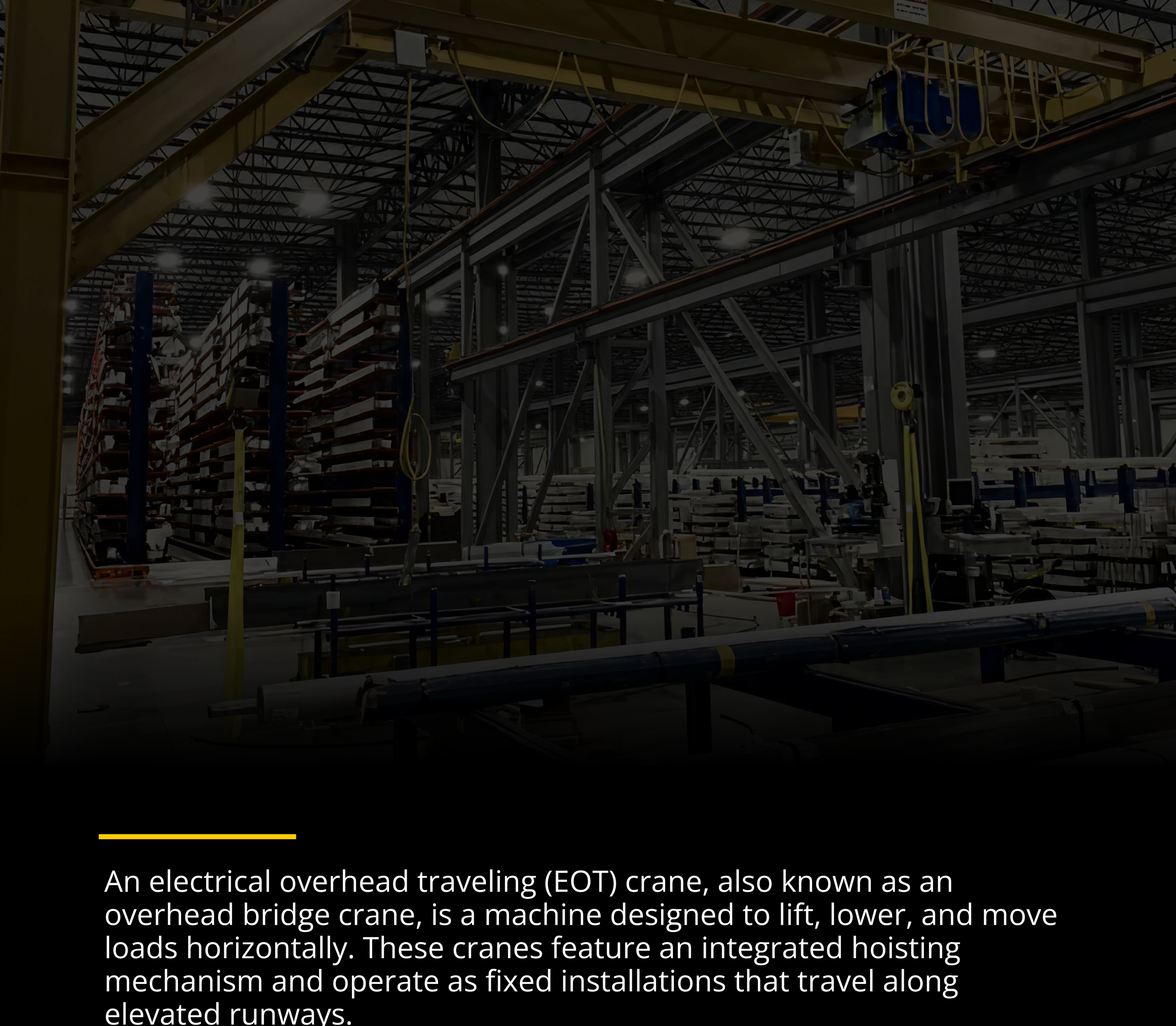


OVERHEAD CRANES POST-PURCHASE OWNERSHIP GUIDE



An electrical overhead traveling (EOT) crane, also known as an overhead bridge crane, is a machine designed to lift, lower, and move loads horizontally. These cranes feature an integrated hoisting mechanism and operate as fixed installations that travel along elevated runways.

