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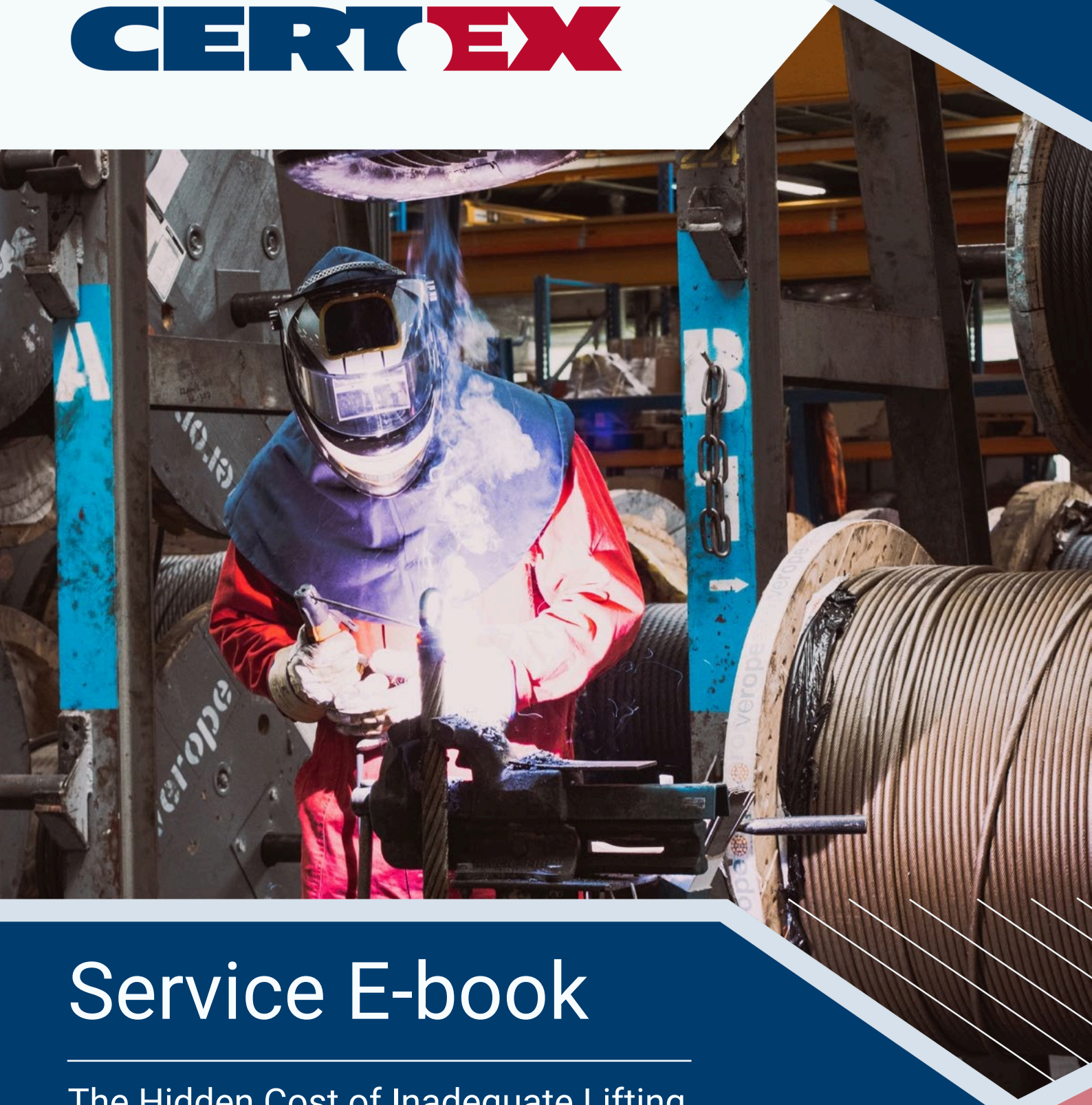

Service E-book

The Hidden Cost of Inadequate Lifting Inspections in Manufacturing

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LIFTING KNOW HOW

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ABOUT THIS E-BOOK

An in-depth guide to understanding regulatory risks, hidden financial impacts, and best practices for lifting equipment inspection and maintenance.

