WHY SOURCE A CRANE FROM ELS?

ELS has the experience and technical expertise to review your application and recommend the best solution to your materials handling challenges. Overhead crane systems are regularly in service for over 25 years. As a result, we strongly recommend investing in the right equipment which will serve you over a long span. We won’t try to sell you something gold plated (unnecessary features or cost), but we don’t automatically gravitate toward the cheapest possible offering. Unless you are erecting a building or adding an extension where the building is designed with a crane system in the plan, a proper analysis is required to ensure the crane system maximizes the available space while minimizing the impact on the building and work areas. We will guide you to the type of crane to best suit your application.

Component Selection & Structural Design – ELS adheres to CMAA Guidelines for classification of your crane system. This is based on the intended use for the crane. Two 5T capacity cranes can be very different based on the application. ELS in-house structural engineers evaluate each system and ensure structural components are selected to minimize deflections, minimize building loads and impact as well as provide sturdy, robust designs that do not ‘sway’, ‘bounce’ or ‘shake’. Often, architectural selections are based on capacity alone and do not take into account the dynamic forces inherent in overhead crane systems.

End Truck Selection – Proper end truck selection is critical for the long term reliability of your crane system. Wheel loads are identified and taken into consideration in structural design. Wear calculations are performed and wheel base length is selected based on approaches required. Alignment characteristics of the runway system are also considered to avoid ‘crabbing’ and undue wear on guide wheels and tracks. ELS designs and build cranes under CMAA Guidelines to properly suit the application and duty cycle – that is to say, the life expectancy of the crane is based upon how many lifts and at what percentage of the design capacity.

BENEFITS to Choosing an ELS Crane System:

BENEFIT OF ENGINEERED STAMPED DRAWINGS – It is the law in Ontario, and good practice everywhere, to have engineered stamped drawings of a crane system. When you purchase a crane system from ELS, we provide you with an engineering drawing that is stamped by a qualified professional engineer licensed in Ontario. In addition, our engineer has worked with our design team and has seen the crane being built. There are no surprises!

BENEFIT OF CHOOSING OPTIONAL FEATURES – Options upgrade and customize your crane to your specific operation. They are the difference between the minimal standard features which suit some of your requirements vs equipment tailor made to your needs. ELS Technical Sales staff taken into consideration many different variables on every project such as hoist selection, speeds, reaches, headroom, environment & interferences.

Crane kits may not provide these options. There are several crane options to enhance operation, performance and satisfaction including:

- **Notched or Shallow Bridge Girders** – To fit crane in low headroom situations and/or those which require a higher hook height or more clearance under runways and structures.
- **Double Girder with Nested Trolley** – Designed to provide optimal hook height for low headroom workspaces, putting the hoist between the girders for maximum lift.
- **Bolted End Truck Connection** – Feature where there is limited space for installation.
• **Adjustment for Wide Runway Flange** - Beneficial when using an under running crane of a lighter capacity on an existing higher capacity runway.

• **Shorter End Trucks** – Used to maximize your hook approach.

• **Explosion Proof & Spark Resistant** - To comply with Class Group and Division, now known as Class & Zone environments. ELS has significant experience and expertise in building cranes of this type. ELS has experience in customizing cranes to suit various other environments as well.

• **Dual Controls** – For either Pendant or Radio controls for multiple hoist and trolleys on the same bridge.

• **Travel Limit Switches** – Can be set for trolley and bridge motion. They can set a slowdown and stop limit.

• **Various Nema Control Panels** – To suit your specific requirements.

• **Warning Horn** – Audible alert to warn of bridge crane movement.

• **Flashing Lights** – Visual alert to warn of bridge crane or runway movement.

• **Remote Control** – Rather than pendant control allowing for un-tethered connection to electrical controls.

• **Weather Proofing** – For protection in outdoor environments.

**BENEFIT OF ELS’S ENGINEERING SERVICES** – Having in-house professional engineers has several benefits as we have the qualified people that can provide you with comprehensive services such as:

- **Customization** – When your crane application is not a standard installation, ELS’s engineers know how to make the crane fit your requirements such as low headroom, maximum hook height, long spans and runout beams to extend lifting coverage beyond the crane span.

- **Load Testing** – Is the verification of the crane’s design capability. Our testing is a repeatable procedure which follows a baseline process to ensure cranes are functioning at original design standards. NOTE: It is the owner’s responsibility to determine if a load test is needed and also to ask for the test to be performed.

- **Pre-Start Health & Safety Review** – Our on-staff professional engineers are qualified to do Pre-start Health and Safety Review’s (PSHSR’s) on the equipment we have supplied. A PSHSR is a specific audit of a process or piece of equipment and the interaction with its surrounding environment. The review seeks to identify safety concerns and evaluate potential hazards. It also defines what measures need to be taken to bring the identified deficiencies into compliance. ELS offers this service for ELS manufactured equipment and for select products we distribute. NOTE: It is the owner’s responsibility to determine if a PSHSR is needed and also to ask for the review to be performed.

**BENEFIT OF ESA TESTING & SIGN-OFF** – By law in Ontario, all new electrical hook-ups require inspection by a licensed electrician. You can be assured that equipment manufactured or modified by ELS is inspected by ESA. Because all ELS manufactured cranes comply with Canadian electrical codes, it makes for quick, easy inspections after installation.

**BENEFIT OF A VARIETY OF HIGH QUALITY HOISTS & COMPONENTS** - ELS’s experienced Technical Sales and Design teams select the right equipment for your application. It is very important to select the right crane and hoist for your application at the beginning of your project as modifying is costly. In addition, we are not tied to one manufacturer, so more choices are available.

**BENEFIT OF SHOT-BLASTING** – All steel is properly prepared to [CSA S16.1](https://www.canmet.ca/en/standards/csa-s16-1) and painted in-house for quality control and expedience.
BENEFITS OF CWB WELD QUALITY ASSURANCE – It’s a badge of honour! ELS has the distinction of being included in the CWB Quality Mark program (2013). We are committed to manufacturing high quality and reliable welded structures. This distinction also means ELS’s manufactured products meet Canadian codes and standards. As a crane manufacturer, ELS is certified to ensure the highest level of performance under the standard W47.1Division2.

BENEFIT OF A LARGE LOCAL MANUFACTURING FACILITY – Our manufacturing floor space is optimized for efficiency with multiple overhead cranes, large beam shot blasting, in-house painting and in-house trucking fleet. ELS has certified weights in–house and the ability to run tests on all our cranes and manufactured products prior to shipment.

BENEFIT OF ON-STAFF INSTALLERS – A dedicated team of highly skilled and experienced professionals who are able to install almost any equipment in almost any location.

It’s no wonder we make difficult jobs seem easy!