extraction arm. Once it connects to the forklift battery (via magnetic, vacuum, or hook-and-chain attachment), the hydraulic-powered extraction arm gently pulls the battery over the ATC’s 10 compartment rollers. A steel battery containment bar keeps the battery in place during transit.
4. Transfer the battery to a Battery Roller Stand for charging and retrieve a charged battery to bring back to the lift truck.

* Reference ATC manual (on the BHS OptimaTM App) and training materials for proper and safe operation of ATC units.

**Lowers System Cost by Using Existing Equipment**

The ATC mounts easily to the user’s existing powered pallet truck. Consult BHS for pallet truck specifications.

**Hydraulic-Powered Extraction**

The powerful extractor arm is hydraulic-powered to push and pull batteries into place using magnetic, vacuum, or hook-and-chain (pictured) attachment.

**Battery Containment**

A steel Battery Containment Bar and battery flip-stop are used to enclose the compartment and keep the battery secure during transit.

**Fleet Protection**

Rubber Bumpers allow close contact, protecting the industrial lift truck fleet’s finish during battery change-out.

**Spark-Proof Protection**

Spark-proof, poly-sleeved rollers reduce corrosive build-up and extend product life (ATC-24 only).

**Smooth Battery Exchange**

Battery exchange is made easy by the roller bed which is outfitted with 10 compartment rollers, providing better wear and load distribution.

**Enclosed Dashboard Sides**

Offers added protection against accidental contact with moving parts during operation.

**Simple Operator Controls**

Simple, center-mounted controls for easy operation from left, right, or rear of the carriage.

**Standard Industrial Components**

ATC design utilizes standard industrial components, allowing for locally available parts.
**EXTRACTION METHODS**

How will you extract batteries? **Choose one of the following options.**

**Vacuum Extraction (ATC-HC/VAC)**
Eliminates the need for manual hook-up and reduces wear and tear on batteries. Includes back-up Hook & Chain Extraction. Ideal for use with a dedicated battery room operator.

**Magnet Extraction (ATC-HC/MAG)**
Eliminates the need for manual hook-up, reduces wear and tear on batteries, and is ideal when batteries are too narrow for vacuum extraction. Includes back-up Hook & Chain Extraction. Ideal for use with non-dedicated battery room operators.

**SERVICING TRUCKS WITH OUTRIGGERS**

If your forklifts have Outriggers/Base Legs or a picking platform, you will require a Cantilever option for additional arm reach.

If you have batteries longer than 40”, you will require an Extended Bed option.

**7” Cantilever (ATC-CAN-7)**
Extends extractor arm reach an additional 7” (178 mm) and is ideal for use with outriggers

**7” Cantilever & 6” Extended Bed (ATC-CAN-7-6)**
7” (178 mm) additional extractor arm reach is ideal for use with outriggers, and 6” (152 mm) bed extension accommodates longer batteries

**7” Cantilever & 8” Extended Bed (ATC-CAN-7-8)**

**14” Cantilever & 6” Extended Bed (ATC-CAN-14-6)**

**14” Cantilever & 8” Extended Bed (ATC-CAN-14-8)**

**SERVICING ROLLER HEIGHTS OUTSIDE STANDARD ATC RANGE**

Consider the lowest and tallest roller height you will be servicing to determine if a Drop-in-Roller (DIR) will be needed. If you don’t have space to store a DIR, consider a Two-Tier Roller Compartment.

If only running forklifts with a roller height above 12.5”, order the Base Elevation option.

When you need to service forklifts with roller heights lower than 6.5”, order the Low Profile Design.

