Self Erect Cranes

Used Self Erect Cranes San Jose - Usually the base that is bolted into a huge concrete pad provides the essential support for a tower crane. The base is attached to a mast or a tower and stabilizes the crane that is connected to the inside of the structure of the building. Usually, this attachment point is to a concrete lift or to an elevator shaft. Typically, the mast is a triangulated lattice structure measuring 0.9m2 or 10 feet square. The slewing unit is attached to the very top of the mast. The slewing unit consists of a motor and a gear which enable the crane to rotate. Tower cranes may have a max unsupported height of eighty meters or two hundred sixty five feet, while the tower crane's maximum lifting capacity is sixteen thousand six hundred forty two kg or 39,690 pounds with counter weights of twenty tons. In addition, two limit switches are utilized in order to make sure that the operator does not overload the crane. There is also another safety feature known as a load moment switch to ensure that the driver does not surpass the ton meter load rating. Last of all, the tower crane has a maximum reach of seventy meters or two hundred thirty feet. There is certainly a science involved with erecting a tower crane, especially due to their extreme heights. First, the stationary structure has to be transported to the construction location by utilizing a large tractor-trailer rig setup. After that, a mobile crane is utilized so as to assemble the machinery part of the jib and the crane. These parts are then attached to the mast. The mobile crane next adds counterweights. Forklifts and crawler cranes could be some of the other industrial machinery which is utilized to erect a crane. When the building is erected, mast extensions are added to the crane. This is how the crane's height could match the building's height. The crane crew uses what is known as a top climber or a climbing frame that fits between the top of the mast and the slewing unit. A weight is hung on the jib by the work crew in order to balance the counterweight. When complete, the slewing unit is able to detach from the top of the mast. In the top climber, hydraulic rams are used to adjust the slewing unit up an additional 20 feet or 6.1m. After that, the crane driver utilizes the crane to insert and bolt into position another mast section piece.