



ELLIOTT
EQUIPMENT COMPANY

CHOOSING THE RIGHT BOOMTRUCK AND EXPLORING CONFIGURATION OPTIONS



CHOOSE THE RIGHT BOOMTRUCK FOR THE JOB

Boom trucks differ from articulated cranes, truck cranes, pick and carry cranes, AT cranes and crawlers in several ways.

Truck-mounted cranes, also known as boom trucks, are an indispensable tool that allow for a wide range of applications over various industries, from electrical construction to railroad maintenance. Working with Elliott sales and engineers to select an array of standard and optional features allows companies in virtually any industry to customize the best equipment for their applications.

Boom trucks differ from articulated cranes, truck cranes, pick and carry cranes, AT cranes and crawlers in several ways. Versatile in availability and options, boom trucks have a point and shoot design that simplifies application.

Available options like telescopic jibs, detachable work platforms, wireless remote controls and an available digger package mean that Elliott BoomTrucks are about far more than lifting materials. Ask the questions in this guide to help develop the customization that best fits your business.

CHOOSING THE RIGHT BOOMTRUCK

HOW MUCH DO YOU NEED TO LIFT AND WHERE WILL YOU BE PLACING IT?



This is the most basic question of all. By knowing how much you need to lift and where you will be placing the load, prospective buyers can quickly review model specific load charts to determine which model(s) will meet the needs of their application.

Elliott boom trucks feature a range of rated capacities from 10 to 50 tons, with a wide range of boom lengths and tip heights up to 207 feet. While generally maxed out at 60 tons, boom trucks often have longer booms than other cranes, allowing for placing loads at greater height or further distances from the centerline.

You can download our lifting capacity product brochures on our website to find an Elliott model that meets your lifting requirements.



CHOOSING THE RIGHT BOOMTRUCK

WHAT WORK DO YOU DO?

Because boom truck cranes are mounted on a chassis, you have the opportunity to add upfitting or body work to best suit your application. Some variables that influence which machine is best include whether your application calls for heavy- or light-weight trucks, whether it calls for extensive driving time or use on rough terrain and the load work necessary for job completion.

Electrical contractors who work far from a right of way are different than a roofer or HVAC contractor who may be operating on paved conditions the majority of the time. Oilfield units can range from pipe delivery to wireline work calling on a multi-functional machine. Railroad and forestry professionals have their own unique needs. Working with Elliott to select an array of standard and optional features allows companies in virtually any industry to customize the best equipment for their applications.



CHOOSING THE RIGHT BOOMTRUCK

WILL YOU BE USING THE CRANE TO LIFT PEOPLE?



Boom trucks can be optionally equipped with work platforms that enable them to position people¹ in addition to lifting loads. With an Elliott boom truck, work platforms come standard with a two-person detachable gravity-leveled steel basket with a hydraulic lifting system. Range diagrams and load charts can be found inside the basket for quick reference.

*1 *Comply with all OSHA 1926.1400 and ASMEB30.23 regulations prior to lifting personnel with a crane*



CHOOSING THE RIGHT BOOMTRUCK

DO YOU ANTICIPATE ANY SETUP CHALLENGES?

RUGGED OR UNEVEN SURFACES

When your application takes you off-road, more cribbing is generally required due to uneven terrain. This may warrant the use of out and down outriggers to overcome differences in terrain. If severe off-road conditions are part of your job, EZ crib outriggers with extended vertical stroke improve penetration when working offroad.

A 6×6 or 8×8 chassis can significantly reduce cribbing needs on the job. For rugged terrain, consider mounting your boom truck on a tracked carrier. These machines allow you to access places otherwise unreachable with a truck, like mountainous, swampy or frozen terrain. Elliott has a unique ability to integrate cranes on a tracked carrier if you have that requirement.

URBAN APPLICATIONS

For work in more urban areas, it may be necessary to work in confined spaces. Customizations such as Elliott's SuperLink 'A' Frame outrigger short jacking option and out-and-down outriggers allow for vertical and midspan placement to maximize performance and versatility. Elliott's patented superlink outrigger system allows you to deploy either A-frame outrigger straight down and have a full capacity, 180-degree load chart on the opposite side that is fully extended.



CHOOSING THE RIGHT BOOMTRUCK

WILL YOUR WORK REQUIRE 360-DEGREE OPERATION?



Work area definitions can allow for different charts in different positions, impacting mounting and outriggers. For example, a crane mounted over a rear axle will allow greater lifting over the back of the truck as the chassis will provide counterweight. A crane mounted right behind the truck cab will generally allow for more bed storage, but may require a front stabilizer, especially if used in 360-degree operation. Boom trucks can also be customized with a 'Command Post' seated control station that rotates 360 degrees with the boom to provide optimized visibility and operator comfort.



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CHOOSING THE RIGHT BOOMTRUCK

WILL THE MAIN BOOM BE ENOUGH?



If your job calls for just a bit longer reach than what the powered boom can achieve, you can add an additional manual swing around section, or jib.

Jibs come in one- and two-section varieties. A two-section jib can reach an additional 55 feet, giving you over 30 percent more reach in many cases. There is a tradeoff that occurs when using a jib in that their lift chart is somewhat smaller than a powered boom, but they provide an excellent way to get to hard-to-reach areas.

If you plan to use a jib on a regular basis, make sure you evaluate your crane's tip section to make sure it is robust enough to handle it. Elliott cranes are designed with a heavy-duty boom tip to withstand the rigors of this work.

Trucks using a jib in that their lift chart is somewhat smaller than a powered boom, but they provide an excellent way to get to hard-to-reach areas.

CHOOSING THE RIGHT BOOMTRUCK

WILL YOU HAVE OTHER SPECIAL NEEDS ON THE JOBSITE?