**Uncoated Rollers (ATC-UNCTD)**
Reduces roller height by 0.25” (6 mm) to accommodate low battery compartments

Note: Available on ATC-24 model only

**Two Tier Roller Compartment (ATC-2TIER)**
Combines two roller compartment levels in one unit, and is ideal for a combination of narrow aisle trucks and counter-balance trucks

**Drop-In Rollers (ATC-DIR)**
Increases roller height up to 10” (254 mm) to reach battery compartments beyond pallet truck maximum lift range. Includes the DIR Centering Angle and DIR Retainer Plate

Note: Recommended when ATC-2TIER is not feasible and extraction from multiple battery compartment heights is required

**Drop-In Roller Friction Strips (ATC-DIR-FS)**
See ATC-DIR description above. Also includes friction strips to provide additional battery stability during transport (for use with standard bed length)

**Drop-In Roller, Extended (ATC-DIR-LG)**
See ATC-DIR description above. This option features an extended Drop-in Roller for use with 6” (152 mm) or 8” (203 mm) Extended Bed options.

**Drop-In Roller, Extended with Friction Strips (ATC-DIR-LG-FS)**
See ATC-DIR-LG description above. Also includes friction strips to provide additional battery stability during transport

**Base Elevation (ATC-BSELV)**
Permanently elevates ATC base up to 10” (254 mm)

**Low Profile-Bolt-In Slide (ATC-LP)**
Cost-effective ATC bolt-in slide option allows roller height to be adjusted 0.5” (13 mm) lower than standard unit

**Low Profile Design (ATC-LPF)**
Allows lowered roller height of 5.5” (140 mm) with or without FP-C option

**Two Tier Poly Roller & SST Shaft (ATC-2TIER-PR)**
Converts the standard upper roller/shaft combination to solid poly rollers with 0.5” (13 mm) SST Shafts
ADDED CONVENIENCE

Need added stability when transporting batteries? Order Friction Strips.

Need to protect the equipment from dirt/debris? Order the Chain Guard Rubber Flap Kit.

Need to power the pallet jack and the ATC simultaneously? Order Electric Quick Disconnect.

- **Magnet Light Indicator (ATC-MLI)**
  Illuminates when magnet is on, providing a secondary indicator to the audible alarm

- **Electric Quick Disconnect (ATC-QDY)**
  Dual SB-175 gray connector harness plugs into the pallet truck and battery, allowing ATC and pallet truck to be powered simultaneously

- **Friction Strips (ATC-FS)**
  Provide additional battery stability during transport

- **Chain Guard Rubber Flap Kit (ATC-RGD)**
  Covers chains and sprockets to prevent dirt and debris from accumulating on or around chains and sprockets

- **Extra Service Capacity (ATC-ESC)**
  Increases ATC load capacity by 1,000 lb (454 kg) and also extends the life of the ATC in harsher environments (includes increased side rail support, front rail reinforcement, front overhead cross bar, and heavy-duty, high-torque, low-speed extractor arm drive motor)

- **Self-Contained Battery and Charger (ATC-BATT), (ATC-CHGR)**
  The ATC-BATT and ATC-CHGR allow the ATC to operate independently from lift truck, and the self-contained charger used in conjunction with self-contained battery provides a convenient and complete battery changing system

- **Remote Control (ATC-RMT)**
  6’ (1.83 m) cord enables ATC control from operator’s position on fork lift

- **Heavy-Duty Extraction (ATC-HD)**
  High torque hydraulic motor is recommended for applications using slide strips

OPTIONS FOR MOUNTING THE ATC TO THE HOST TRUCK

Whether mounting an ATC to one pallet truck or requiring the flexibility to mount to multiple trucks, the ATC can be customized to meet a variety of facility requirements. **Choose one of the following required options.**

- **Part-Time Mount**
  Fork Pocket/QDY/Tongue Kit (ATC-FP-C-24/30, ATC-FP-C-36/42)
  Designed for applications where a pallet truck can’t be dedicated full time to the battery changing process. Includes a welded Tongue Kit to enhance stability and an SB quick disconnect (ATC-QDY). Rear-entry fork pockets are designed for use with pallet truck. See fork pocket dimensions below.

