

CERTEX



LIFTING EQUIPMENT INSPECTION E-BOOK

A Practical Guide for Safe Use, Compliance,
and Maintenance of Lifting Equipment

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PRODUCT INSPECTION



Lifting equipment plays a critical role in industrial operations, construction, logistics, and manufacturing. Because these tools operate under heavy loads and high-risk conditions, proper inspection and maintenance are essential to ensure safety, compliance, and reliability.

This e-book provides a structured approach to inspecting lifting equipment, inspired by industry best practices and standards such as LOLER, EN norms, and EKH guidelines.

NOTE: Always ensure to seek expert advise or service inspections when dealing with these practices to avoid unnecessary damages, work delays or hazardous environment.



WHAT WE INSPECT



Certex offers a wide range of lifting equipment for industries such as construction, offshore, manufacturing, logistics, etc. This includes some of the following categories:



Steel Wire Rope



Chain Blocks & Lever Hoists



Clamps & Trolleys



Shackles



Lifting Slings



Eyebolts & Lifting Points



Hook Blocks & Swivels



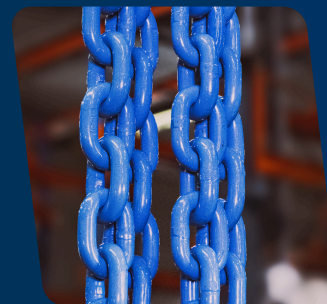
Jacks & Hydraulics



Fall Protection



Cargo Securing



Chains



Cranes

All products are tested and certified according to relevant standards before delivery, ensuring they meet strict safety and performance requirements.

However, certification alone is not enough. Lifting equipment is exposed to wear, load stress, and environmental conditions over time. That's why it must always be inspected.

Continuous inspection ensures equipment remains safe and reliable throughout its lifecycle.

01

WHY INSPECTION MATTERS

Lifting equipment failures can result in serious accidents, financial losses, and legal consequences. Regular inspections help:

○ **PREVENT ACCIDENTS AND INJURIES**

Early detection of defects reduces the risk of equipment failure during lifting operations, protecting workers and nearby personnel.

○ **ENSURE COMPLIANCE WITH REGULATIONS**

Inspections help ensure compliance with applicable regulations and industry standards, reducing the risk of penalties or operational disruptions.

○ **EXTEND EQUIPMENT LIFESPAN**

Identifying wear and damage early allows for timely maintenance, preventing minor issues from becoming major failures.

○ **MAINTAIN OPERATIONAL EFFICIENCY**

Well-maintained equipment performs reliably, ensuring smooth operations without interruptions or reduced performance.

○ **REDUCE DOWNTIME AND UNEXPECTED FAILURES**

Planned inspections minimize the chances of sudden breakdowns that can halt production and cause costly delays.

Safe lifting isn't achieved at the moment of the lift. It's ensured long before, through disciplined inspection.

Inspection levels refer to the different depths and frequencies of checks performed on lifting equipment to ensure it remains safe and compliant throughout its use.

01 PRE-USE INSPECTION

This is the first line of defense, designed to quickly identify obvious defects before equipment is used.

Performed by local operators before each use:

- ✓ **VISUAL DAMAGE CHECK**
- ✓ **VERIFICATION OF MARKINGS AND LABELS**
- ✓ **BASIC FUNCTIONAL TESTING**

02 PERIODIC INSPECTION

These inspections provide a more thorough evaluation of equipment condition over time, formally logged by a service technician to help detect developing issues

Performed by service technician:

- ✓ **DETAILED CONDITION ASSESSMENT**
- ✓ **WEAR AND DEFORMATION CHECKS**
- ✓ **FUNCTIONAL TESTING**

03 THOROUGH EXAMINATION

This is the most comprehensive level, often required by law, ensuring the equipment is safe, compliant, and formally approved for continued use. This is logged by a certified inspector ensuring that all information is traceable.

Performed by certified inspectors

- ✓ **FULL COMPLIANCE VERIFICATION**
- ✓ **LOAD TESTING IF REQUIRED**
- ✓ **CERTIFICATION ISSUANCE**

03 WHAT OUR ENGINEERS AT CERTEX CHECK

At Certex, our engineers perform thorough inspections to guarantee safety, compliance, and optimal performance of your lifting equipment. These are what we inspect:

- **Structural integrity and general condition**
- **In-depth measuring and inspection of wear, corrosion or deformation**
- **Safe Working Load (SWL) markings and identification**
- **Operation of safety features and devices**
- **Correct setup, installation, and usage environment**
- **Previous inspection records and reported defects**

After the inspection, you will receive a Report of Thorough Examination, outlining any defects found, recommended actions, and the due date for the next inspection.