01

UNDERSTANDING YOUR LEGAL OBLIGATIONS

In the European Union, lifting equipment in manufacturing environments is regulated primarily under :

MACHINERY DIRECTIVE 2006/42/EC

(replaced by the Machinery Regulation from 2027) — sets essential health and safety requirements for machinery, including lifting equipment.

WORK EQUIPMENT DIRECTIVE 2009/104/EC

ensures that work equipment is suitable, properly maintained, and used safely.

EUROPEAN NORMS (EN STANDARDS)

provide technical guidance and best practices for specific equipment types.
See page 05 for examples.

These directives and standards are implemented in each EU member state's national laws, which may include additional local requirements.

WHAT THE EU FRAMEWORK REQUIRES

EU regulations impose duties on employers and operators to ensure:

- Lifting operations are planned by a competent person.
- Equipment is fit for purpose and properly maintained.
- Periodic inspections (also referred to as "periodic in-service inspections" or "thorough examinations") are carried out by a competent person.
- Accurate records of all inspections, defects, and corrective actions are kept.

CERTEX

LIFTING EQUIPEMENT DEFINED

Any equipment used to lift or lower loads, including attachments for anchoring, fixing or supporting.

LIFTING ACCESSORIES INCLUDE:


Chains

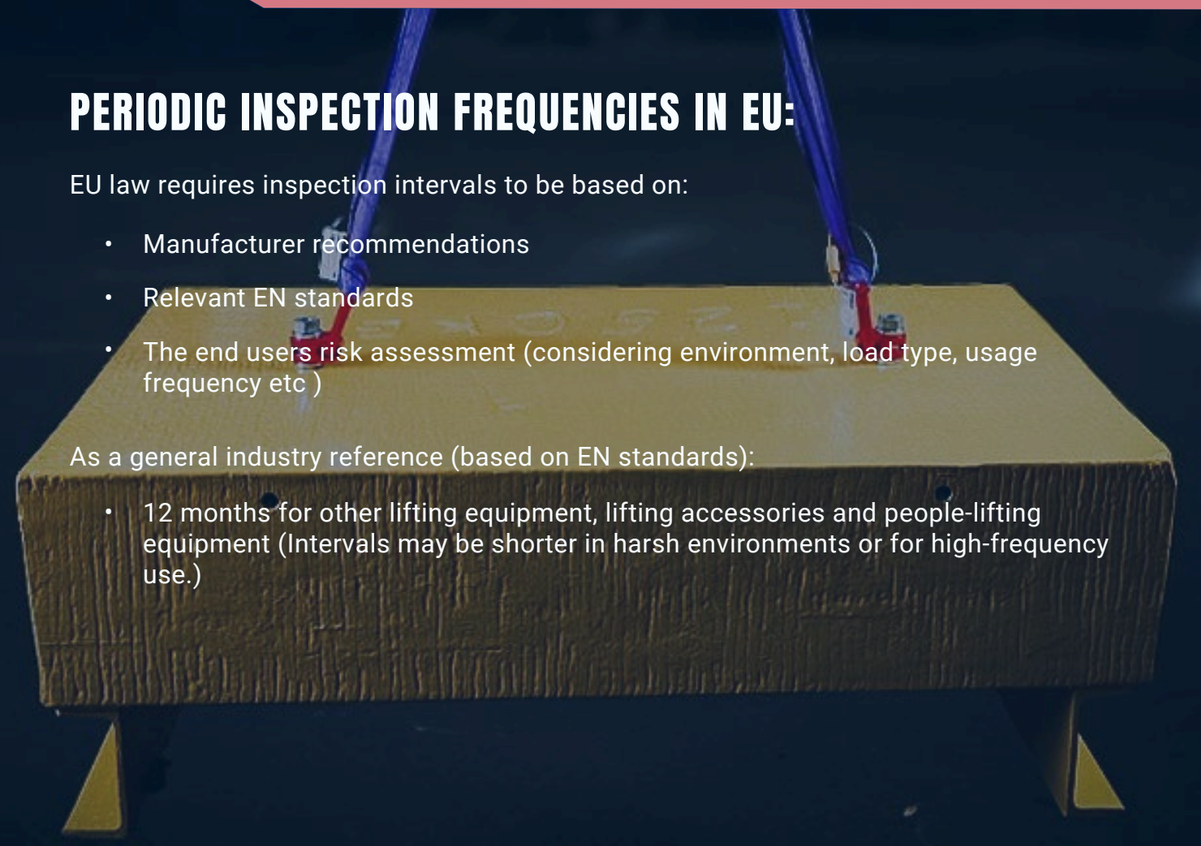

Slings


Shackles


Eyebolts


Spreader Beam

Check our website for more Lifting Accessories.



PERIODIC INSPECTION FREQUENCIES IN EU:

EU law requires inspection intervals to be based on:

- Manufacturer recommendations
- Relevant EN standards
- The end users risk assessment (considering environment, load type, usage frequency etc)

As a general industry reference (based on EN standards):

- 12 months for other lifting equipment, lifting accessories and people-lifting equipment (Intervals may be shorter in harsh environments or for high-frequency use.)

02 THE HIDDEN COSTS OF INADEQUATE INSPECTIONS

In manufacturing environments, lifting equipment is often mission-critical. When periodic inspections are overlooked or delayed, the impact extends far beyond the lifting gear itself.

5 HIDDEN COSTS YOUR BUSINESS MIGHT ALREADY BE FACING

01 INCREASED DOWNTIME

Unexpected breakdowns can halt production, impact delivery schedules, and inflate labour costs as workers wait for operations to resume.

02 HIGHER REPAIR AND REPLACEMENT COSTS

Minor defects can grow into serious failures if not caught early. A failed component may cost significantly more to replace than to repair when first noticed.

