

EUCHNER SAFETY SERVICES

Services for machine manufacturers and users



Your partner for machinery safety

EUCHNER

More than safety.



Your partner for machinery safety

Our expertise for your success

Industrial safety is becoming more important all the time. Machine manufacturers and users must comply with UK and European directives, as well as international standards. EUCHNER Safety Services can provide you with professional solutions for all aspects of machinery safety, anywhere in the world.

We help machine manufacturers and users meet legal safety requirements at every stage of machine and installation life cycles. Our team of highly qualified machinery safety experts are at your disposal.

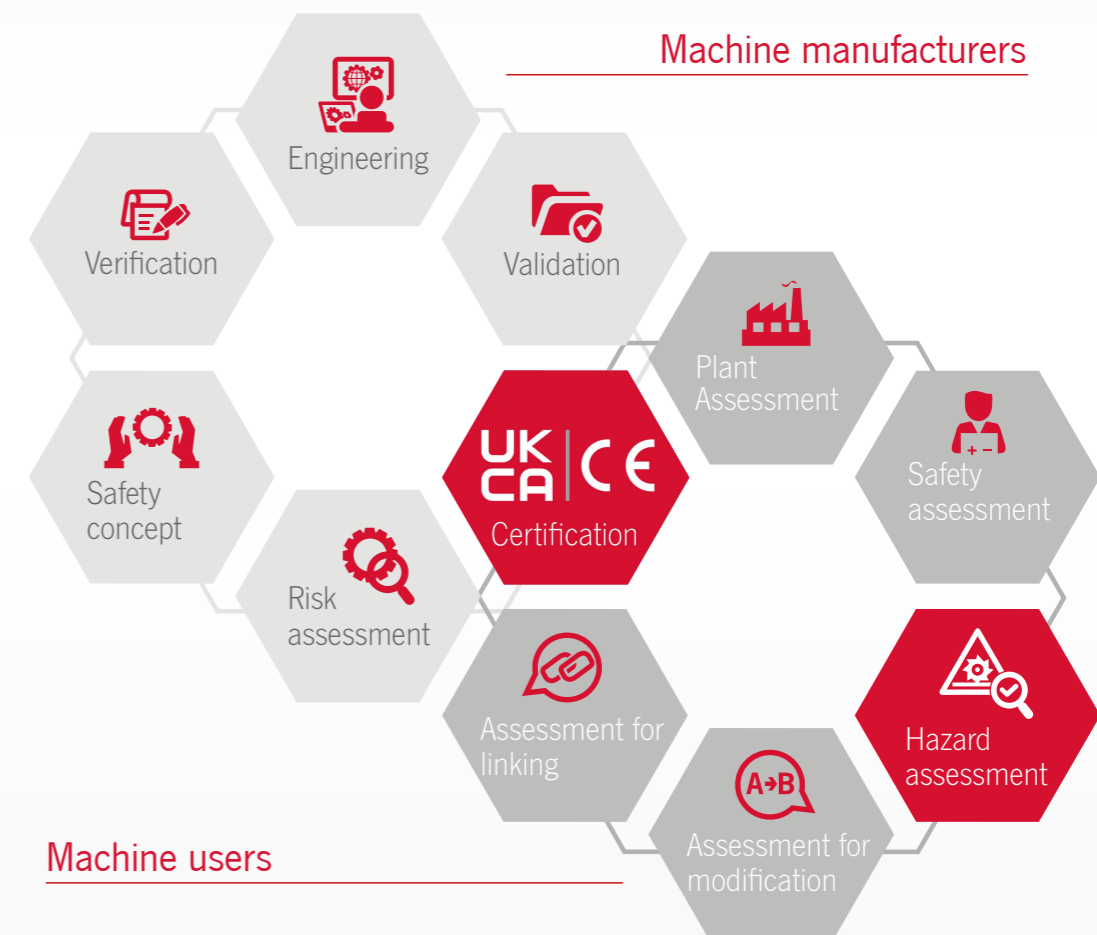
We'd be delighted to meet with you informally to discuss how our services can fulfil your specific requirements. Or why not schedule an in-house consultation day, tailored to suit your own safety engineering issues?

