



Using Grapple Trucks as Part of Your Collection System

Grapple trucks complement refuse fleets by making your organization a one-stop-shop for all refuse collection. It makes a multi-person job, a one-person task. With that comes safety and efficiency—something all operations seek.

By Sam Petersen

You were probably looking at this line in the table of contents thinking, "How do I know if we need a grapple truck?" The simple answer is: you need a grapple truck. But first, you need a bulky waste program. Every community generates bulky waste, including tree limbs, branches, logs, discarded household appliances, furniture, etc. This type of solid waste requires special handling and management, and due to its shape, bulk or weight, it cannot be placed in a container or bundled. Not having a bulky collection program is the equivalent of sticking your head in the sand. The response we hear often is, "Well, our city is different." No, it's not. Your city is not a special snowflake. Chances are if you are not collecting bulky waste, you have an illegal dumping problem; in which case, you need a grapple truck to clean up the illegal dump sites.

At this point, I would have to say that grapple trucks have hit the big time. Many of you probably even knew what this article was about without having to google grapple trucks. But, just for kicks, let's do a little exercise. Pull out your phones and google "bulky waste". Not grapple trucks, as we are attacking the larger problem here. Chances are that you have a Wikipedia entry at the top of the page. Click it. Drum roll what is that? That, my friend, is a grapple truck in all of its glory. I know; I was surprised, too.





Atlas Lightning Loader®. Photos courtesy of Petersen Industries.

Grapple trucks are an absolutely necessary piece of equipment for a bulky waste collection program. If there is a need to pick up larger, hard to handle items in an efficient, yet safe manner, then a grapple truck is the ultimate tool. Bulky waste is not easily quantified. It is by definition different shapes, sizes, weights and comprised of different materials. Operators generally have no idea what will be waiting for them at the next stop. Because of this, you must be prepared to pick up anything and everything. Grapple trucks do this safely and efficiently by eliminating the need to handle the waste. These trucks also keep the operator out of the street, which is where many of the truly tragic injuries occur.

The Right Fit

There are a couple of applications that are best suited for grapple trucks. The first is municipal refuse collection. Most, if not all, municipalities have some need to collect and discard items that will not fit into an automated garbage cart or that cannot be lifted easily into the back of a rear loader. The majority of municipalities have included grapple trucks into their weekly routes to handle these kinds of items because they make what used to be a complicated task very simple and easy. Additionally, grapple trucks are very well suited for multiple other tasks. They are extremely capable of removing sidewalk, cleaning out ditches and waterways, as well as removing road kill. They are perfect multi-purpose tools for any municipality.

Another great fit for grapple trucks is in forestry and logging applications. Grapple trucks come in a variety of sizes and some are very well suited for lifting long, heavy logs quickly. They allow individuals the ability to remove multiple loads per day, while minimizing the amount of risk to the workers.

Finally, grapple trucks are also well suited for disaster relief. Natural disasters leave tons of destruction in their wake. Most of the items that need to be moved are heavy, cumbersome items that require heavy equipment. Not only can grapple trucks be first response vehicles, getting in quickly and moving road impediments out of the way for emergency vehicles to get where they need to go, they can also aid in cleanup effort. Now, don't check out on me. Don't say you do not need a grapple truck because you do not get hurricanes or tornadoes. First, the range is much broader than that. Regular wind, rain and ice storms can cause major damage but you don't need storms to need grapple trucks. You need bulky waste, which you have. That being said, preparedness is the name of the game when it comes to storms and with a grapple truck you will always be prepared.

Integrating the Right Grapple Truck Style

Every customer has varying degrees of need and the industry has progressed enough to meet many of them. Forty years ago, if you bought a grapple truck, it was a 16' boom with an 18' dump body—that was it. Now, you can get different boom and body sizes, control locations, lift capacities, etc. There are solutions out there not just for large fleet users, but also for very small communities.

A "self-loader" grapple truck incorporates a grapple loader and a dump body to load the items in and are great "all-a-rounders". This is the most common style of grapple truck. These are used by operations that have a need for an all-purpose grapple. The bodies are capable of handling most any bulk item you can fit in it and has the convenience of being a one-person operation. They can be used in route situations or special pickups, especially when there is a lot of drive time involved. Due to this, the combination trucks only need one operator, which means that there is only one person riding around instead of a whole crew.

For the high-volume customers with defined routes, having a dedicated loader with haul trucks is a great way to keep the loader on the route and let the haul trucks do the driving back and forth to the landfill. There are a few different styles of this type of truck, but they all have a loader mounted on a shorter wheel base chassis and use the grapple to grab and lift items to load into the back of the haul truck. The most popular style of this type of truck can be driven and operated from the operator cab. This capability has helped some of the nation's largest cities become extremely efficient at loading bulky items.

For the very small communities, skid mounted units are a great solution. They can use existing roll-off or hook lift trucks and can be set aside when not needed. This adds a use to an existing piece of equipment and eliminates the need for purchasing the most expensive part of a grapple truck—the chassis.

Reducing the Unknowns

Having a grapple truck makes a difficult job easy and reduces or mitigates the risk of the unknowns. We have already established that the piles will differ from stop to stop and the operator generally doesn't know what is around the next corner. If you don't have a grapple truck and you are hand loading the bulky waste, the next few questions can get pretty dicey. But with a grapple truck, the answers are simple.

Is the item more than 50 lbs.? Doesn't matter, you can lift thousands of pounds. Is there heavy traffic or distracted drivers? Doesn't matter, you are not in the street. Are there needles, glass, thorns, snakes, bed bugs or raccoons in the pile? Doesn't matter, you're not handling the waste by hand. Having a grapple truck simplifies everything. One operator in a truck can now lift thousands of pounds by him/herself without ever having to actually touch the debris.

Complementing Your Operation

Grapple trucks complement both automated and unautomated fleets perfectly. It makes a multi-person job, a one-person task. With that comes safety and efficiency—something all operations seek. If your fleet is automated or semi-automated, it is as simple as this: whatever does not fit in the cart gets picked up by the grapple truck. The automated truck is used for all of the daily household waste and the grapple truck is used for all the bulky waste. Users of grapple trucks experience less work comp issues when it comes to loading heavy, bulk items, as well as increased productivity. They are the closest thing to the automation of bulk item collection.

Sam Petersen is Vice President and Co-Owner of Petersen Industries, Inc. (Lake Wales, FL). His duties for the company include managing the sales and marketing departments, dealer network, and national accounts while continuing to expand the company and product line. Sam can be reached at spetersen@petersenind.com.



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