

Lift truck attachment basics

Lift truck handling of pallet and palletless loads requires different attachments. Here are the details of the various types and how they can reduce costs and improve handling efficiencies.

By Sara Pearson Specter, Editor at Large

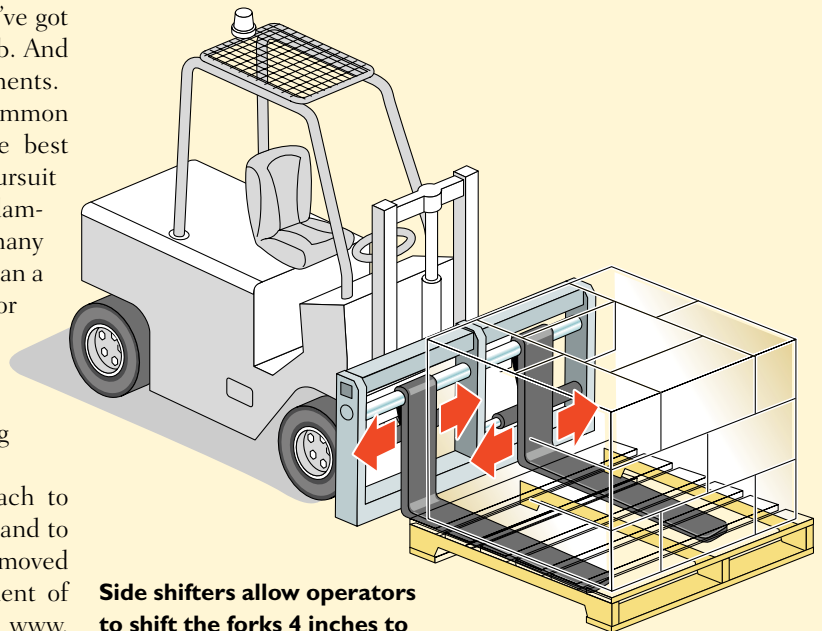
Any good carpenter will say you've got to use the right tool for the job. And it's no different for lift truck attachments.

While forks are the most common attachment, they're not always the best solution for every application. In pursuit of higher productivity, less product damage and reduced worker injuries, many loads require an attachment other than a fork – clamps and push/pull units, for instance. And even if forks are the tool of choice, attachments such as side shifters and fork positioners are valuable aids for improving load handling.

"Attachments allow users to reach to higher heights, to reach further out and to move heavier loads than could be moved manually," says Gary Frette, president of Basiloid Products (812-692-5511, www.basiloid.com). "So the attachments, when applied properly on a lift truck, substantially increase the amount of work that can get accomplished in the course of a day."

Additionally, attachments protect operators from ergonomic stress by keeping them on the seat of the truck rather than lifting, pulling or tugging loads that couldn't be moved with conventional forks, notes Ronnie Keene, vice president of sales and marketing at Brudi Bolzoni Auramo (800-358-5438, www.bba-usa.com). Keene adds that attachments

Side shifters



Side shifters allow operators to shift the forks 4 inches to the left or the right.

