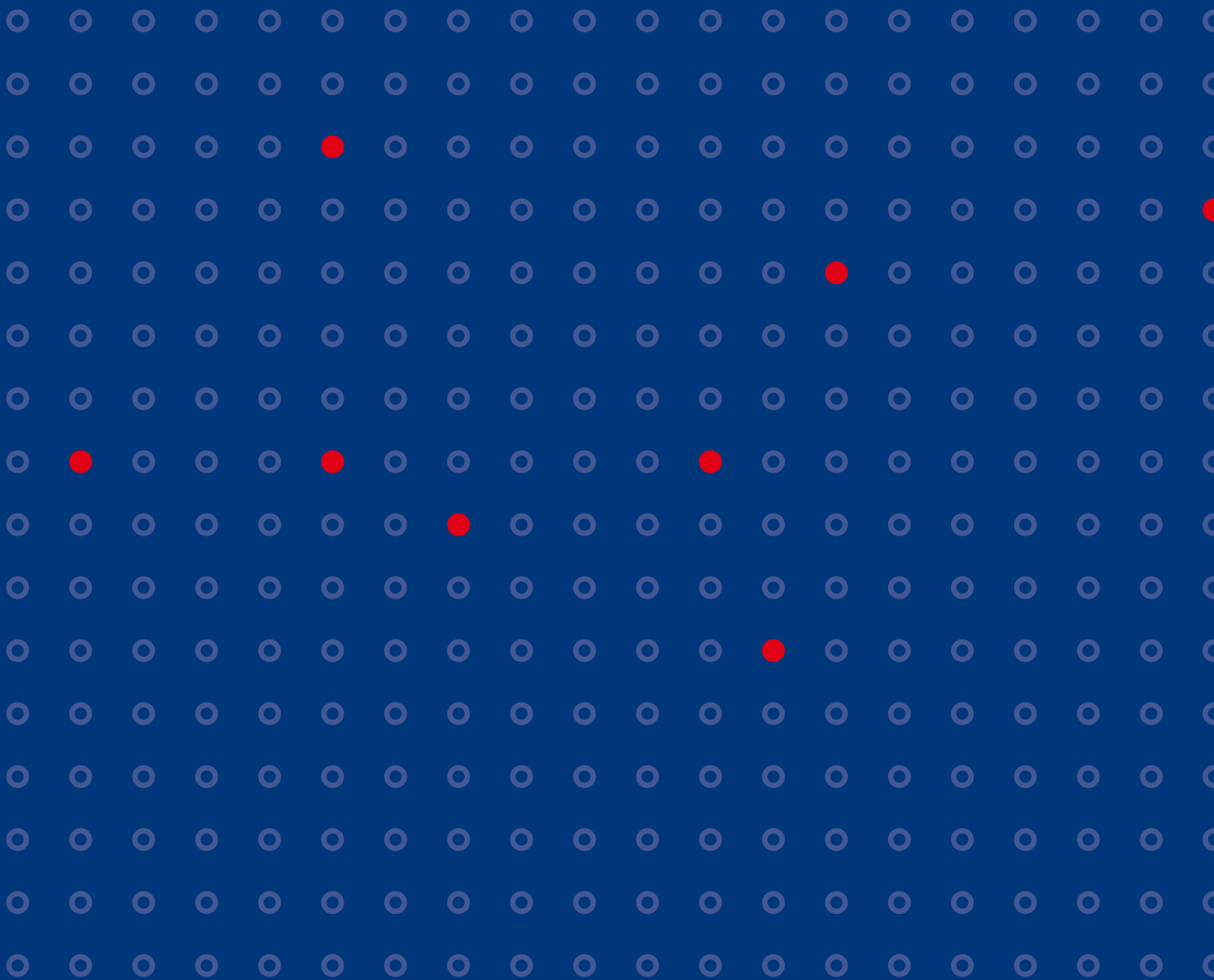




## CE-Network

Competent advice on  
machine safety





## At a glance

**The CE-Network provides you with support throughout the entire process:**

### **Project management**

- Consulting and advice
- Creation and preparation of specifications
- Project planning, project supervision, construction site supervision
- Procurement management
- Structuring and ministration of company-internal documentation

### **CE-marking**

- Product definition
- Standards and directives enquiry
- Preparation and planning of electrical safety circuit projects
- Technical documentation and translation
- Tests (EMC, electrical tests, emissions etc.)