Learn more about operator qualification, initial inspections, and establishing a rigorous maintenance schedule to protect your investment.



Defining Operator Competency and Training

Overhead cranes do not require third-party certification or licensing from organizations. Therefore, responsibility for safety rests entirely with the crane owner. The employer must deem each operator competent to safely operate the specific equipment within their facility.

While there is no formal federal mandate for a specific 3rd-party license, the employer is responsible for establishing a rigorous training program. This program verifies that operators possess the knowledge to recognize and avert risks. T&M Cranes assists facility owners by developing tailored training procedures that align with industry standards, ensuring your internal competency evaluations are thorough and documented.

Effective training should cover:

- OSHA 1910.179 requirements for overhead and gantry cranes
- ASME B30 safety standards and operating procedures
- CMAA and HMI specifications
- Load capacity and rated capacities for your specific system
- Rigging fundamentals and safe lifting practices
- Pre-shift inspection procedures
- Emergency stop procedures and hazard recognition

Many crane owners partner with third-party providers for initial training. You can later bring portions of this training in-house as internal expertise develops. Regardless of the delivery method, you must maintain records of each operator's qualification and competency results. Keep this documentation readily accessible for future reference.

Initial Inspection Upon Installation

Before a newly installed EOT crane is put into service, an initial periodic inspection must be performed. This process should follow ASME B30 and OSHA 1910.179 standards. The evaluation can occur before or after load testing and focuses on the following:



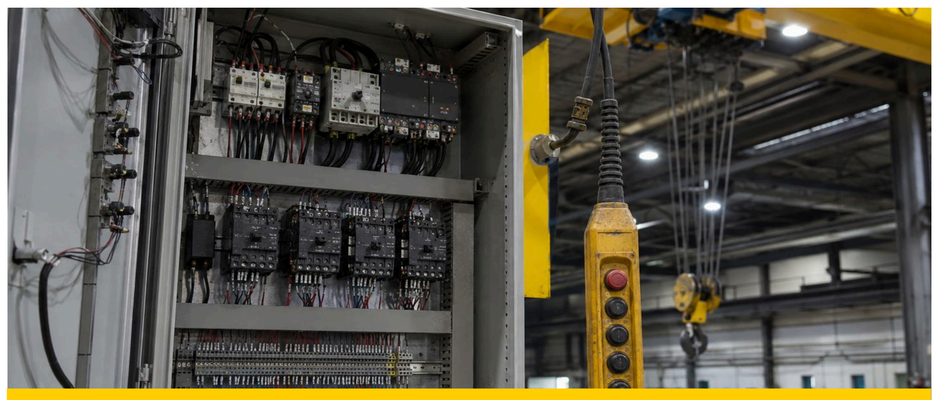
Structural components, including bridge girders, end trucks, and runway beams