03 LEGAL EXPOSURE AND SAFETY RISKS

Non-compliance with EU directives or national laws could lead to investigations, fines, or even prosecution, especially if an incident causes injury.

04 DAMAGE TO GOODS AND EQUIPMENT

Failures in lifting systems can cause damage to stock, machinery or even facilities, resulting in secondary costs and insurance claims.

05 ERODED CLIENT CONFIDENCE

Downtime, missed deadlines, or visible safety issues can damage long-standing customer relationships and hurt your reputation in the market.

03 CREATING AN EFFECTIVE PERIODIC INSPECTION PLAN

A well-designed periodic inspection plan is the foundation of lifting equipment safety and compliance. It should not only meet the minimum legal requirements but go beyond to ensure the long-term reliability and safe operation of your lifting gear.

10 STEPS TO GUIDE YOU TO CREATE AN EFFECTIVE PLAN

01 DEFINE THE SCOPE OF THE PERIODIC INSPECTION PLAN

Start by listing all the lifting equipment and accessories used within your facility. This should include cranes, hoists, slings, shackles, spreader beams, and any custom lifting solutions. Include information such as serial numbers, location, frequency of use, and whether it is used for man-riding or material handling.

02 IDENTIFY REGULATORY REQUIREMENTS

Make sure you understand the legal requirements for inspections under Machinery Directive, Work Equipment Directive, and relevant EN standards. There are also recommendations from the manufatcurers that are important to consider. Some equipment must be inspected every 6 or 12 months depending on its use. Refer to your risk assessment and ensure your plan covers the required inspection frequencies.

03 ENVIRONMENTAL AND OPERATIONAL FACTORS

Environmental conditions such as exposure to moisture, corrosive chemicals, extreme temperatures, or confined spaces can influence how frequently equipment should be inspected. Equipment operating in such environments may need more frequent and ENVIRONMENTAL AND OPERATIONAL FACTORS specialized inspections. Include these considerations in your plan and risk assessment.

04 ASSIGN COMPETENT PERSONS

A competent person is defined by their knowledge, training, and experience. Ensure each inspection task is assigned to someone qualified. For complex equipment like gantry cranes or jibs, OEM support may be required. Outline which equipment needs third-party or specialist input.

