

Tower Crane Safety

OHSA reminds all duty holders that the setting up and operation of all lifting appliances (including cranes) is covered by a number of specific provisions in the Work Equipment (Minimum Safety and Health Requirements) Regulations, of 2004. In particular, regulation 5 (1) requires an employer to ensure that where the safety of work equipment depends on the installation conditions, such equipment shall be subject to an initial inspection (after installation, and before first being put into service) and a subsequent inspection after assembly at a new site or in a new location by competent persons, so as to ensure that the work equipment has been installed correctly and is operating properly.

The Work Places (Health, Safety and Welfare) Regulations S.L 424.09 specify that cranes have to be thoroughly examined by a competent person and a certificate of the test and examination specifying the safe working load or loads of the machine and signed by the person making the test is issued and kept available for inspection. The base of the crane has to be certified by a competent person so as to ascertain that it can withstand the weight of the crane and the maximum load it can lift. The employer must also ensure that the crane is regularly maintained by competent persons and that the safety features are not tampered with. Another very important aspect in the operation of tower cranes is the re-reeving operation whereby the operator changes the wire rope configuration from two fall to four fall. When this is done automatically by engaging the pulley mechanism to the carriage, the operator has to make certain that the mechanism is correctly and fully engaged. There are various safety aspects related to crane operations. Some of these are described below.

The crane operator must be able to read and interpret the load charts so that the crane is not overloaded. The employer must ensure that the safety switches and alarms are fully functional and a risk assessment of the lifting operations is carried out. No persons may be lifted by a crane unless the crane is designed for this purpose and a suitable cage, certified by a competent person, is used. Cranes should not be operated in very strong winds and the loads have to be attached to the hook in a safe manner and well balanced. Passing with loads over persons and third party property should be avoided. A safe passage for pedestrians should be established and clearly indicated in cases where the crane is erected in the road. If the operator cannot see the whole lifting operation there should be a signal man to guide him. Particular care should be taken to stay clear of overhead power lines. The tower crane should be left in free slew and no objects should be left attached to the hook when not in use.

The full regulations and Code of Practice can be viewed at:

<http://www.mjha.gov.mt/DownloadDocument.aspx?app=lom&itemid=10734&l=1>

<http://www.justiceservices.gov.mt/DownloadDocument.aspx?app=lom&itemid=10714&l=1>

http://www.ohsa.org.mt/docs/CodePractice_Building.pdf

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