Knowledge you can trust

Our membership in national and international standards committees keeps us up to date on regulations, standards and future developments. As a machine manufacturer or user, you can rely on us as a partner with a wealth of reliable advice and support for your safety engineering. We have the expertise needed to review, understand and analyse your specific requirements from a neutral, objective viewpoint.

Industry expertise in the service of safety

EUCHNER has dedicated itself to the safety of people, machinery and processes for over 60 years. This has given us valuable experience in all areas of safety engineering within many industries, ranging from the construction of machine tools, food & beverage, printing & paper and packaging to logistics, assembly technology, automotive engineering and renewable energy systems. We know the legal requirements, as well as the potential hazards and risks in your sector.



All-around protection with EUCHNER Safety Services

You can rest assured that EUCHNER Safety Services will provide the best professional support over all machine and installation life cycle phases.

Even during the engineering phase, we help machine manufacturers implement the legal requirements set out in the Supply of Machinery Regulations and Machinery Directive. Likewise, we assist machine users over the longer term in fulfilling legal requirements from the Provision and Use of Work Equipment Regulations 1998 (PUWER).



EUCHNER Safety Services for machine manufacturers

Your road map to optimal machinery safety

Machines and production facilities must be safe in accordance with applicable law. Manufacturers cannot sell a machine in the UK or European Economic Area until it has passed the conformity assessment process and received the appropriate marking.

From design to conformity

We can support you right from the engineering phase, accompanying you every step of the way to obtain the UKCA or CE marking for your machine.

The earlier you involve us in your processes, the more you will benefit from this. Starting to consider safety engineering aspects during the development phase can greatly reduce your workload down the line, and help you develop the safest possible machine design from the outset.

We analyse and assess potential hazards, and suggest measures you can take to reduce risks. We develop custom safety concepts for you, and provide any assistance you may need to put the required measures into practice.

Your added value

With our support, you can rest assured that your machine will meet the latest legal requirements. We help you implement all relevant specifications. You save valuable time, and can focus on your core business.



Our services for machine manufacturers

We work with you in every step of the process to obtain the relevant conformity.

Benefits for you

- + Support in all engineering phases
- + Risk assessment according to current legal status and harmonised standards
- + Support in assessment and implementing risk reduction measures
- + Verify control system architecture compliance
- + Comprehensive, clear documentation
- + Compliance with requirements of the conformity assessment process



Support through to UKCA / CE certification

The UKCA (UK Conformity Assessed) marking is new UK product marking that is used for goods being placed on the market in Great Britain. The UKCA marking came into effect on 1st January 2021. However, to allow businesses time to adjust to the new requirements, you will still be able to use the CE marking until 1 January 2022 in most cases.

Machines in the UK and Europe must comply with the safety requirements of the 'Supply of Machinery (Safety) Regulations 2008' and Machinery Directive 2006/42/EC respectively, before they can be sold and placed on the market.

The certification process comprises of many individual steps. Each of them requires the well-founded understanding of applicable regulations and the extensive experience in dealing with machines and installations that Euchner can offer as safety experts.

Our service: UKCA/CE certification as a complete package

Euchner can support you in each individual step and guide you throughout the entire declaration of conformity process, until you obtain a UKCA/CE mark for your machines.

Benefits for you

- + Independent, experienced experts help you navigate through complex rules and regulations.
- + You work with a partner that understands your specific requirements and can support you only where needed or throughout the process.
- + You will receive all services related to the certification from one source, saving you time and money.
- + Euchner assume the responsibility for issuing the conformity declaration on your behalf.

Our services

We support you in all phases through to certification

The individual steps of the conformity assessment process:

- ▶ **Risk assessment**
We first determine the harmonised standards and legal foundation applicable to the machine concerned. We define the machine functions and identify and assess potential danger zones in the risk analysis and risk assessment. The risk assessment fully documents the risks and the required Performance Level.
- ▶ **Safety concept**
The next step after the risk assessment is designing the machine to be safe. We develop a detailed machinery safety concept for you by suggesting risk reduction measures.
- ▶ **Verification with SISTEMA**
With the safety concept as a basis, we specify and test the machine's individual safety functions and verify its safety integrity. EUCHNER uses the SISTEMA software for verification.