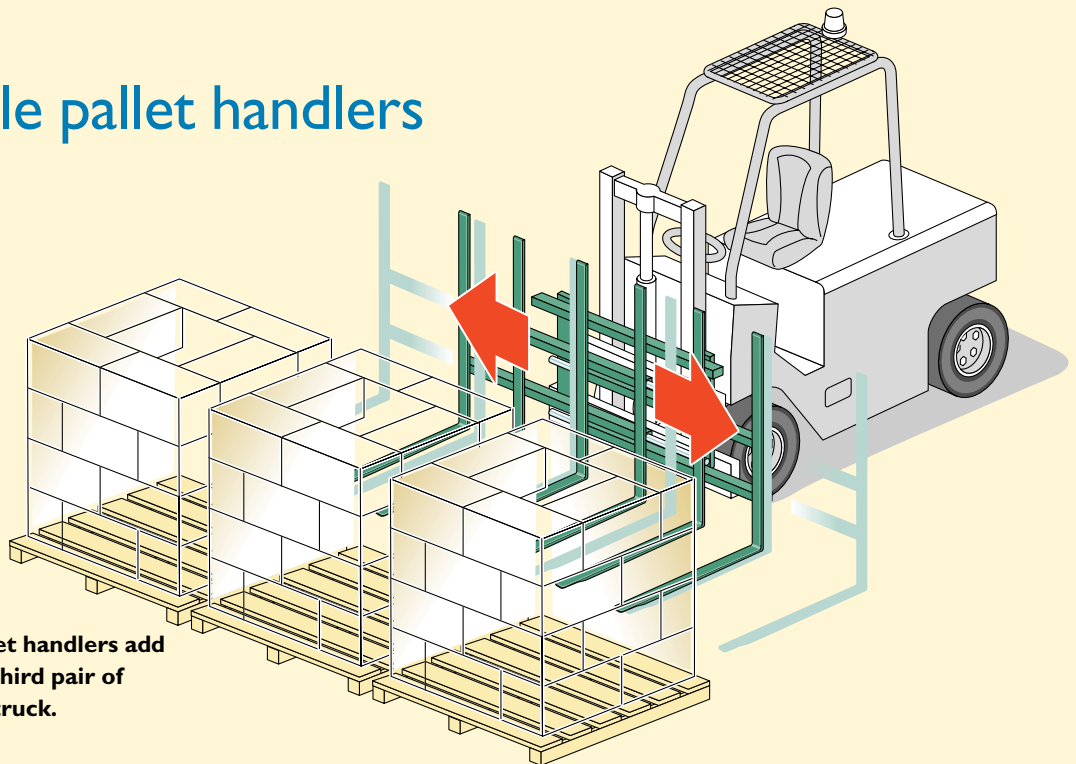
make proper handling of the load more convenient for the operator, who is then more likely to handle and transport loads correctly—reducing product damage.

As for the future of lift truck attachments, suppliers are working to develop higher levels of monitoring attachment use through bar coding and radio frequency identification (RFID) tags.

"These technologies provide opportunities

Illustrations by Steve Hussey

Multiple pallet handlers



Multiple pallet handlers add a second or third pair of forks to the truck.

to embed information such as the clamp forces required to handle a product safely without over-clamping and crushing the load,” explains Mike Kern, vice president of MHP marketing and sales at Cascade Corporation (800-227-2233, www.cascorp.com). “Even though operators have attachments now, they don’t always know when it’s appropriate to change from one setting to another. This technology makes it easier for the user to not have to make a determination.”

And, yielding higher productivity is ultimately what lift truck attachments are all about. Here’s a look at the most common technologies applied to pallet-based and palletless load handling.

Pallet handling attachments

Side shifters

The most common attachment today, the side shifter operates with a standard pair of forks. As the name suggests, the attachment allows operators to shift the forks 4 inches to the left or the right to align them perfectly with pallet notches when picking up a load.

By adding this additional dimension of movement, wear and tear to the truck is avoided, as operators can reposition the forks rather than reposition

the truck by maneuvering it repeatedly in forward and reverse. Also, side shifters cut down on pallet damage since truck repositioning is sometimes considered optional by operators. Side shifters are available as both single and double units, capable of handling one or two pallets at the same time.

Fork positioners

With the variety of pallet dimensions out there, each with different pallet notch spacings, it would be impractical to have multiple lift trucks designated to handle each size. It would also be a very timely undertaking for an operator to have to climb down from the cab and manually adjust the fork spacing before every pick up.

Fork positioners, usually hydraulic-powered, are a solution. This device automatically adjusts the distance between the forks to handle an infinite number of pallet sizes, without the operator ever leaving the seat of the truck. In addition to the time savings, fork positioners also reduce the potential for back injuries or pinched fingers that could result from manual adjustments.

Multiple pallet handlers

Multiple pallet handlers can double or triple lift truck productivity by adding a second or third pair

of forks to the truck. Some attachments handle loads that are two pallets deep.

By allowing operators to pick up more than one load at a time side by side, a greater number of pallets can be transported throughout the day. Multiple pallet handlers are most frequently found in high-volume operations such as beverage and food handling.

These attachments do present some limitations in horizontal clearance, limiting their access to certain aisles or other areas. However, some models feature retractable forks that permit single load handling and can travel through narrow aisles and doorways.