05 DOCUMENTATION AND RECORD-KEEPING

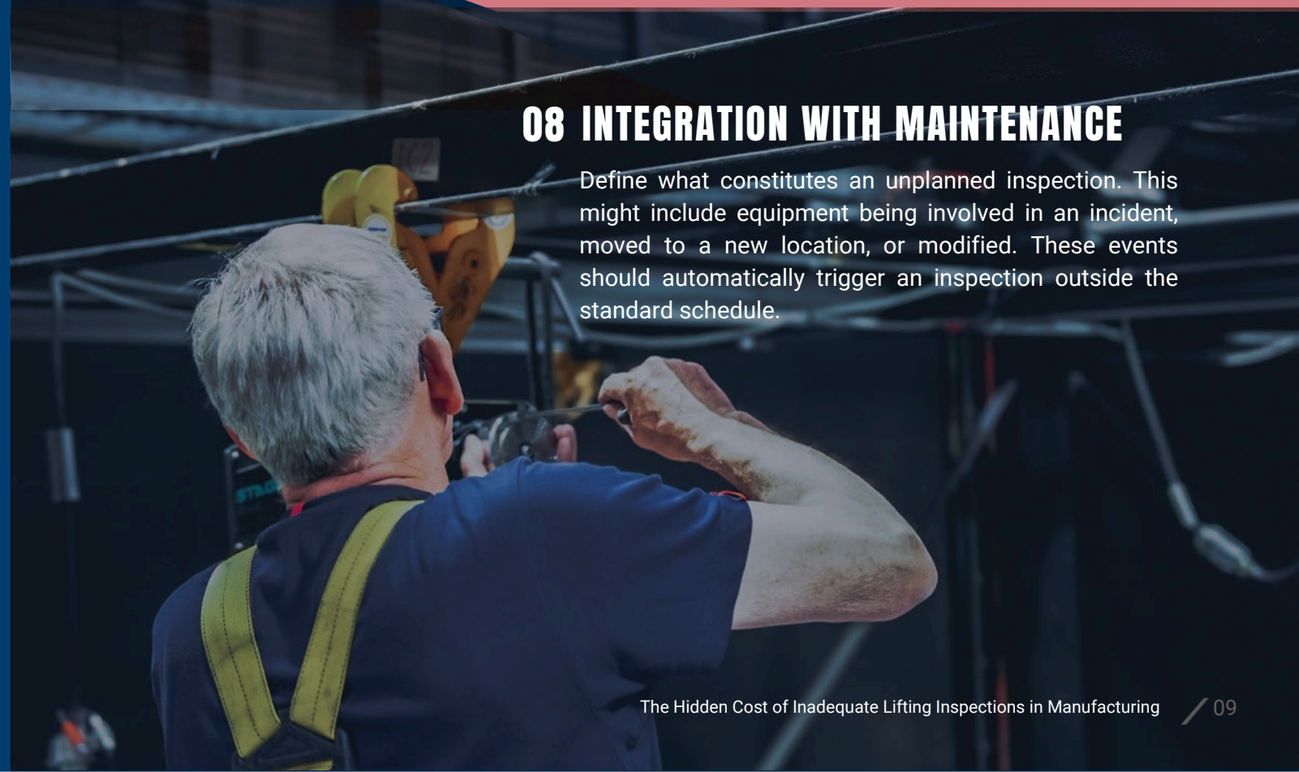
Create and maintain digital inspection records to demonstrate compliance. These should include the date of inspection, name of inspector, equipment status, defects found, and corrective actions taken. These records should be easy to retrieve in the event of an audit.

06 PRE-USE AND INTERIM INSPECTIONS

Your inspection plan should also address daily or weekly checks. Operators should perform pre-use checks for visible damage or malfunctions and report issues immediately.

07 INSPECTION TRIGGERS

Define what constitutes an unplanned inspection. This might include equipment being involved in an incident, moved to a new location, or modified. These events should automatically trigger an inspection outside the standard schedule.