- ▶ **Engineering**
We support you as needed in implementing the measures from the safety concept.
- ▶ **Validation**
Validating the safety concept involves checking the effectiveness of the implemented measures. This includes the inspection of the machines' safety functions and preparing the required documentation of results and verification.
- ▶ **Preparation for issuing the conformity declaration**
Once the process is complete, we give you a written recommendation for issuing the conformity declaration. Alternatively, you can authorise us to issue the conformity declaration on your behalf.

Result: UKCA / CE certification for your machine

Machines may be provided with the UKCA or CE mark and sold within the UK or EU once the conformity declaration process is complete. With the certification, you as the machine manufacturer declare conformity with the applicable Regulation or Directive and accept the responsibility for your product meeting the legal requirements.



Risk assessment

All manufacturers must perform and document a risk assessment for their machines. This risk assessment is a complete, systematic assessment of all machine hazards. It makes economic sense to perform the risk assessment as early as the engineering phase. Our safety experts assess the risks in close cooperation with you.

Systematic process according to EN ISO 12100

Risk assessment involves several steps to determine and assess all hazards posed by a machine. EN ISO 12100 determines the exact sequence and the assessment criteria.

The first step is to describe the machine in detail including its use and its limits. In the process, we also determine the applicable harmonised standards and legal foundation. We identify a machine's hazards in the risk analysis and risk assessment. All danger zones are then listed and assessed using a standardised process.

Benefits for you

- ⊕ You receive an assessment of all safety-engineering aspects in compliance with the latest laws and standards, plus an assurance of neutrality on the part of our safety experts.
- ⊕ Standardized procedures and documents ensure uniform quality of development.
- ⊕ Our risk assessment lays the foundation for your machinery safety.

Our services

We analyze risks in the individual machine life cycles in accordance with legal requirements. This comprises:

- ▶ Assessment of the machine by a machinery safety expert.
- ▶ List of applicable directives and standards.
- ▶ Description of the machine, its use and limits.
- ▶ Risk assessment of the individual danger zones.



Safety concept

The next step after determining a machine's danger zones in a risk assessment is to create an intelligent safety concept. The objective here is to define specific measures for each danger zone to reduce the risk to an acceptable minimum. The individual risk reduction measures are shown based on a machine overview.

We work closely with you to develop the technically and economically ideal safety concept. We are committed to neutrality in selecting the safeguards for this purpose.

Implementing the safety concept does more than just improve the installation's safety. A safe installation increases your machine availability while boosting your productivity.

Benefits for you

- ⊕ You get a technically optimised safety concept tailored to your requirements.
- ⊕ Professional integration of suitable safety measures saves you time and money.
- ⊕ Your safety concept always complies with the latest laws and standards.

Our services

We develop the safety concept for your machine. You receive an offer including the following services:

- ▶ Solutions for ensuring machinery safety over the long term.
- ▶ Development of suggestions for protecting the respective danger zone using state-of-the-art mechanical, electrical, pneumatic and hydraulic technologies.
- ▶ Specification of the safety function.



Verification

It must be verified whether the safety functions planned for the machine achieve the required safety level. EUCHER uses the well-respected manufacturer-independent SISTEMA software for this purpose. The SISTEMA calculation can quickly and reliably determine whether the planned safety measures comply with the requirements of the BS EN ISO 13849-1 standard. Our experts are well versed in using this software.

Simple machinery safety calculation

SISTEMA simulates the structure of machine safety components based on predefined architectures and then calculates the Performance Level (PL) achieved. The safety concept has been verified and corresponds to the specifications in the standards if the required Performance Level from the risk assessment has been met.

