

Various Types Of Cranes

A crane is a tower or derrick that is equipped with cables and pulleys that are used to lift and lower material. They are commonly used in the construction industry and in the manufacturing of heavy equipment. Cranes for construction are normally temporary

structures, either fixed to the ground or mounted on a purpose built vehicle.

They can either be controlled from an operator in a cab that travels along with the crane, by a push button pendant control station, or by radio type controls. The crane operator is ultimately responsible for the safety of the crews and the crane.

Mobile Cranes

The most basic type of crane consists of a steel truss or telescopic boom mounted on a mobile platform, which could be a rail, wheeled, or even on a cat truck. The boom is hinged at the bottom and can be either raised or lowered by cables or hydraulic cylinders.



Telescopic Crane

This type of crane offers a boom that consists of a number of tubes fitted one inside of the other. A hydraulic mechanism extends or retracts the tubes to increase or decrease the length of the boom.



Tower Crane

The tower crane is a modern form of a balance crane. When fixed to the ground, tower cranes will often give the best combination of height and lifting capacity and are also used when constructing tall buildings.



Truck Mounted Crane

Cranes mounted on a rubber tire truck will provide great mobility. Outriggers that extend vertically or horizontally are used to level and stabilize the crane during hoisting.



Rough Terrain Crane

A crane that is mounted on an undercarriage with four rubber tires, designed for operations off road. The outriggers extend vertically and horizontally to level and stabilize the crane when hoisting. These types of cranes are single engine machines where the same engine is used for powering the undercarriage as it is for powering the crane. In these types of cranes, the engine is normally mounted in the undercarriage rather than in the upper portion.



Loader Crane

A loader crane is a hydraulically powered articulated arm fitted to a trailer, used to load equipment onto a trailer. The numerous sections can be folded into a small space when the crane isn't in use.



Overhead Crane

Also referred to as a suspended crane, this type is normally used in a factory, with some of them being able to lift very heavy loads. The hoist is set on a trolley which will move in one direction along one or two beams, which move at angles to that direction along elevated or ground level tracks, often mounted along the side of an assembly area.



In the excavation world, cranes are used to move equipment or machinery. Cranes can quickly and easily move machinery into trenches or down steep hills, or even pipe. There are many types of cranes available, serving everything from excavation to road work.

Cranes are also beneficial to building bridges or construction. For many years, cranes have proven to be an asset to the industry of construction and excavating. Crane operators make really good money, no matter what type of crane they are operating.

This article was submitted by Er. Vikrant

Source: <http://www.engineeringcivil.com/various-types-of-cranes.html>