Palletless handling attachments

Clamps

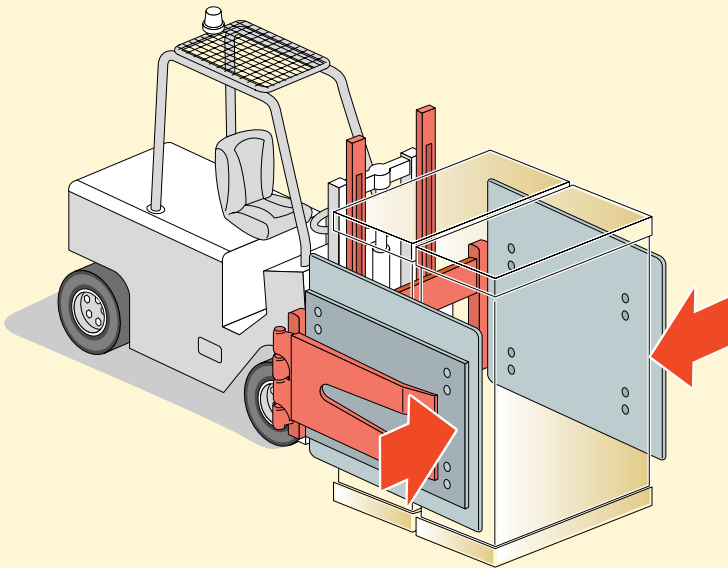
Clamp attachments literally clamp opposing sides of a load, applying a sufficient amount of pressure to lift the load in a controlled manner without crush-

ing or dropping it. Used in a range of applications, clamps handle loads that simply aren't transportable by pallet.

Flat surface carton clamps are often used in the appliance industry to move high-bulk, low-weight items like refrigerators, washers, dryers, ovens, dishwashers and more. They're also used to move unit loads of beverages stacked without slip sheets or pallets.

Concave surface paper roll clamps are used in the paper and printing industries to move large rolls of paper throughout a facility. Clamps are also used to position rolls on equipment that converts raw paper into consumer goods like paper towels, toilet paper and tissues.

Carton clamps

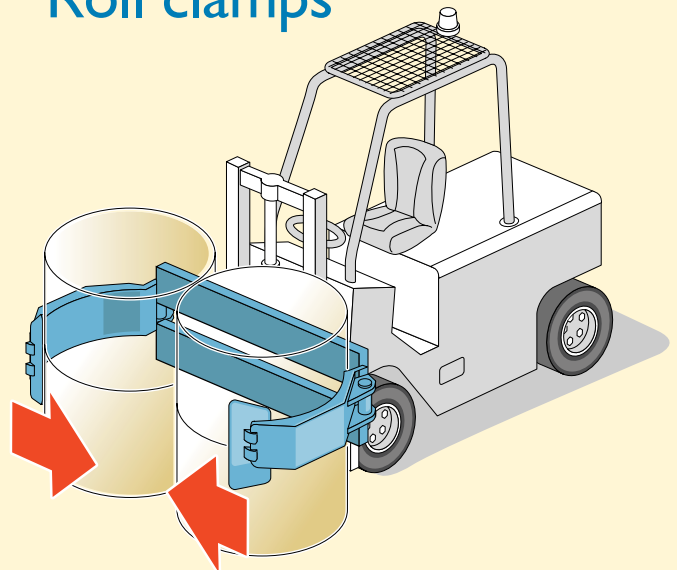


Rotators

This attachment features forks mounted on a rotating apron that turns anywhere from 180 to 360 degrees. Rotators are most often used in operations where bulk bins or containers store and transport large volumes of small items. Once the truck has delivered the bin to its destination, the rotator turns to dump the contents out into another hopper or processing station.

These attachments are used extensively in scrap metal applications. Other uses include food and wine processing. Rotators are part of the sorting and production process as bins of fruits and vegetables are received from the fields and then poured into processing equipment.

Roll clamps



Carton and roll clamps grab opposing sides of a load with enough pressure to move the load in a controlled manner without crushing or dropping it.

Push/pull units

Push/pull units

Push/pull attachments work with loads on cardboard or plastic slip sheets with a lip. The attachment clamps on to the lip and pulls the load onto a set of wide, low profile forks for transport.

Once the load reaches its destination in the warehouse or on the trailer, it is then pushed off the forks by the attachment. They are most often used in situations where a facility has elected to eliminate pallet usage to cut costs. These attachments are also often found in food-processing applications, where users have replaced pallets with slip sheets for hygienic and sanitary reasons.

Push/pull units clamp on to the lip of a slip sheet and pull the load onto a set of wide, low profile forks for transport.

