

Construction Equipment

Used Construction Equipment New Mexico - Industrial equipment including heavy-duty vehicles designed for specific construction tasks make up the majority of construction equipment. Common earthmoving operations rely on engineering equipment, oversized trucks and heavy hydraulics among other things. Five main types of construction equipment systems include powertrain, implement, structure, control and information and traction. There is a variety of industrial equipment that is classified under the heavy equipment umbrella. Tractors Tractors are meticulously designed to provide high tractive responses at slow speeds to facilitate hauling equipment, trailers or items required for construction or agricultural applications. One of the most popular farming machines is tractors that mechanize heavy lifting and loading tasks that need traction and power. Numerous agricultural additions can be mounted behind or onto the tractor to make certain jobs easier. Tractors can mechanize attachments to enable digging, heavy lifting and loading, 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. Excavators rely on hydraulic motors, hydraulic fluid and hydraulic cylinders to facilitate all movements and functions. 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 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. The backhoe loaders that have been manufactured that way are extremely strong; models specified for farm variation are not as suited for heavy work. 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. The hydraulically powered attachments include the grapppler, tiltrotator, auger, breaker and other items. The backhoe can be used in a variety of industries including agricultural, engineering and construction. A popular attachment for transporting tools is the tiltrotator. Many backhoes provide different quick coupler mounting systems. This mechanism enables better efficiency and drastically increases the abilities of 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. It is possible to reverse a backhoe bucket and use it as a power shovel. This flexible design is excellent for completing tasks around obstacles such as pipes, for increasing reach potential and for filling items or loading stockpiled materials. Skidder A type of forestry equipment for transporting freshly cut trees is the skidder. This hauling practice is referred to as skidding. Newly cut logs are dragged out of the forest and taken from the cutting area to a landing where they can be safely loaded and taken to the sawmill on logging trucks. Dredging Dredging refers to underwater excavation. Dredging can occur in shallow lakes or the deep ocean. This excavation method is used to keep waterways and ports navigable for ships and free of debris. It is commonly done for land reclamation, coastal development and coastline protection. This process allows sediments to be suctioned up and relocated. Dredging can be utilized to recover items at times. Minerals or high-value sediments can be collected from certain construction applications during dredging. There are four parts to the dredging process including loosening items, bringing the material topside to the surface, transporting and disposing of the material. 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.

Excellent design features evenly distribute the weight over a wide area to prevent this heavy machine from sinking in sandy or muddy locations. Swamp tracks, as the extra wide tracks are known, are useful in poor terrain. Transmission systems within bulldozers are designed to offer excellent tractive force by taking advantage of the unique tracks. Mobile and powerful, bulldozers are commonly used in developing infrastructure, road building, construction, mining, land clearing and other projects that require earth-moving equipment. There are 4WD models on the market of wheeled bulldozers that utilize a hydraulic, articulated system. The hydraulically actuated blade is mounted 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. 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. 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. Some graders have been specifically designed for use in underground mining. Graders are employed by civil engineering to finish precision grades of a certain blade angle, pitch and height. Rough grading processes are completed with bulldozers or scrapers. Graders achieve accuracy while building gravel and dirt roads. They are also used to prepare the base for the construction of paved roads. Graders are employed to set gravel or native soil foundation pads to finish grade before large-scale building construction. These impressive machines can create inclined surfaces in order to generate side slopes for roads or drainage ditches along sides of the highways. Grader steering can be completed via a steering wheel or a joystick to control the front wheels' angle. Many models can conduct a tighter turning radius due to the way the frame is articulated between the rear and front axles. Materials can be moved more efficiently thanks to this design allowing operators to change the articulation angle. Electro-hydraulic servo valves rely on electronic switches, joystick input or direct lever control to complete additional functions via hydraulics.