# Request for Quotation

**Company Name:**

**Address:**

**City, Province:**

**Postal Code:**

**Job Reference:**

**Contact Name:**

**Phone:**

**Fax:**

**E-Mail Address:**

<table>
<thead>
<tr>
<th>Equipment Type</th>
<th>Main Hoist</th>
<th>Auxiliary Hoist (if applicable)</th>
<th>Bridge (if applicable)</th>
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</thead>
<tbody>
<tr>
<td>T/R D/G Bridge Crane</td>
<td>Lifting Capacity:</td>
<td>Lifting Capacity:</td>
<td>Capacity:</td>
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<tr>
<td>T/R S/G Bridge Crane</td>
<td>Lift Height:</td>
<td>Lift Height:</td>
<td>Span:</td>
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<tr>
<td>Jib Crane</td>
<td>Lift Speeds:</td>
<td>Lift Speeds:</td>
<td>Travel speeds:</td>
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<td>Single Speed</td>
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<td>VFD</td>
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<tr>
<td>Gantry Crane</td>
<td>Trolley Speeds:</td>
<td>Trolley Speeds:</td>
<td>Capacity:</td>
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<td>Single Speed</td>
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<td>VFD</td>
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</tbody>
</table>

If there are two hoists on this equipment, are they to be on separate trolleys or one common trolley? 

**Control**

- Pendant on Track
- Pendant from Hoist
- Radio Control with Pendant Back-Up

<table>
<thead>
<tr>
<th>Enclosures:</th>
<th>CEMA 1</th>
<th>CEMA 12</th>
<th>CEMA 4</th>
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</thead>
</table>

**Runway**

- Do you require a runway system for this equipment? Yes No
- If yes, please check all the components you require. Conductor Beam Columns Rail
- What is the required length of the runway? 
- If new columns are required, will they be free standing tied back to existing structure
- What is or what will be the down shop center to center spacing between them?
- Do you require installation of this equipment? Yes No
- Do you require freight to the job site? Yes No If yes, what is the location?
Your Overhead Crane Specialists

- Standard Overhead, Jib and Gantry Cranes
- Custom Cranes
- Heavy Duty Cranes
- Runway Systems and Monorail Systems
- Installations by Factory Trained Personnel
- Rebuilds, Upgrades and Modifications of Existing Systems
- Parts for All Cranes and Related Equipment for All Manufacturers
- Service - Emergency 24 Hour Service - Equipment Inspections - Inspection Certificates (Ministry of Labour Accepted)
- Non-destructive Testing for All Types of Lifting Attachments
- Training Seminars in Crane Operation
- Chain Hoists and Lifting Attachments

This pamphlet is intended to give a general understanding of the terminology used in the overhead crane industry. The following explanation of terms should provide you with the information you will need to make an informed decision when purchasing material handling equipment. On the reverse side of this pamphlet, you will find an easy to use Request for Quotation form which can be faxed to our office. If you have any questions regarding this brochure or any of the products or services we provide, please contact us.

**Cranes Components**

- **Bridge** - The main travelling structure of the crane which spans the width of the bay. The bridge consists of two end trucks and one or two bridge girders depending on the **Equipment Type**.
- **End trucks** - Located on either side of the span, the end trucks house the wheels on which the entire crane travels. These wheels ride on the runway beam allowing access to the entire length of the bay.
- **Bridge Girders** - The principal horizontal beam of the crane bridge which supports the trolley and is supported by the end-trucks.
- **Trolley Hoist** - The unit consisting of both the hoist and the trolley frame. In situations where more than one hoist is required on one crane, both hoists can be supplied on a single trolley or on separate trolleys.
- **Trolley** - The trolley carries the hoist across the bay along the bridge girder(s) traversing the span.
- **Hoist** - The hoist is mounted to the trolley and performs the actual lifting function via a hook or lifting attachment. There are two basic types of hoist. The Munck brand is a Wire Rope Hoist which is very durable and will provide long term, reliable usage. The other type of hoist is the Chain Hoist. These hoists are used for low capacity, lighter duty applications and for projects in which cost is a primary deciding factor.

