

Construction Equipment

Used Construction Equipment Pomona - Most heavy-duty construction equipment includes vehicles build to complete specific construction tasks. Heavy hydraulics, engineered vehicles and large trucks often accompany earthmoving operations. 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. Depending on the particular model, the house is located on top of an undercarriage that has either tracks or wheels. 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. A swiveling seat design enables the operator to face either direction as needed, preventing operator fatigue. These machines can be purchased as is or may be constructed from a farm tractor pairing with a rear backhoe and 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. 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. This constant movement to reposition the machine during digging often slows down the process. Common hydraulically powered attachments include the auger, a grapppler, breaker and a tiltrotator to complete a variety of jobs in the engineering, agricultural and construction industries. The tiltrotator attachment works well for carrying tools. Many backhoes provide different quick coupler mounting systems. The quick coupler offers better attachment efficiency for switching different equipment out on the machine. It is common to find backhoes working beside bulldozers and loaders. One of the most common types of industrial equipment is the backhoe loader. Backhoes are commonly being replaced by different front-end loaders and excavators. The mini-excavator has become popular for many applications. Jobs that would have relied on a backhoe can now combine a skid steer and a mini-excavator. A power shovel can be created when the backhoe bucket is used in reverse. 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. 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 Dredging refers to a type of underwater excavation or partially underwater. Dredging can take place in the ocean or in shallow waters. This process is used to keep ports and waterways open and navigable. It is commonly done for land reclamation, coastal development and coastline protection. Sediments can be sucked up and redistributed. On occasion, dredging can be done to recover things lost in the water. High-value sediments or minerals may be collected via dredging and utilized by the construction industry. There are four parts to the dredging process including loosening items, bringing the material topside to the surface, transporting and disposing of the material. Dredging materials can be transported by barge, removed as a liquid suspension through pipelines or locally disposed of. Bulldozers A popular type of heavy equipment is the bulldozer. It relies on large tracks to manage mobility on rough surfaces and tricky 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. 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 mounted in front of the articulation joint. The ripper and the blade are the primary tools with this model. Grader A grader is a type of construction machine that features a long blade. A grading operation creates a flat surface. 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. There are optional attachments for the rear including the scarifier, compactor, ripper or blade. Dirt grading and snowplowing jobs commonly use a mounted side blade. 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. Bulldozers and scrapers are used to accommodate difficult grading procedures. Graders achieve accuracy while building gravel and dirt roads. Graders are used to achieving the proper base for construction and road paving. Graders are essential for setting gravel or native soil foundation pads to make the grade before construction begins. 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. A smaller turning radius is possible by many models due to the frame articulation design between the rear and front axles. This design allows operators to change the angle of articulation to move material more efficiently. Other functions are usually powered with hydraulics and can be directly controlled by joystick inputs, levers or electronic switches powering electro-hydraulic servo valves.