Benefits for you

- You receive a reliable evaluation of whether the planned safety measures comply with the requirements of the BS EN ISO 13849-1 standard.
- If you need a reliable partner with well-founded experience in using SISTEMA, look no further than EUCHNER Safety Services.

Our services

- ▶ Verification of the planned measures from the safety concept in accordance with BS EN ISO 13849-1.
- ▶ Verification using SISTEMA calculation, which includes feeding the safety functions from the risk assessment into the software structure.
- ▶ Reliable, clear documentation of results.



Validation

Validation is a decisive step in the conformity assessment process. It is used to check whether the fully equipped machine is safe and fulfills the specifications of the applicable Regulation or Directive. This final check ends with verification that your machine complies with all safety regulations. Our experts develop a suitable checking strategy for each safeguard.

The machine safety check is preceded by validation planning, during which we consider every danger zone from the risk assessment along with the safeguard implemented for reducing the risk. Experienced experts develop a suitable checking strategy for each safeguard.

Benefits for you

- You receive an efficient and neutral machine assessment performed by experienced specialists.
- We work out details of the procedure with you in advance while keeping your economic considerations in mind.
- Standardised documentation, as well as state-of-the-art testing and measuring equipment, guarantees high productivity when processing the inspection order.

Our services

- ▶ Subsequent review and documentation of the danger zones from the risk assessment.
- ▶ Preparation of a detailed test plan based on the risk assessment and the installed safeguards ("safety check").
- ▶ Testing directly on the machine or installation.
- ▶ Standardised measurement and test report as verification.



EUCHNER Safety Services for machine users

Working for your operational safety

Machine users bear the heavy responsibility of adequately protecting employees against potential hazards. Machine users are obliged to comply with all current machinery safety laws. This obligation begins when the equipment is put into use and continues throughout its life cycle. Our safety experts are at your side in every phase of the retrospective legislation.

Targeted and thorough

Machine users must ensure occupational and machinery safety as soon as they purchase work equipment. This is required by the Provision and Use of Work Equipment Regulations 1998 (PUWER) and by industrial safety regulations. New and existing machines must therefore undergo periodic hazard assessments to ensure their continued compliance with UK safety regulations.

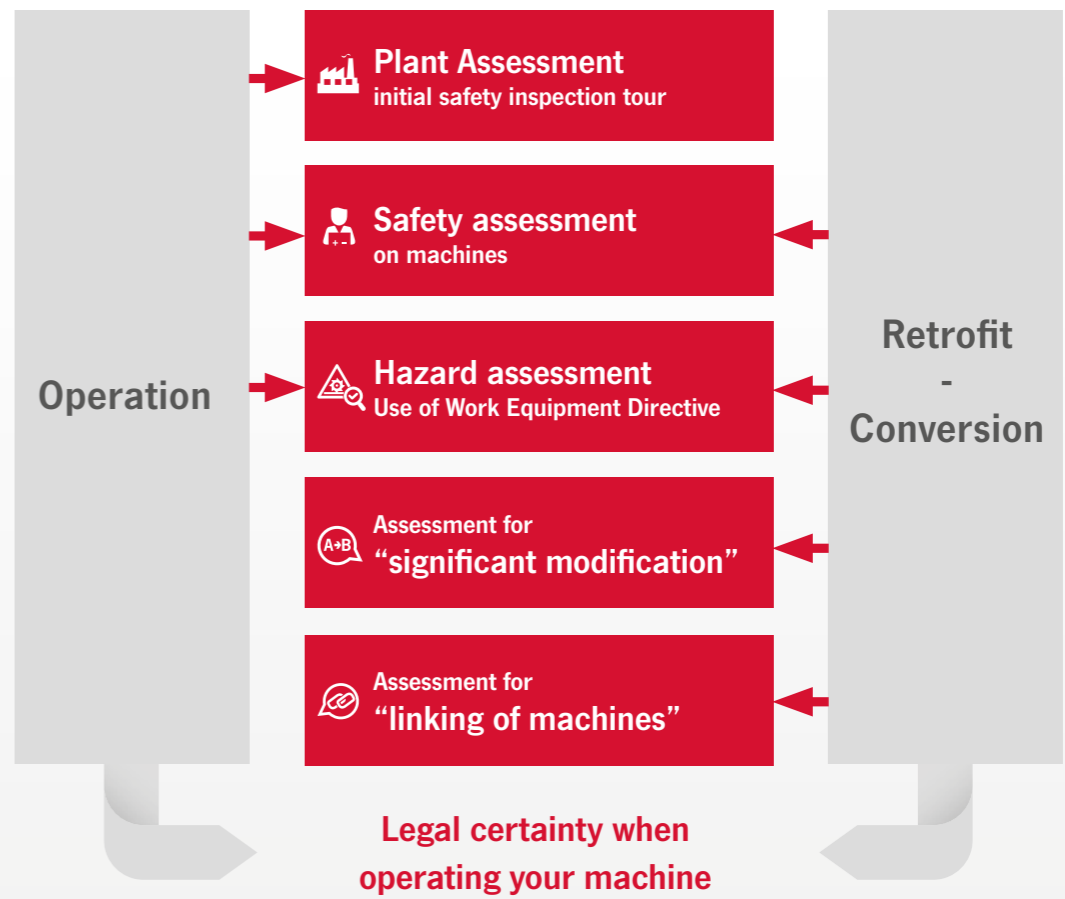
The user must analyse and assess the effects of any modifications when converting, retrofitting or linking a machine. This is the only way to ensure that legal safety requirements are fulfilled.