- **3-Way Part-Time Mount**
  Three-Way Fork Pocket/QDY (ATC-FP-3-24/30, ATC-FP-3-36/42)
  Designed for multi-purpose, multi-position and for applications where a pallet truck can’t be dedicated full time to the battery changing process. Rear-entry fork pockets are designed for use with pallet truck. Side-entry fork pockets are designed for use with SDCB lift trucks. Includes a welded Tongue Kit to enhance stability and an SB quick disconnect (ATC-QDY).

- **3-Way Part-Time Mount**
  Three-Way Fork Pocket (ATC-FP-3)
  Designed for multi-purpose and multi-position. Side-entry fork pockets are designed for use with SDCB lift trucks, typically as a back-up to Operator Aboard Battery Extractors when combined with the Remote Control (ATC-RMT) and Vacuum Extraction (ATC-VAC) options. Rear-entry fork pockets can also be used with a pallet truck host truck when the bolt-on Tongue Kit is attached.

- **Permanent Mounting (ATC-MPJ)**
  Operations that can dedicate a pallet truck to battery changing full-time can make the transformation permanent with factory welding to the customer-supplied pallet truck

- **Bolt-On Mounting (ATC-BLTON)**
  Semi-permanent mounting solution when the host truck is occasionally required for other tasks

* Consult factory for this option.
† 24 V dc must be supplied from the host truck for powering the ATC (may require special taps and cable from SDCB battery), or optional on-board battery and charger packages are available if required.
### Models & Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>ATC-24</th>
<th>ATC-30</th>
<th>ATC-36</th>
<th>ATC-42</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Max. Load Capacity</strong>&lt;sup&gt;1&lt;/sup&gt;</td>
<td>4,000 lb / 1814 kg</td>
<td>4,000 lb / 1814 kg</td>
<td>4,000 lb / 1814 kg</td>
<td>5,000 lb / 2268 kg</td>
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<tr>
<td><strong>Voltage Requirement</strong></td>
<td>12/24 V dc</td>
<td>12/24 V dc</td>
<td>12/24 V dc</td>
<td>12/24 V dc</td>
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<tr>
<td><strong>Hydraulic Pump</strong></td>
<td>Gear</td>
<td>Gear</td>
<td>Gear</td>
<td>Gear</td>
</tr>
<tr>
<td><strong>Extractor Arm Travel Speed</strong>&lt;sup&gt;2&lt;/sup&gt;</td>
<td>0-24 ft/min / 0.12 m/s</td>
<td>0-24 ft/min / 0.12 m/s</td>
<td>0-24 ft/min / 0.12 m/s</td>
<td>0-24 ft/min / 0.12 m/s</td>
</tr>
<tr>
<td><strong>Optional Magnet</strong></td>
<td>4” x 12” / 101 mm x 305 mm</td>
<td>4” x 12” / 101 mm x 305 mm</td>
<td>4” x 12” / 101 mm x 305 mm</td>
<td>4” x 12” / 101 mm x 305 mm</td>
</tr>
<tr>
<td><strong>Optional Vacuum</strong>&lt;sup&gt;2&lt;/sup&gt;</td>
<td>10” Diameter / 254 mm</td>
<td>12” Diameter / 305 mm</td>
<td>12” Diameter / 305 mm</td>
<td>12” Diameter / 305 mm</td>
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<tr>
<td><strong>Primary Drive Reduction</strong></td>
<td>2:1</td>
<td>2:1</td>
<td>2:1</td>
<td>2:1</td>
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<tr>
<td><strong>Primary Drive Chain Size</strong></td>
<td>#50</td>
<td>#50</td>
