

## Construction Equipment

Used Construction Equipment Fresno - Industrial equipment including heavy-duty vehicles designed for specific construction tasks make up the majority of construction equipment. Earthmoving operations are often accompanied by heavy trucks, engineering machines, heavy hydraulics and more. Some of the popular kinds of the five equipment systems include implement, control and information, powertrain, traction and structure. Many kinds of industrial machines are categorized under the heavy equipment category. Tractors Tractors are specially designed to deliver high tractive movements at slower speeds to accommodate hauling items such as trailers or construction equipment commonly for agricultural purposes. One of the most popular farming machines is tractors that mechanize heavy lifting and loading tasks that need traction and power. A variety of agricultural attachments may be mounted on or behind the tractor to make certain tasks more efficient. Tractors can mechanize attachments to enable digging, heavy lifting and loading, etc.

Excavators Excavators are one of the most popular types of heavy construction equipment. They often feature a cab located on a rotating platform, a boom and a stick. The house sits on top of an undercarriage outfitted with wheels or tracks depending on the model. Hydraulic cylinders, motors and hydraulic fluid all help the excavator complete its movement and job capacity. The linear actuation of the hydraulic cylinders offers a different operation mode compared to excavators operated with cables, steel ropes and winches to accomplish tasks.

Backhoe Loaders A backhoe loader is similar to a tractor with a backhoe situated at one end and a front loader on the other. To help prevent operator fatigue, there is a swiveling seat to allow the operator to face whichever direction is needed. Backhoe loaders are for sale as is or they can be created by combining a rear backhoe loader with a front-end loader. The backhoe loaders that have been manufactured that way are extremely strong; models specified for farm variation are not as suited for heavy work. The farm model requires the operator to change seats from sitting in the tractor seat to sitting in front of the backhoe controls. Constantly changing positions to move the machine into place for digging slows everything down. Thanks to the invention of hydraulically powered attachments including an auger, tiltrotator, a grapppler, breaker, etc., the backhoe can be outfitted to use in a variety of applications including construction, engineering and agricultural sectors. The tiltrotator attachment works well for carrying tools. Many backhoes provide different quick coupler mounting systems. This mechanism enables better efficiency and drastically increases the abilities of the machine. Backhoes commonly work beside loaders and bulldozers. Backhoe loaders are popular within the industrial equipment industry. Certain types of special equipment including excavators and front-end loaders are replacing backhoes. The mini-excavator has become popular for many applications. Previous job sites that would have employed a backhoe may now feature a mini excavator and skid steer used in conjunction. A power shovel can be created when the backhoe bucket is used in reverse. This can be useful for working around pipes and other obstacles, to increase overall reach capability, for loading from a stockpile or for filling material or picking up items next to buildings.

Skidder The skidder is a type of heavy equipment utilized in the forestry industry and logging for taking freshly cut trees out of the forest. Freshly cut logs are dragged out of the forest and transported from where they were cut to a landing where they are loaded onto logging trucks and transported to the sawmill.

Dredging Dredging refers to a type of underwater excavation or partially underwater. Dredging can be completed in shallow or deep waters. This excavation method is used to keep waterways and ports navigable for ships and free of debris. It is used for coastal redevelopment, land reclamation and assists in protecting the coastline. Sediments can be sucked up and redistributed. Dredging can be utilized to recover items at times. Minerals or high-value sediments can be collected from certain construction applications during dredging. Four specific components comprise the dredging process including loosening items, transporting the materials to the surface, transporting materials and disposing of them. Extracted items may be locally disposed of, removed in pipelines via a liquid suspension or moved by barge.

Bulldozers

Bulldozers are powerful heavy equipment with great tracks to provide superior mobility on rough terrain. Their design features excellent ability to distribute the extensive weight over a large area to prevent the machine from sinking into muddy or sandy environments. Swamp tracks, as the extra wide tracks are known, are useful in poor terrain. The bulldozers' transmission system is built to deliver powerful tractive force by enabling the machine to take advantage of its' unique tracks. Bulldozers are commonly utilized in mining, road building, forestry, developing infrastructure, construction, land clearing and projects that need earth-moving machinery that is extremely powerful and mobile. Wheeled bulldozers have four wheels and are operated with a 4WD with an articulated, hydraulic system. The hydraulically actuated blade is situated in front of the articulation joint. The two primary tools on a bulldozer are the blade and the ripper. Grader A grader is a type of construction machine that features a long blade. A grading operation creates a flat surface. Many models have an engine and cab located above the rear axles at one end of the machine, three axles with the third axle situated at the front end and the blade balanced in between. Most graders drive while their rear axles are in a tandem position. Some models feature front-wheel drive to provide better grading maneuverability. Extra attachments may be used on the rear of the machine such as a blade, ripper, compactor or scarifier. Dirt grading and snowplowing jobs commonly use a mounted side blade. Some grader models that can employ numerous attachments. Other graders have been designed for specific industries including underground mining. Graders are employed by civil engineering to finish precision grades of a certain blade angle, pitch and height. Scrapers and bulldozers complete rough grading processes. Dirt and gravel roads rely on graders to provide accuracy. These machines prepare the base for paved roads and construction. Graders are employed to set gravel or native soil foundation pads to finish grade before large-scale building construction. These giant machines create inclined surfaces to facilitates side slopes needed for drainage and road building beside highways. A joystick or steering wheel is used to control the front wheel angle of the grader. A smaller turning radius is possible by many models due to the frame articulation design between the rear and front axles. This enables the operator to change the articulation angle to be more efficient moving material. Additional functions may be completed with hydraulics that are controlled directly by levers, joystick input or electronic switches that deliver power to electro-hydraulic servo valves.