We support you through the whole life cycle: we check and document the safety status of your machines, assess hazards, support you in conversions and accompany you all the way to UKCA certification for your machine if necessary.

Your added value

EUCHNER Safety Services will help you meet your responsibilities under the PUWER Regulations at all times. Existing and potential hazards are ruled out so that you can rest assured you are always working and manufacturing in compliance with the law.

Our services for machine users



Benefits for you:

- + Systematic hazard assessments
- + Greatest possible safety for employees, machines and processes
- + Minimising accident risks and machine downtime
- + Solution-oriented, state-of-the-art approaches taking economic aspects into account at all times
- + Comprehensive, clear documentation
- + Support in implementing the measures



Plant assessment – safety inspection tour of production facilities

Users must ensure safety in all machine and installation life cycle phases. An inspection tour of your production facilities and machines as part of our plant assessment provides a quick and easy evaluation of your actual safety status.

Our independent safety specialists inspect your production machines and facilities resulting in an overview detailing the current safety level.

Our many years of experience allows us to quickly identify the key areas requiring action in the respective machine or installation, as well as the issues to prioritise. Using this assessment, we help you to prioritise the key safety tasks in the production facility so that they can be corrected promptly.

Benefits for you

- You receive a quick overview of what must be done in terms of machinery safety.
- You receive an independent assessment of your safety status.

Our services

- ▶ Preparation of a comprehensive list of all machines and the danger zones identified.
- ▶ We prioritise measures to correct safety defects promptly.



Safety assessment

Users are often faced with the question of whether individual machines or machine components still meet the current safety requirements. As independent service providers, we can conduct a targeted safety assessment to determine whether your machines are in a condition to provide maximum protection for your employees, and thereby comply with applicable laws, or whether they require corrective measures.

We identify the key danger zones on the machine or plant section and define appropriate risk reduction measures. Existing safeguards are checked for compliance with standards.

Benefits for you

- Professional integration of suitable safety measures saves you valuable time and money
- Our independent, experienced employees always base their safety assessments on the relevant state of the art standards.
- You benefit from a partner that works closely with you while keeping the productivity of your processes in mind during all assessment phases.

Our services

- ▶ Agreement on the type and scope of the safety assessment.
- ▶ Analysis of the machine or installation by a machinery safety expert.
- ▶ Analysis and assessment of the identified machine hazards.
- ▶ Suggestions for eliminating possible causes of risk.



Assessment for a significant modification to a machine

Machines and installations undergo changes in the form of conversions, retrofitting or expansions over the course of their service life. This generally has direct effects on the machine's safety requirements as well.