<td>#50</td>
<td>#50</td>
</tr>
<tr>
<td><strong>Roller Diameter</strong></td>
<td>2.4” / 61 mm</td>
<td>2.4” / 61 mm</td>
<td>2.4” / 61 mm</td>
<td>2.4” / 61 mm</td>
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<tr>
<td><strong>Roller Shaft Size</strong></td>
<td>7/16” Hex / 11 mm</td>
<td>3/4” Hex / 19 mm</td>
<td>3/4” Hex / 19 mm</td>
<td>3/4” Hex / 19 mm</td>
</tr>
<tr>
<td><strong>Battery Width</strong></td>
<td>6” Min / 23” Max 152 min Min / 584 max Max</td>
<td>6” Min / 29” Max 152 min Min / 736 mm Max</td>
<td>6” Min / 35” Max 152 min Min / 889 mm Max</td>
<td>6” Min / 41” Max 152 min Min / 1041 max Max</td>
</tr>
<tr>
<td><strong>Battery Length</strong>&lt;sup&gt;3&lt;/sup&gt;</td>
<td>41” Max / 1041 mm</td>
<td>41” Max / 1041 mm</td>
<td>41” Max / 1041 mm</td>
<td>41” Max / 1041 mm</td>
</tr>
<tr>
<td><strong>Min. Battery Height</strong></td>
<td>12” / 305 mm</td>
<td>12” / 305 mm</td>
<td>12” / 305 mm</td>
<td>12” / 305 mm</td>
</tr>
<tr>
<td><strong>Hook &amp; Chain Magnet Vacuum</strong></td>
<td>18” / 457 mm</td>
<td>18” / 457 mm</td>
<td>18” / 457 mm</td>
<td>18” / 457 mm</td>
</tr>
<tr>
<td><strong>Roller Width</strong></td>
<td>24.5” / 622 mm</td>
<td>30.5” / 775 mm</td>
<td>36.5” / 927 mm</td>
<td>42.5” / 1079 mm</td>
</tr>
<tr>
<td><strong>Extended Arm Reach (Beyond Roller Bed)</strong></td>
<td>6” / 152 mm Standard 13” / 330 mm Cantilever</td>
<td>6” / 152 mm Standard 13” / 330 mm Cantilever</td>
<td>6” / 152 mm Standard 13” / 330 mm Cantilever</td>
<td>6” / 152 mm Standard 13” / 330 mm Cantilever</td>
</tr>
<tr>
<td><strong>Rated Draw Bar Pull</strong></td>
<td>1,000 lb / 453 kg</td>
<td>1,000 lb / 453 kg</td>
<td>1,000 lb / 453 kg</td>
<td>1,000 lb / 453 kg</td>
</tr>
<tr>
<td><strong>Average Holding Force</strong></td>
<td>750 lb / 340 kg Vacuum 775 lb / 351 kg Magnet</td>
<td>1,000 lb / 453 kg Vacuum 775 lb / 351 kg Magnet</td>
<td>1,000 lb / 453 kg Vacuum 775 lb / 351 kg Magnet</td>
<td>1,000 lb / 453 kg Vacuum 775 lb / 351 kg Magnet</td>
</tr>
<tr>
<td><strong>Service Weight (unloaded)</strong>&lt;sup&gt;4&lt;/sup&gt;</td>
<td>580 lb / 263 kg</td>
<td>640 lb / 290 kg</td>
<td>700 lb / 317 kg</td>
<td>770 lb / 349 kg</td>
</tr>
</tbody>
</table>

**NOTES:** BHS recommends that high-speed travel be disabled on pallet truck and maximum speed set at turtle or lowest setting.

1. Verify capacity of pallet truck being used at the specified load center (minimum 34” with 38” battery). Load center increases by 0.5” (12.7 mm) for every inch of battery over 38” (965 mm) in length.
2. Certain options may affect load capacity. Consult factory.
3. Consult factory for additional options.
4. Weight does not include options. Add 80 lb (36 kg) for magnet extraction.

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**IMPROVE YOUR BATTERY ROOM**

BHS’ full line of industry-leading equipment can help any facility maintain a productive battery room. From battery and charger stands, to cable management and safety accessories, BHS has the total solution to fit the needs of any size facility.