



Export machines worldwide

Testing and evaluation of machines for international markets

Machines are needed all over the world and are essential components of economic development. However, manufacturers and distributors who intend to export their machines must provide evidence regarding national safety and EMC requirements prior to import and taking into operation in the target markets. Trust in the knowledge and experience of a competent partner and activate your global business with TÜV Rheinland's Market Access Services.

KNOW THE APPROVAL PROCESS

On international markets very different standards apply to machines, which place specific requirements on your product or the documentation. National regulatory programs sometimes demand additional certifications, which should be completed prior to export. If you find out about the approval process and technical regulations at an early stage, you will avoid problems at customs or when taking your machine into operation. The experts at TÜV Rheinland will support you and always follow the latest requirements when testing and evaluating your machines. Our services cover all types of machines: robotics, autonomous vehicles, packaging and filling machines, laser machines, machines for metal, plastic and wood processing and all types of production machines.

1. CONFORMITY ASSESSMENT PROCEDURES FOR MACHINERY IN EUROPE

Machines for the European market must undergo a procedure in accordance with the Machinery Directive 2006/42 EC. In addition, other European directives such as EMC, RED, WEEE, Explosion protection or the Pressure Equipment Directive may be applicable and have to be considered. Our experts will be happy to inform you about the directives in force for your specific product.

For all machines, the essential health and safety requirements according to 2006/42/EC, Annex I must be demonstrated with the help of (harmonised) standards. Manufacturers can prove the safety of their machines by means of the technical documentation in accordance with 2006/42/EC, Annex VII. TÜV Rheinland will be happy to support you in preparing the technical test reports and checking the plausibility of the technical file.

Based on the technical file, the applicable reports and certificates from TÜV Rheinland, the manufacturer can create the declaration of conformity in accordance with the Machinery Directive and affix a CE mark to his product. There are two exceptions to this process:

- 1) For "incomplete machinery" a declaration of incorporation must be issued and the "incomplete machinery" will not be labelled with the CE mark.
- 2) For machinery listed in Annex IV, a "Notified Body" such as TÜV Rheinland must be involved in the assessment procedure if the machinery has not been fully assessed through the application of harmonised standards. In this case the machine is labelled with the CE mark and the number of the Notified Body (CE 0197 for TÜV Rheinland LGA Products GmbH). In all phases of the CE process, TÜV Rheinland is the competent partner at your side.

2. GREAT BRITAIN AND NORTHERN IRELAND

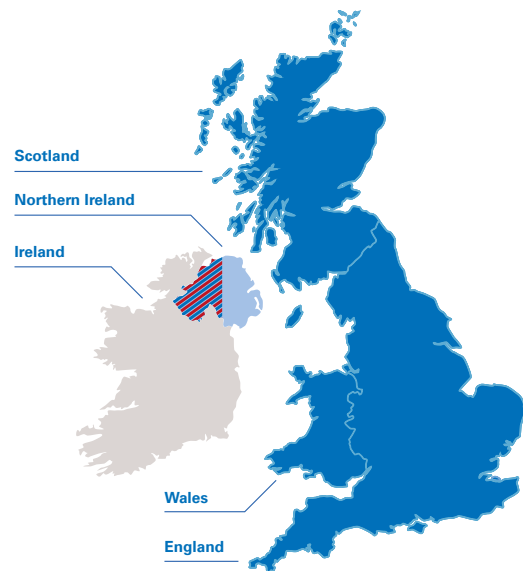
The United Kingdom installed different market access requirements for various products since its withdrawal from the European Union. With the end of the transition period on December 31, 2022, only the newly introduced UKCA mark will be accepted. From that date, all products exported from the EU to the UK must comply with the relevant UK regulations and standards.




We support you with the UKCA self-declaration and the issuing of UKCA certificates according to Annex IV Machinery Directive. On our website you will find further information on this complex topic.

[Learn more!](#)



MARKET ACCESS FOR GREAT BRITAIN AND NORTHERN IRELAND



-  UKCA Scheme applies
-  CE Scheme applies
-  UKNI Scheme only applies if a UK Approved Body was used in place of an EU Notified Body*

*As TÜV Rheinland operates both a UK Approved Body and EU Notified Bodies the UKNI mark is not offered by TÜV Rheinland (as we can offer UKCA and CE).

3. SAUDI ARABIA

Saudi Arabia is a highly interesting market for European machinery manufacturers. Prior to April 1, 2018, a shipping certificate was sufficient to import products into the Kingdom. Since then, a completely new system has been introduced: The SALEEM program and new technical regulations came into force. You can only export goods to Saudi Arabia if your products meet the determined criteria and you can prove this with a certificate recognized by the Saudi Standards, Metrology and Quality Organization (SASO). This certificate must be presented to the customs authorities upon import. TÜV Rheinland supports your market access. We test your machines in accordance with Saudi Arabian deviations and can issue the product and delivery CoC.