Hoisting mechanisms and wire rope condition



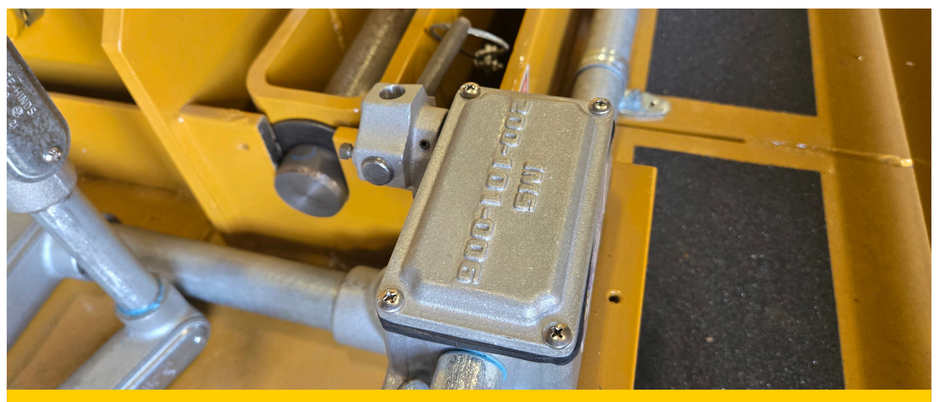
Trolley and bridge travel systems



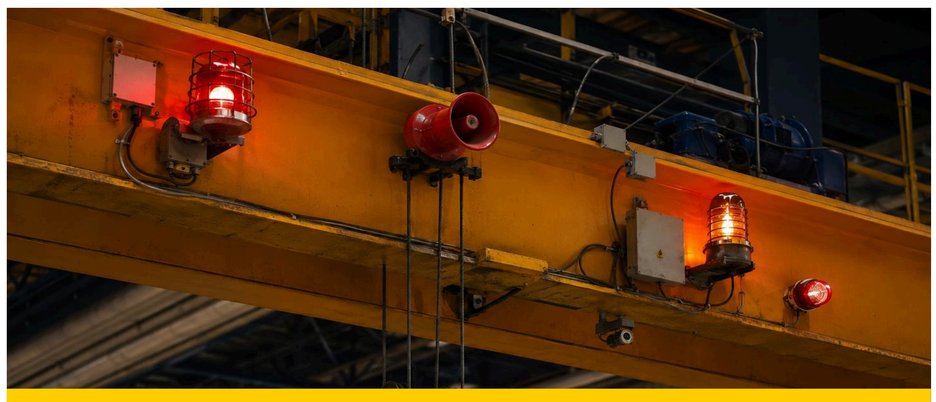
Electrical systems, controls, and pendant stations



Braking systems and safety devices



Upper and lower limit switches



Warning devices and audible alarms



Load capacity markings and equipment identification

Store these results as proof of compliance and baseline data for your crane's operational history.



Load Test of New, Re-Installed, or Altered Equipment

> Load testing verifies that the crane and crane structure can safely handle its rated capacity. To perform a load test, the crane should be loaded with 100 to 125% of the rated capacity. The load test weight should never exceed 125% of the rated capacity of the crane. Perform these tests during new installations or after major alterations to load-bearing components. Note that some classifications of cranes do not require a load test - consult ASME B30 Guidelines to confirm if your specific equipment requires a load test. If your equipment does require a load test, consult ASME B30 Guidelines for the correct load test procedure.

Record Retention and Data Management

> The initial inspection and load test should be retained and accessible indefinitely. Additionally, all subsequent load tests and inspections should be managed and stored on site. Proper records protect your organization and provide valuable historical data to track equipment condition.



Establishing Your Maintenance Schedule

ASME B30 and OSHA 1910.179 require periodic inspections and preventive maintenance based on your crane's usage, environment, and duty cycle. Always start with the care and maintenance manuals provided by your crane, hoist, and trolley manufacturers for specific guidance on lubrication intervals, adjustment procedures, and parts replacement schedules.

ASME B30 and OSHA 1910.179 define three core inspection types, each with different frequencies and focus areas:



Functional Test Inspection (pre-shift)

Performed before each shift or day of use by the qualified crane operator. Focuses on controls, safety devices, and operational readiness. Consult the included checklist for additional details.

ASME B30 and OSHA 1910.179 mandate daily operational checks before each shift to identify potential safety hazards before they result in equipment failure or injury. The operator should examine the crane before beginning work and immediately report any deficiencies.

While ASME B30 provides general guidance, the specific checklist must be tailored to your crane's design and operational environment.

Critical daily inspection items include:

- Operating Controls and Safety Devices
- Wire Rope and Load-Bearing Components
- Mechanical Systems
- Structural and Environmental

For a complete breakdown of each inspection category, please consult **the T&M Cranes Functional Test Inspection Checklist.**



Frequent Inspection

Frequent inspections are conducted monthly, or more often for cranes operating under heavy use conditions. These inspections must be performed by designated maintenance personnel familiar with the equipment. The goal is to identify wear, deterioration, or developing defects before they escalate into safety hazards or costly failures.