Depending on your application, you can equip your crane with accessories to help you do your job quickly and efficiently.

Elliott BoomTrucks are qualified for even the most specific applications, from setting trusses, lifting coil tubing, working dockside or raising materials to height. High-capacity, single-line pull winches let you lift more weight on fewer lines of rope and a two-speed winch improves lift control and reduces cycle time. The jib extends smoothly and simply and, once your load is in place, the load swings freely via an available glide swing and brake or a rotation gear as needed.

We can also equip your boom truck with additional functions and accessories like a post hole digger, pole handler, seated controls, tilted cab, railgear, clamshells and many other options that will allow you to do the work of two machines (or more) with a single piece of equipment. Elliott specializes in listening to your needs and collaborating with you to provide the solution you need to enhance productivity, efficiency and safety on the job.



FINE TUNE YOUR SEARCH

Once you know what you need to do with your new crane, you can fine tune your search by digging deeper into the machine specifications to customize to your needs. Consider the following additional considerations:

STRUCTURAL SOUNDNESS

The design and welding of a crane's structural component go a long way to determining its life in the field. The lower structures like the subframe, turret and outriggers sometimes get ignored when choosing a machine, but these have a major effect on the cranes performance. Be sure to check these out to make sure they are up to the task. Elliott offers a lifetime structural warranty on all BoomTruck models for your peace of mind.

WARRANTY, PARTS AND SERVICE

Hopefully you will never have to use your warranty or repair your machine, but in the event you do, it will save you time and money to ensure you buy a crane that is covered by a comprehensive warranty and that has a limited number of proprietary parts.

HYDRAULICS

The hydraulic system is the heart of your machine. A strong pump and hydraulic lines that allow maximum flow maintain high performance over the life of your machine. Check to make sure your pump, hoses and fittings are properly sized to allow the proper pressure and flow and can work in extreme hot or cold conditions.



Elliott offers the longest, most comprehensive warranty in the boom truck crane industry: Two years for parts and labor and a lifetime structural warranty.



CONTROLS

Smooth operating controls can make a novice operator perform better, while poor operating controls can make an experienced pro look like an amateur. Generally, boom truck cranes are outfitted with hydraulic controls or electric over hydraulic. Radio remote controls can be added to allow for remote operation.

Most small cranes feature hydraulic controls. Check the tension of the lever, how quickly it goes back to center and if it is comfortable to operate.

Larger boom trucks have more variety in their control systems. On models that are 40 tons and over, manufacturers use electric/hydraulic or full hydraulic controls. With Elliott, you can have it your way, and choose either system for your crane.

Radio remote controls are another way to operate the machine. Simple radios offer control of the unit while more complex controls come equipped with screens to monitor LMI information. Today's radios are more reliable than ever before, allowing for use in extreme applications.

In general, lower-capacity boom trucks have standing controls to keep their cost down. Higher-capacity machines, particularly those 40 tons and up, come with seated controls and enclosed cabs to improve worker comfort. There are exceptions to this though, and Elliott will work with you to make sure you have the most ergonomic solution for your job.

Patented features like Elliott's Standup Ride-Around Control console, or optional command post controls, are available to help give you the optimal viewing angle, even on a smaller crane.

OPERATOR AIDS

Boom trucks are required to have operator aids to limit the possibility of overloading them. These aids can be simple, like a hydraulic capacity alert system that monitors the hydraulic pressure of the machine and stops when it exceeds a certain threshold. More involved aids provide additional information to the operator, like an LMI, which measures boom length, angle, position and weight on the hook. This information is displayed on a screen for the operator. When limits are reached, the system prevent the boom from extending, rotating or booming down.

WINCH

The winch does the hard work on your crane, and having a good one improves productivity. High-capacity, single-line pull winches let you lift more weight on fewer lines of rope and a two-speed winch improves lift control and reduces cycle time.

Elliott will work with you to make sure you have it your way and have the most ergonomic solution for your job.



DIFFERENT JOBS NEED DIFFERENT TOOLS

BoomTrucks are extremely versatile tools, qualified for even the most specific applications, whether it be setting trusses, lifting coil tubing, working dockside or raising materials to height. Different jobs need different tools. Some typical options used for different industries include:

Utility & electrical – Auger, pole guide, two piece jib, work platform, radio remotes, track carrier, hydraulic tool circuit

Truss hauling and setting – Tractor mounted booms with additional sections minimize stowed length over cab and create more space for a trailer, out and down outriggers.

Oil & gas – Auxiliary winch, tilt cab, tractor mount boom, pipe rack, oil heater, welder generator.

Public works – Special flatbeds and tool boxes, conspicuity lighting, out and down outriggers, custom paint colors.

Railroad – Rail gear, hydraulic tool circuit at boom tip, clamshell bucket, heavy duty bed and body, rear mounting, ride around control console.

Other applications with special requirements include construction, mining, forestry and many more. Many options and features are available to add to your boom truck to best customize it for your work.



If you are in need of these types of application-centric options, make sure the crane you select can handle what you intend to do.

Of equal importance is selecting a manufacturer that will work with you to optimize the machine for your job. Elliott specializes in listening to your needs and collaborating with you to get the solution you need to do your job safely and efficiently, while increasing productivity.

CHOOSING THE RIGHT BOOMTRUCK **PUTTING IT ALL TOGETHER**



Elliott Equipment Company sets itself apart from competitors by listening to the needs of professionals across industries and designing machines that meet their specific needs. We do it because we think everyone's better off when work is faster, safer and more productive.



IF YOU'RE READY TO PUT AN ELLIOTT ON YOUR FLEET, REQUEST A CONSULTATION.

We'll help you identify the machine that will streamline your work and enhance your business. Then, get in touch with your nearest distributor to take the first step to adding the right machine for your fleet.

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