4. USA AND CANADA

The governments of the USA and Canada have clearly defined regulations that machines must meet before taking into operation for commercial or industrial use. These products are subject to mandatory testing and certification by an independent testing organization approved in the respective country. As a Nationally Recognized Testing Laboratory (NRTL), TÜV Rheinland supports a quick market access of your industrial machine with targeted services.



Depending on the application, we recommend the most suitable service:

- Field Evaluation Services (FES) for customized single machines according to NFPA 791, NFPA 79 and SPE 1000. We perform a FES pre-test at your production site. This avoids modifications and the need to submit additional documents prior to commissioning in the USA/Canada. There is only a short inspection necessary and the machine is labelled with the FES mark. For small machines, the labelling can also be done directly at the production site.
- cTUVus certification according to UL and CSA standard for serial machines that are regularly delivered to USA/Canada. In addition to the positive testing of the machine, regular audits are required in production and for this the entire series can be labelled with the NRTL mark. Audits in America are not required. A cTUVus certificate can also be issued for a predefined number of machines (Limited Production Certification).

- Control Panel Shop Program for manufacturers of control panels according to UL508A, NFPA 79 and CSA C22.2 No. 14. TÜV Rheinland audits the procedures for designing control panels according to the guidelines from USA/Canada. Afterwards, the manufacturer can independently mark its control cabinets with the Control Panel test mark.

5. BRAZIL

Through our safety assessment of machinery according to NR 12 (Machinery Safety), we support manufacturers of machinery in the conformity assessment for the Brazilian market. The technical indications, principles and protective measures established by NR 12 are intended to guarantee the health and physical integrity of workers and establish minimum requirements for the prevention of accidents and occupational diseases in the phases of design, manufacturing, import, marketing, exhibition and movement of machinery and equipment. In addition, we test your machinery according to IEC 60204-1, a standard that usually covers the electrical requirements of machinery according to NR 10.

6. KOREA

The Korean Occupational Safety and Health Administration (KOSHA) and the National Radio Research Agency have standardized the approval procedure under a Korean law. Only products that have been tested by an internationally accredited test center, registered with the above-mentioned authorities and bear the KC (RRA) and KCs mark can be placed on the Korean market.

TÜV Rheinland supports you in the Korean approval procedures. Specifically, for the mandatory approvals KC (RRA) (EMC for industrial equipment) and KCs (EMC and safety for high-risk machinery) and the voluntary KOSHA S-Mark for machinery.



7. AUSTRALIA/ NEW ZEALAND

In Australia and New Zealand, manufacturers are required by occupational health and safety legislation to ensure that machinery is designed and manufactured in such a way that it does not pose a risk to the health and safety of the user. These standards affect various safety relevant aspects. Although testing of the standards is not mandatory for export, proof and compliance are required by the market and the respective industry. TÜV Rheinland tests your machines according to Australian and New Zealand standards from the AS/NSZ 4024 series of standards.

8. MEXICO

Machines for the Mexican market must comply with the NOM standards. Manufacturers can apply to the requirements with three different procedures, whereby procedure three is often used for industrial machines.

- 1) Proof of compliance with a specific NOM standard is required at customs.
- 2) Proof of compliance with a specific NOM standard must be available for commissioning.
- 3) No standards are specified for 1) and 2) and the machine must comply with the applicable NOM standards.

In Mexico, the following standards are essentially applied to industrial machinery:

Die NOM-001-SCFI is often used as the basic standard for general safety, although it is harmonized with IEC 60950 and applies to information technology equipment.

Die NOM-003-SCFI applies to electrical installations and is primarily important for machine operators. The standard also requires compliance for devices and machines. Furthermore, Annex O defines basic safety requirements for machines.

NOM-004-STPS specifies occupational safety on machines and is important for machine operators. However, the standard also includes requirements for accompanying documentation and for risk analysis.

The scope of **NOM-019-SCFI** is data processing equipment and thus should not apply to machinery. However, Mexican authorities like to interpret the scope generously. The standard is often applied to machines that process data in the broadest sense – respectively many modern machines.



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GLOBAL BRAND

With 150 years of experience in testing, inspection and certification, we are a longstanding respected and recognized company serving major brands around the world.



EFFICIENT AND RELIABLE SOLUTIONS

Our team of qualified experts located worldwide provides clarity on regulations specific to your product and simplify the testing process for multi-market access needs.



ONE TEAM

Our highly experienced experts have practical knowledge of the entire product development lifecycle in addition to the tests, and certification requirements.



PARTNER FOR QUALITY

Our worldwide network of accredited laboratories offers our customers access to an extensive range of services with additional support in key manufacturing and destination markets.



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