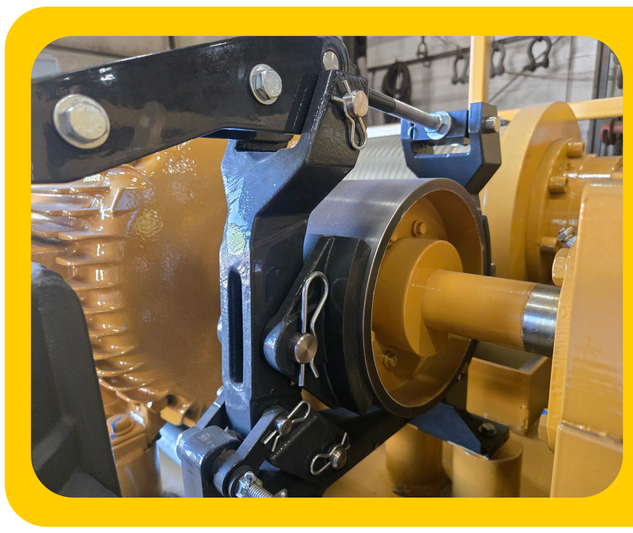
Key areas of focus include:



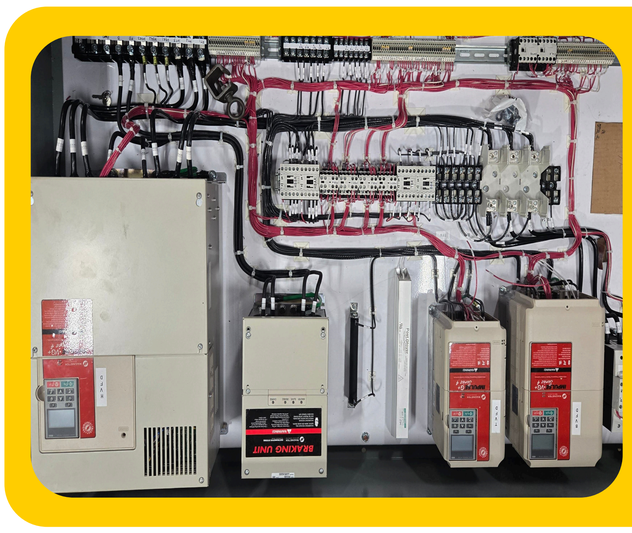
Wire rope condition, including broken wires, kinking, corrosion, and wear



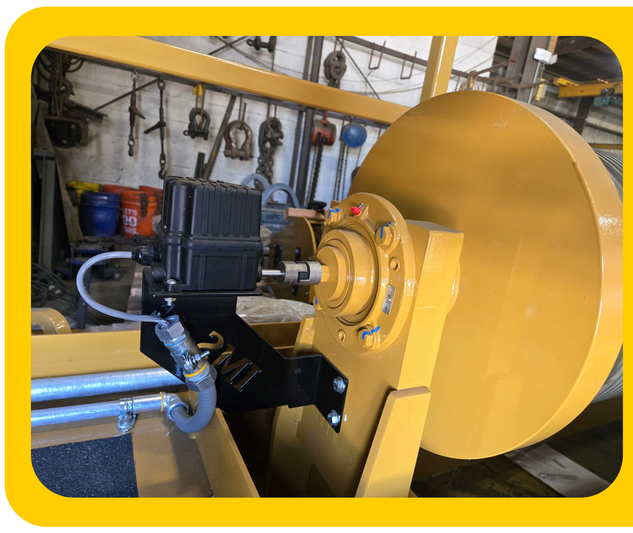
Hook and hook latch condition



Brake performance and adjustment



Electrical contacts and control components

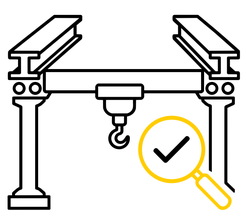


Lubrication levels and evidence of leaks

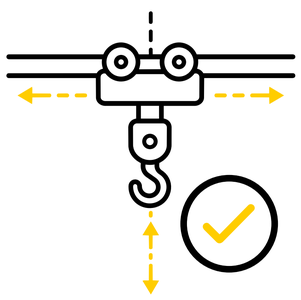
Any deficiencies identified during a frequent inspection must be documented and addressed before the crane is returned to service.