**Basic Terminology**

- **Capacity** - The maximum weight the crane will be required to lift.
- **Span** - The horizontal distance between the rails of the runway on which the crane is to travel.
- **Lift or Hook Height** - The required distance from the floor to the top of the hoist. This dimension is critical in most applications as it determines the height of the runway from the floor and is dependent on the core inside height of the building.
- **Bridge, Trolley and Lift Speeds** - The rate at which the bridge or trolley travels, or at which the hoist lifts, usually in feet per minute or FPM. You may specify either Single Speed, Two Speed travel/lift or a specific rate of speed, (i.e. 120 & 30 FPM bridge travel). Another option as far a motion speeds are concerned is a Variable Frequency Drive. See the Control section for more information.

**Equipment Types**

This section specifies the kind of equipment you require. Overhead cranes come in four basic configurations:

- **Top Running (T/R)** - The crane bridge travels on top of rails mounted on a runway beam supported by either the building columns or columns specifically engineered for the crane. (See the first and second graphics on the front of this pamphlet.)
- **Under Running (U/R)** - The crane bridge travels on the bottom flange of the runway beam which is usually supported by the roof structure. (See the third graphic on the front of this pamphlet.)
- **Single Girder (S/G)** - The crane consists of two end trucks, a single bridge girder and the trolley hoist unit. The trolley runs on the bottom flange of the bridge girder. (See the second and third graphics on the front of this pamphlet.)
- **Double Girder (D/G)** - The crane consists of two end trucks, two bridge girders and the trolley hoist unit. The trolley runs on rails on top of the bridge girders. (See the first graphic on the front of this pamphlet.)

A variation on these types of overhead crane are Gantry Cranes. These cranes are essentially the same as the regular overhead cranes, however, the bridge girders(are) connected to "legs" on either side of the span. These "legs" eliminate the supporting runway and column system and connect to end trucks which run on a rail either embedded in, or laid on top of, the floor.

For some applications only a Trolley Hoist is required. For instance, in the case of a monorail system a Trolley Hoist unit similar to the one used on single girder cranes is mounted on a simple beam which might be used to service an assembly line, to lift a workpiece or to service clients facility. Other clients may have an existing single or double girder crane bridge and may just want to replace the hoisting unit. In most of these situations, capacity permitting, we can provide either a Wire Rope or Chain Hoist.

Another solution which may fit your needs is a Jib Crane. A Jib Crane basically consists of a boom which is supported as a cantilever on a column. A Trolley Hoist travels along the boom which can rotate up to 360°.

**Control**

- **Pendant** - The pendant gives the operator precise control over the motions of the crane. There are many configurations of pendant depending on the function of the equipment being controlled. Each pushbutton on the pendant controls an operating function of the crane.

- **Radio Control** - The radio control performs exactly like the pendant but operates using a radio frequency. The radio control incorporates numerous safety features and allows the operator a greater range of operator motion than a pendant.

- **Power Supply** - The electrical service available in the building for which the crane is being designed (i.e. 575 Volt, 3 phase, 60 Hertz).
- **Enclosures** - The enclosures house all of the electrical components on the crane and are rated by the National Electrical Manufacturers Association (NEMA) or the Canadian Electrical Manufacturers Association as to the level of protection they provide from the conditions in the surrounding environment. There are three basic levels of protection.
  - **CEMA/NEMA 1** - Provides protection against accidental contact with, and electrical shock from, enclosed equipment.
  - **CEMA/NEMA 12** - Provides indoor protection against falling dirt, dust, oil and water.
  - **CEMA/NEMA 4** - Provides indoor protection in hosed down, very wet or outdoor environments, as well as falling dirt, dust, oil and water.

- **Runway**

The rails, beams and columns on which the crane operates. The rail, on which the end-trucks run, is fastened to the runway beam. This beam is then supported on columns (Top Running) or from the roof structure (Under Running). The existing building columns can be used or new ones can be supplied with the system. New columns can either be free Standing or Tied Back to the existing building structure for additional lateral support. When designing a runway system that is to use existing building columns, it is important to provide the down shop center to center spacing between them. Conductors supply power to the crane and are mounted on the runway beam.