

Crane Selection

The essentials of safe crane operation

Getting the right crane for your job

Avoid delays and the ordering of a crane not best suited to your needs. It is important that people evaluate their site conditions before they telephone the crane hire company.

Things to consider are:

Information about the load.

Get as much as possible. Weight and dimensions of a load are key information. Perhaps the exact data is not available to you, in which case a description will assist the crane hire company to correctly assess the situation. The job you are doing may be similar to crane operations they have done for others. The make and model of a piece of machinery to be lifted for example, may provide the essential information the crane dispatcher requires to determine the weight and dimensions.

How close can the crane get to the load that is to be lifted?

Lifting capacity of a crane is determined by the reach of the boom, both the length extended and the distance the load is from the centre of rotation. It's important therefore to know how far the crane will have to reach in order to place the load in the desired location.

Identify any obstacles the crane has to work around in order to complete the task.

Power lines, trees or buildings etc could all impact on the operation of the crane. You may need to explain to the crane dispatcher what obstacles exist that may affect the crane's ability to perform the tasks required.

Check the suitability of the ground conditions.

Confirm that the ground area is big enough and can support the weight of the crane moving into position and when working. Identify potential trouble spots such as underground water mains or drains. Access for the crane may need to be improved to avoid getting the crane stuck when moving onto or off the site. Cranes can be set up on sloping ground but they have to be levelled before lifting. The crane operator may need to bring additional materials and equipment to enable the crane to be levelled.

Check the access the set up position.

Narrow driveways and tight corners may require a four wheel steer crane. Parking may be needed for a support vehicle bringing additional equipment if required. Discuss any limitations on access etc with the crane dispatcher.

Evaluate the impact of the crane operation on the general public.

Will loads have to be lifted over roadways or the property of other people? Will traffic have to be stopped or controlled during crane operations?

Consider the need for specific lifting equipment.

Discuss your needs with the dispatcher. Special lifting equipment is available to lift loads of all types and the correct attachment of suitable lifting equipment to the load will avoid damage.

Consider requesting a site visit by a crane company representative.

Crane operation companies are keen to meet their customers expectation and maintain safety. A site visit by their representative may be appropriate