Periodic Inspection

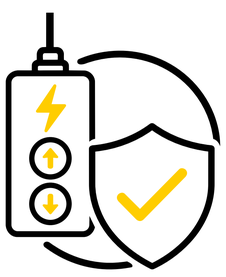
Periodic inspections are performed quarterly, semi-annually, or annually depending on crane usage, duty cycle, and operating environment. These inspections must be carried out by a qualified inspector or certified crane service provider. They represent the most comprehensive evaluation of your crane's overall condition and compliance status.



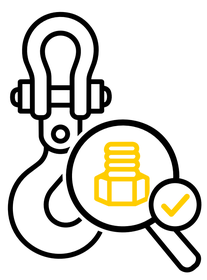
Complete structural evaluation of bridge girders, end trucks, and runway beams



Alignment checks of all travel and hoisting systems



Full review of electrical systems, controls, and safety devices



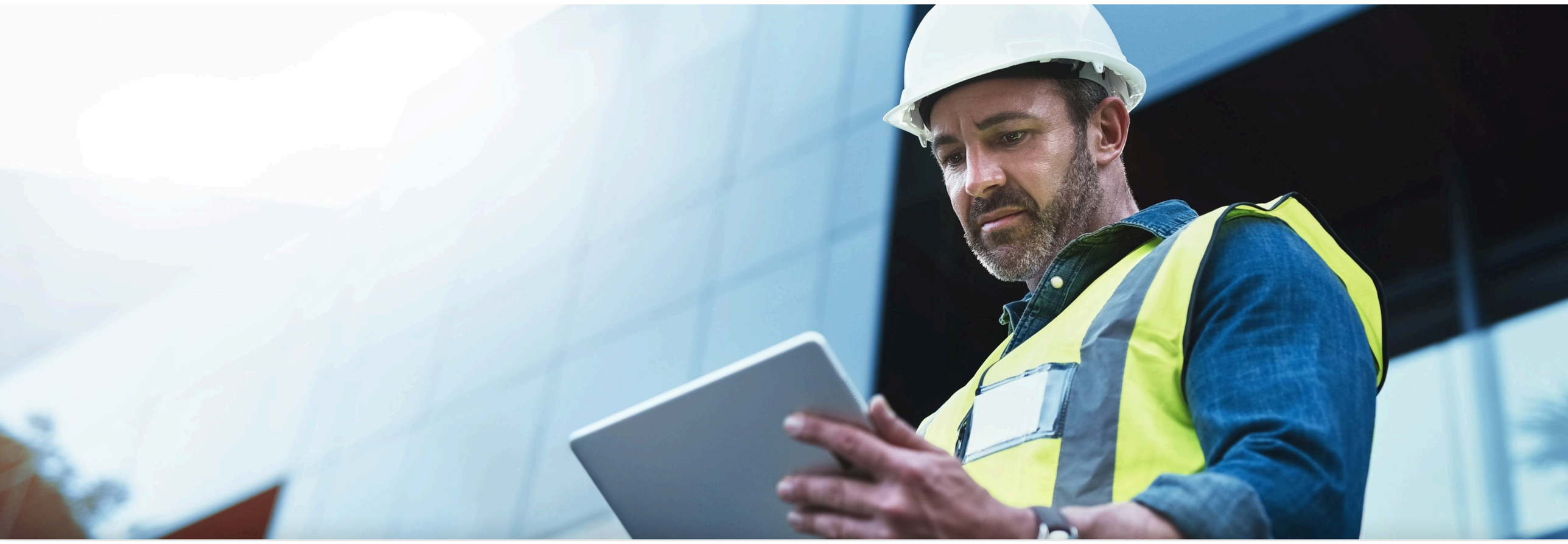
Inspection of load-bearing components and fasteners



Documented review of all systems against ASME B30 and OSHA 1910.179 requirements

All findings must be formally documented and retained on site as part of your crane's operational history.

The appropriate periodic inspection interval depends on the frequency of crane use, load intensity, operating environment (corrosive atmospheres, outdoor exposure, extreme temperatures), and manufacturer recommendations. As a guideline, cranes in normal service with moderate use typically follow a 12-month periodic inspection cycle, while cranes in heavy-duty service or harsh environments may require quarterly or semi-annual inspections.