08 INTEGRATION WITH MAINTENANCE

Define what constitutes an unplanned inspection. This might include equipment being involved in an incident, moved to a new location, or modified. These events should automatically trigger an inspection outside the standard schedule.

10 STEPS TO GUIDE YOU TO CREATE AN EFFECTIVE PLAN

09 SAMPLE INSPECTION SCHEDULE TABLE

EQUIPMENT ID	DESCRIPTION	LOCATION	FREQUENCY	INSPECTOR	NOTES
HO-103	2T Electric Chain Hoist	Line A	12 months*	Competent Person	Used daily High Priority
SL-505	Webbing Sling	Stores	12 months*	Site Engineer	Replace on visible wear
CR-008	Overhead Crane (WII >500kg)	Fabrication	12 months*	Accredited third-party inspector	OEM service every 24 months

*If the hoist is used for lifting people, or in particularly harsh conditions, then every 6 months is required.

10 REVIEW AND UPDATE CYCLE

Your periodic inspection plan should not be static. Schedule annual reviews or reviews after any significant incident or near-miss. Track recurring issues and use this data to adjust inspection intervals or identify equipment reaching end of life.

By implementing a proactive and well-structured inspection plan, manufacturers can reduce the risk of downtime, ensure legal compliance, and protect the safety of their workforce. The upfront investment in inspection planning delivers long-term savings and operational resilience.

04 REAL-WORLD CASE STUDIES

CASE STUDIES

The following real-world examples demonstrate the tangible costs of neglecting lifting inspections—from fatal consequences to costly downtime and reputational damage.

CASE STUDY 01

Fatal Incident at a Steel Fabrication Company

In 2021, a UK-based steel fabrication company faced a tragic incident when a lifting accessory failed during a routine operation. The root cause was traced back to a corroded shackle that had not been inspected for over 18 months. Despite being legally required under LOLER (Equivalent to EU standards), the company had no valid thorough examination records for several lifting accessories.

The HSE investigation revealed systemic failures in inspection procedures and record keeping. The company was fined £450,000.

LESSONS LEARNED:

- Missed inspections = legal and human cost
- Comprehensive tracking and digital record-keeping are essential

CASE STUDY 02

Crane Brake Failure Due to Lack of Maintenance

A large automotive parts manufacturer encountered a production stoppage when an overhead crane's braking system failed unexpectedly. The cause was a worn brake disc that had not been flagged during recent service checks. The failure caused a near-miss incident and halted operations for two days. Emergency repairs and the cost of downtime totalled more than £30,000. A full maintenance review led to the implementation of a digital inspection and monitoring system.

LESSONS LEARNED:

- Service checks must be thorough and consistent
- Digital tools help prevent overlooked wear and tear

CASE STUDY 03

Downtime Costs Due to Missed Inspection

A UK-based metal components manufacturer experienced a costly interruption when a key production crane failed during a lift. The fault was due to a gearbox component that had worn beyond tolerance—a defect that a timely LOLER inspection could have identified. The business suffered 72 hours of production downtime, hired temporary lifting equipment at a cost of £8,000, and incurred over £40,000 in lost output and penalties.

LESSONS LEARNED:

- Ignoring inspection schedules leads to spiralling costs
- Inspection plans are cost-saving, not cost-generating

05 CONCLUSION AND FINAL RECOMMENDATION

Lifting equipment inspections are not simply a regulatory requirement—they are a vital component of operational resilience, safety assurance, and long-term profitability.

As demonstrated through both technical insights and real-world case studies, the consequences of inadequate inspection are far-reaching: lost time, unplanned costs, reputational damage, and in the worst cases, injury or loss of life.

TO MITIGATE THESE RISKS, MANUFACTURERS SHOULD COMMIT TO THE FOLLOWING:

- Establish formal inspection plans with defined frequencies.
- Ensure all inspections comply with EU and Regional standards, regulations and manufacturer's instructions.
- Digitize record-keeping and inspection scheduling.
- Train duty holders and ensure access to competent persons.
- Partner with a qualified lifting equipment specialist for ongoing support.

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