

Construction Equipment

Used Construction Equipment Bellevue - Construction equipment includes industrial machines designed to conduct certain building and demolition tasks. Heavy hydraulics, engineered vehicles and large trucks often accompany earthmoving operations. 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 Specifically designed tractors offer extreme tractive capabilities at slower speeds to facilitate hauling equipment including construction items, trailers and items for agriculture. Tractors are commonly used to describe farm equipment that offers traction and power to mechanize farming tasks. Numerous agricultural additions can be mounted behind or onto the tractor to make certain jobs easier. The tractor can provide power to the mechanized attachment to facilitate heavy lifting or digging etc. Excavators Heavy construction equipment such as excavators have a stick, a boom and a cab situated on a rotating platform. Depending on the particular model, the house is located on top of an undercarriage that has either tracks or wheels. The hydraulic excavators complete all functions and movement with the help of hydraulic fluid, hydraulic motors and hydraulic cylinders. A different operation mode is achieved with excavators that rely on the linear actuation of the hydraulic cylinders as opposed to models that use cables, steel ropes and winches. Backhoe Loaders Backhoe loaders resemble a tractor and these machines feature a backhoe found at one end of the equipment and a front loader found at the opposite end. There is a swiveling seat option to position the operator facing whichever direction is required at the time. Backhoe loaders can be built by pairing a front-end loader with a rear backhoe or the machines can be purchased ready to go. These machines are very durable and have been manufactured to be strong enough to complete farm work however, they are not suitable for heavy construction jobs. Operators using the farm model will have to change seats from the tractor seat to the front of the backhoe controls. Obviously, switching seats repeatedly to reposition the machine for digging applications slows productivity 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. A great attachment for carrying tools is the tiltrotator. Numerous backhoes offer quick coupler mounting systems. The quick coupler offers better attachment efficiency for switching different equipment out on the machine. Backhoes commonly work beside loaders and bulldozers. Backhoe loaders are popular within the industrial equipment industry. Backhoes are commonly being replaced by different front-end loaders and excavators. The mini-excavator has become popular for many applications. A mini-excavator and a skid steer can work together to complete work that was formally reserved for a backhoe. 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 A skidder is a kind of heavy equipment that is used in logging for hauling freshly cut trees from the forest in a forestry practice known as skidding. The logs are dragged out and transported from the cutting location to a landing where they can be loaded onto logging trucks and taken to the sawmill. Dredging Excavating partially or completely underwater is a process called dredging. Dredging can take place in the ocean or in shallow waters. Dredging helps to keep waterways and ports easy to navigate and open. It is used for coastal redevelopment, land reclamation and assists in protecting the coastline. This process allows sediments to be suctioned up and relocated. Sometimes, dredging is completed to recover materials. 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 A popular type of heavy equipment is the bulldozer. It relies on

large tracks to manage mobility on rough surfaces and tricky 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. Poor terrain can be easily navigated with extra-wide swamp tracks. The transmission system delivers extensive tractive force and allows the machine to make the most of the 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 bulldozer models with 4WD are available. They feature an articulated hydraulic system to complete difficult tasks. The hydraulically actuated blade is mounted in front of the articulation joint. The ripper and the blade are the primary tools with this model. Grader Graders are a kind of construction equipment that uses a long blade. Graders make surfaces flat during grading. Many models have an engine and a cab situated at one end of the machine above the rear axles. There are three axles and the third one is found at the front end of the machine. The blade is balanced in between. Many graders ride with their rear axles in tandem. Some models offer front-wheel drive to provide more maneuverability for grading purposes. Extra attachments may be used on the rear of the machine such as a blade, ripper, compactor or scarifier. Snowplowing and dirt grading operations often use a side blade that can be mounted. A variety of attachments can be used on certain grader models. Other graders have been designed for specific industries including underground mining. Graders are used in the civil engineering industry to finish grade with precision with the proper height, pitch and blade angle. Scrapers and bulldozers complete rough grading processes. Maintaining and constructing dirt and gravel roads requires work by graders to ensure accuracy. They are also used to prepare the base for the construction of paved roads. These machines are used to set native soil foundation pads or gravel to complete the grade prior to large-scale construction commences. These giant machines create inclined surfaces to facilitate 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. Materials can be moved more efficiently thanks to this design allowing operators to change the articulation angle. 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.