Protecting Your Investment with T&M Cranes

Purchasing an EOT crane is a significant capital investment that directly impacts your facility's productivity and safety record. Protecting that investment requires ongoing attention to operator competency, meticulous inspection protocols, and proactive maintenance. The responsibilities outlined in this guide, from initial load testing to establishing a professional service schedule, form the foundation of safe and compliant crane ownership.

T&M Cranes supports crane owners far beyond the initial sale. Since 1974, we have served as a trusted partner for industrial facilities throughout Illinois, Indiana, and the surrounding regions. Our team specializes in the complete lifecycle of material handling systems, including professional installation, OSHA-mandated periodic inspections, emergency repair services, and the development of internal operator training programs.

We understand that every facility has unique operational demands. Whether you are managing a high-duty cycle production line or a standby maintenance crane, we provide the technical expertise and genuine replacement parts necessary to maximize your equipment's uptime and longevity. Our commitment is to ensure your overhead crane remains a reliable asset that meets all ASME, CMAA and HMI standards.

Get Started Today

If you need assistance developing a documented training plan, establishing a quarterly inspection procedure, or scheduling a comprehensive system audit

CONTACT US TODAY

Our experts are ready to help you navigate your regulatory responsibilities and keep your operations moving safely.

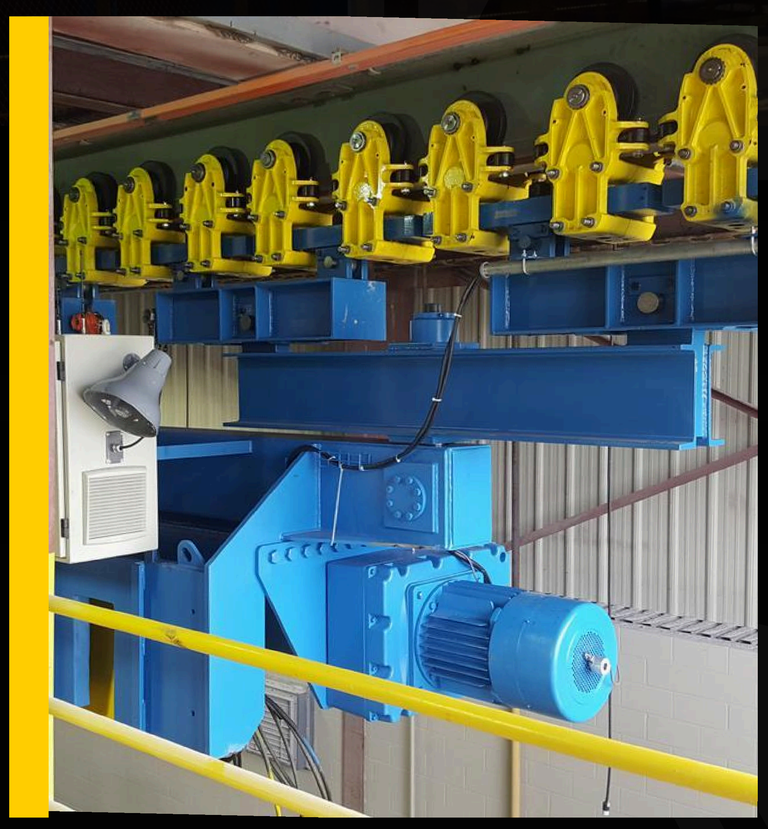
ABOUT US

Family owned and operated since 1974.

T&M Cranes is known for its high-quality products and dependable service in the overhead material handling equipment field. Our modern overhead material handling facilities serve customers throughout North America.

Family owned and operated, we treat our customers like family and have a reputation for excellence and a strong commitment to the care of our customers. T&M Cranes key strengths include:

- An experienced engineering and sales staff with the mechanical, structural and electrical knowledge to work with you to develop a solution that meets your expectations and budget.
- A knowledgeable parts department readily available to answer technical questions, expedite orders, and respond to all your OEM parts needs.
- A dependable 24/7 service team dedicated to minimizing your downtime and maximizing your return on investment of your overhead crane equipment.



As we've grown, we've evolved our business by introducing new technologies while honoring the same values and work ethic from past generations. Hundreds of companies nationwide depend on T&M as the single source for all of their material handling equipment needs, and we look forward to working with you.

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