GLOBAL LIFT EQUIPMENT

Self Erect Cranes

Used Self Erect Cranes Thousand Oaks - Usually the base which is bolted into a big concrete pad provides the crucial support for a tower crane. The base is attached to a mast or a tower and stabilizes the crane which is connected to the inside of the building's structure. Usually, this attachment point is to a concrete lift or to an elevator shaft. The crane's mast is often a triangulated lattice structure which measures 10 feet square or 0.9m2. Connected to the very top of the mast is the slewing unit. The slewing unit is made of a gear and a motor that allows the crane to rotate. Tower cranes are able to have a maximum unsupported height of 80m or 265 feet. The tower crane's maximum lifting capacity is 16,642 kg or thirty nine thousand six hundred ninety lbs. with counter weights of 20 tons. Moreover, two limit switches are used to be able to ensure the driver does not overload the crane. There is also one more safety feature referred to as a load moment switch to make certain that the operator does not surpass the ton meter load rating. Lastly, the maximum reach of a tower crane is seventy meters or 230 feet. Because of their extreme heights, there is a science involved to erecting a crane. The stationary structure would at first have to be transported to the construction site by using a big tractor-trailer rig setup. After that, a mobile crane is used in order to assemble the machinery portion of the crane and the jib. Then, these parts are attached to the mast. Afterward, the mobile crane adds counterweights. Crawler cranes and forklifts can be some of the other industrial machinery which is usually used to erect a crane. Mast extensions are added to the crane as the building is erected. This is how the height of the crane can match the building's height. The crane crew uses what is called 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 utilized to adjust the slewing unit up an extra 6.1m or 20 feet. Then, the crane operator uses the crane to insert and bolt into place one more mast section piece.