It is decisive whether the modification is classified as "significant." An internationally recognised document details the criteria for classifying a modification as significant. This document also specifies a generally recognised procedure to check this.

If the modification to the machine and its protective measures is of a significant nature, legislation requires that the conformity assessment process must be repeated for the modified overall system.

Our experience helps you make the informed decision on whether a modification is classed as "significant" or not.

Benefits for you

- ⊕ Experienced machinery safety experts help you assess modifications and conversion measures.
- ⊕ You benefit from an assessment in compliance with all legal requirements regarding whether the modification in your facility is a "significant modification."

Our services

- ▶ Analysis of the existing machine and the planned conversion regarding the effects on safety.
- ▶ Support in deciding the degree of conversion and modifications.
- ▶ Preparation of a report on the decision concerning a significant modification.
- ▶ Assistance in performing the conformity assessment process.



Assessment for linking of machines

If individual machines or installations interact in the production process, it must be checked whether the combination constitutes a "linking of machines" as defined in the Supply of Machinery Regulations. If this is determined to be the case, the assembly of machines must undergo a new conformity assessment process. If the combination does not constitute a "linking of machines," the operator must fulfil the requirements resulting from the operation of the linked individual machines.

We guide you through the maze of options based on our long-standing experience, helping you make the right decisions in compliance with standards and the law. At the end of the consultation process, you receive a document recording the decision-making process and its result.

Benefits for you

- ⊕ Experienced machinery safety experts assist you in reliably assessing the linking of machines.
- ⊕ You benefit from an assessment in compliance with all legal requirements regarding whether the linking falls under the "assemblies of machinery" definition according to the requirements of the Supply of Machinery Regulations.

Our services

- ▶ Examination of interacting machines for linking (assemblies of machinery) as defined in the Supply of Machinery Regulations.
- ▶ Report on the assessment for assemblies of machinery.
- ▶ Assistance in performing the conformity assessment process.



Machine operators



Machine operators

Machine manufacturers

The Provision and Use of Work Equipment Regulations 1998 (PUWER)

The Provision and Use of Work Equipment Regulations 1998 governs the provision of work equipment by the employer and its use by employees.

Employers must regularly identify and check all workplace hazards that could impair their employees' health and safety.

By law, companies must perform a hazard assessment for each item of work equipment. Standardised assessment schemes are used for the hazard assessment for reasons of consistency, completeness and efficiency.

Benefits for you

- Your work equipment is efficiently and fully assessed according to the Provision and Use of Work Equipment Regulations 1998.
- You benefit from our structured approach that always takes the productivity of your production processes into account.

Our services

- ▶ Agreement about the type and scope of hazard assessments.
- ▶ Performance of the hazard assessments on an agreed schedule.
- ▶ Preparation of an action plan for eliminating possible causes of risk.
- ▶ Full PUWER report documentation.

Consultation day

Our experts provide on-site advice regarding relevant machinery safety topics, including:

- ▶ Procedure for a UKCA / CE process, as well as the requirements of associated Regulation or Directive
- ▶ Review of machine documents relevant to UKCA / CE.
- ▶ Preparations for a risk assessment.
- ▶ Verification of safety functions according to BS EN ISO 13849-1 and SISTEMA calculation of achieved Performance Levels.
- ▶ Explanation of the risk estimation according to BS EN ISO 13849-1.
- ▶ Consultation on conversion and significant modification to machines.
- ▶ Consultation on linking of machines and machine installations.

Benefits for you

- We clarify all safety-specific aspects with you and address your specific questions.
- Since we advise you on-site, you save valuable time and can concentrate on your core business.

Our services

- ▶ Our consultation is tailored to your requirements.

EUCHNER SAFETY SERVICES

EUCHNER SAFETY SERVICES CONTACT DETAILS

EUCHNER (UK) Ltd
Unit 2 Petre Drive
Sheffield, South Yorkshire
S4 7PZ
Tel. 0114 2560123
services@euchner.co.uk

EUCHNER
More than safety.