

Construction Equipment

Used Construction Equipment Mexico - Most heavy-duty construction equipment includes vehicles build to complete specific construction tasks. Earthmoving operations are often accompanied by heavy trucks, engineering machines, heavy hydraulics and more. There are five equipment systems including traction, information and control, structure, implement and powertrain. There is a variety of industrial equipment that is classified under the heavy equipment umbrella. 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 often utilized as farm equipment to mechanize farming tasks that require power and traction. 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 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. Excavators rely on hydraulic motors, hydraulic fluid and hydraulic cylinders to facilitate all movements and functions. The hydraulic cylinders provide linear actuation to provide a different operation mode in comparison to other excavator models that use winches, steel ropes and cables. Backhoe Loaders A backhoe loader is similar to a tractor with a backhoe situated at one end and a front loader on the other. A swiveling seat design enables the operator to face either direction as needed, preventing operator fatigue. 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. However, the farm unit requires the operator to change seats from sitting in front of the backhoe controls to then sitting in the tractor seat and vice versa. 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. Quick coupler mounting systems are commonly found on numerous backhoes. This enables easier attachment mounting and can dramatically increase the capabilities of the equipment on the machine. Backhoes often work alongside bulldozers and loaders. 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. Previous job sites that would have employed a backhoe may now feature a mini excavator and skid steer used in conjunction. A backhoe bucket can be reversed and utilized in a power shovel application. This design is helpful for extended-reach applications, working around pipes, loading and filling stockpiled materials, etc. 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. 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 underwater excavation. Dredging can be completed in shallow or deep waters. This process is used to keep ports and waterways open and navigable. Dredging is often done to improve the coastline, for coastal development purposes and land reclamation. Sediments can be sucked up and redistributed. 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 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. The extra-wide tracks are called swamp tracks and these work well in difficult terrain. Transmission systems within bulldozers are designed to offer excellent tractive force by taking advantage of the unique tracks. Bulldozers are often used in road building, infrastructure development, road building applications, mining, land clearing, construction and other projects that rely on earth-moving machinery. Wheeled bulldozer models with 4WD are available. They feature an articulated hydraulic system to complete difficult tasks. The hydraulically actuated blade is situated in front of the articulation joint. The blade and the ripper are the main tools associated with this bulldozer. Grader A grader is a type of construction machine that features a long blade. It creates a flat surface during the grading operation. Numerous models feature a cab and engine found above the rear axles located at one end of the equipment with three axles. The third axle is found at the front portion of the machine and the blade balances nicely in between. Many graders ride with their rear axles in tandem. Some models offer front-wheel drive to provide more maneuverability for grading purposes. Optional rear attachments include the compactor, scarifier, ripper and blade. Snowplowing maneuvers and dirt grading jobs rely on a mounted side blade. Some grader models that can employ numerous attachments. Some graders have been specifically designed for use in underground mining. Graders are used in the civil engineering industry to finish grade with precision with the proper height, pitch and blade angle. Rough grading processes are completed with bulldozers or scrapers. Graders achieve accuracy while building gravel and dirt roads. These machines prepare the base for paved roads and construction. Graders are essential for setting gravel or native soil foundation pads to make the grade before construction begins. These large machines can designate inclined surfaces to establish slopes for drainage ditches or roads beside the highways. Grader steering can be completed via a joystick or steering wheel to control the angle of the front wheels. Numerous models can complete a smaller turning radius thanks to frame articulation between the front and rear axles. This enables the operator to change the articulation angle to be more efficient moving material. Electro-hydraulic servo valves rely on electronic switches, joystick input or direct lever control to complete additional functions via hydraulics.