04

IDENTIFICATION AND TRACEABILITY

Proper identification and traceability are fundamental to safe lifting operations. Every piece of equipment must be uniquely identifiable so its history, specifications, and inspection status can be verified at any time.

Traceability ensures that each product can be tracked throughout its entire lifecycle from manufacturing and certification to inspections, maintenance, and eventual retirement. This not only supports safety but also strengthens accountability and audit readiness.

CHECKLIST

- ✓ UNIQUE ID OR SERIAL NUMBER
- ✓ WORKING LOAD LIMIT (WLL) CLEARLY MARKED
- ✓ MANUFACTURER IDENTIFICATION
- ✓ INSPECTION HISTORY AVAILABLE

Traceability ensures accountability and allows tracking of inspection cycles.



INSPECTION & FUNCTIONAL ASSESSMENT

05

Effective inspection combines visual checks, component-specific assessments, and functional testing. Each method plays a role in identifying different types of risks, from visible damage to hidden performance issues. Together, they provide a complete picture of equipment condition and safety.



Visual Inspection

When doing visual inspections, check for the following:

- ⊗ **CRACKS OR FRACTURES**
- ⊗ **CORROSION**
- ⊗ **DEFORMATION**
- ⊗ **WEAR**
- ⊗ **SURFACE DAMAGE**

Any visible defect must be assessed immediately.



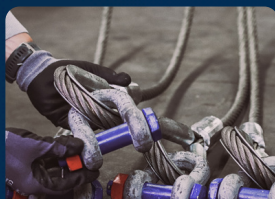
Component-Specific Inspection

Different components fail in different ways, requiring targeted checks such as:



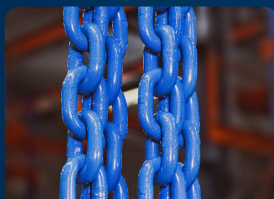
HOOKS

Deformation & Wear
Latch function
Cracks & Fractures
Corrosion



SHACKLES

Bent bow or pin
Cracks in body or pin
Corrosion & heavy wear
Thread damage



CHAINS

Bent or twisted links
Cracked links
Rust or pitting
Unauthorized repairs



TEXTILE SLINGS

Cuts, tears, frayed edges
Broken stitching
Discoloration
Stiffness



SWR

Broken Wires & Kinks
Corrosion
Wear & Abrasion
Lack of Lubrication

Functional Testing

Perform functional testing and ensure that equipment works for safe operations:

- ✓ **BRAKES & CONTROLS**
- ✓ **SMOOTH MOVEMENT**

- ✓ **SAFETY SYSTEM**
- ✓ **EMERGENCY STOP**

NOTE: This guide is not exhaustive. Always ensure equipment is thoroughly inspected and complies with applicable standards and manufacturer guidelines. When in doubt, consult an expert for inspection or remove from service.

06 WHERE WE INSPECT

Our inspection services cover a wide range of industries and environments, ensuring safe lifting operations wherever you work.

- **Industrial and manufacturing sites, including factories, workshops, warehouses, and processing plants**
- **Ports and terminals, supporting cargo handling and logistics activities**
- **Construction and infrastructure developments**
- **Wind energy projects, both onshore and offshore, including turbines, substations, transition pieces, and port operations**
- **Offshore facilities such as fixed platforms, jack-ups, FPSOs, and support vessels**
- **Utilities, power generation, and other critical sectors**

We can deploy to individual locations or manage inspections across multiple sites as part of a coordinated programme.

07

BENEFITS OF WORKING WITH US

Partnering with Certex means more than sourcing lifting equipment. It means strengthening safety, compliance, and performance across your entire operation. Our experience, product quality, and technical expertise help you reduce risk while improving long-term efficiency.

KEY BENEFITS:

○ INCREASED SAFETY AND REDUCED RISK

Certified products and expert inspections help identify hazards early and ensure safe performance under real working conditions.

○ FULL COMPLIANCE WITH REGULATIONS

Stay aligned with applicable standards, and legal requirements through proper documentation and traceability.

○ ACCESS TO INDUSTRY-LEADING EXPERTISE

Gain support from experienced specialists who provide practical advice and industry knowledge.

○ EXTENDED EQUIPMENT LIFESPAN

Early detection of wear and proper maintenance help maximise equipment durability and return on investment.

○ IMPROVED OPERATIONAL EFFICIENCY

Reliable equipment and structured inspections reduce downtime and keep operations running smoothly.

Choose Certex for safer lifting, proven compliance, and expert support you can rely on.



CONTACT US



SCAN FOR MORE INFO



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