### **Creation, preparation and review of standard-compliant technical documentations**

### **Occupational safety and the Ordinance on Industrial Safety and Health**

- Analysis, inventory and documentation of the existing machinery
- Risk assessment and analysis
- Instruction manuals
- Explosion protection documents

### **Safety-related concepts**

- Check and revision of the safety technology of the machinery in place

### **Machine building**

- Redesign and modernisation of existing plants with regard to automation and rationalisation

### **Training for manufacturers and users regarding**

- Quality management
- Project management
- CE-marking
- Technical documentation
- Occupational safety
- Product liability

### **Questions regarding issues – the CE-Network has the answers**

- Which changes are induced by the new Machinery Directive?
- Which specifications must be observed in the risk analysis to DIN EN ISO 13849-1?
- How to conduct a conformity assessment?
- Which are the safety requirements of the export markets?
- Which regulations apply to the redesign of machines?
- How are the responsibilities and liabilities regulated for interconnected machines?

## Safely operating machinery and plants – without leaving questions unanswered!

Safety is an essential, even crucial aspect in the construction of a machine or plant. Every manufacturer must document, which directives and standards he has taken into consideration during the construction and he moreover must confirm the compliance of his machine or plant with these directives.

Thereby, it is not just a matter of safety as such. It is more about fulfilling all safety requirements in such manner that the productivity of the machine is not affected and that the protective measures, which the manufacturer has provided, are integrated as good as possible in the work processes. In other words: the manufacturer must aim at an optimal integration of the safety in the machine.

To that effect, innovative safety switching appliances are required. The Schmersal Group has set itself the target to design and manufacture such switchgear and switching systems. The core business of our collaborators is related to issues regarding the selection of adequate safety switching appliances. For all questions and problems going beyond this scope,

we refer our customers to the service providers of the **CE-Network**, whose core competency is concentrated on machine safety.

The engineering companies affiliated to the CE-Network will advise and assist you throughout all steps of the process, from the design of a safe machine over the preparation and creation of the documentation up to the use of the machine in the customer's factory – for all issues about the CE-marking, the Ordinance on Industrial Safety and Health and occupational safety. And they are also your privileged partner for the safe operation and the optimisation of the safety technology on existing machinery and plants. In this way, you can be sure that no questions remain unanswered and that you are always on the safe side when designing, manufacturing and operating machines.

### Which conditions must be met for the CE-marking?

Machines, which are marketed in the European Union, must bear the CE Conformity Mark. The partners of the **CE Network** master the selection and assessment procedure for the CE-marking of plants, machines, machine parts and components.

An essential condition for the CE-labelling of machinery and plants is that a

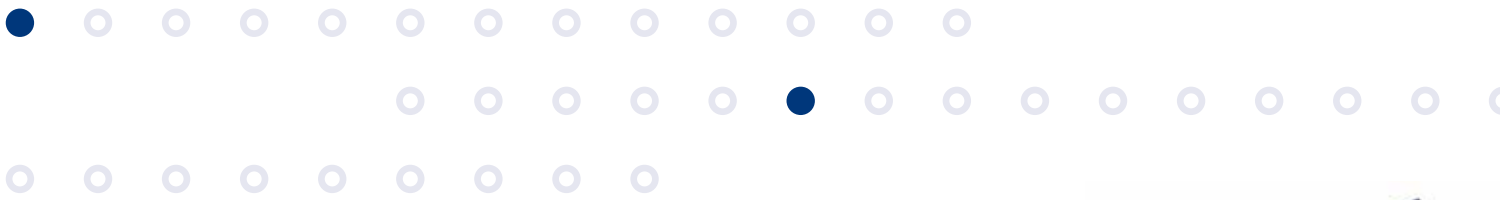
conformity assessment is executed. For this conformity assessment, the Machinery Directive stipulates that, amongst other things, the following tasks must be completed:

- Standards and directives enquiry
- Execution of a standard-compliant risk analysis
- Execution of tests (EN 60204-1, noise level, EMC...)
- Preparation and creation of an instruction manual
- Translation of the instruction manual (depending on the country of use)
- Issuance of the Declaration of Conformity
- Affixing the CE Conformity Mark

For this task, the service providers of the CE-Network will provide your manufacturers with efficient and competent assistance. As a result of their experience, the network partners can both proficiently execute a risk analysis/ risk assessment and render constructive assistance in order to exclude possible hazards from the start within the meaning of a safe construction. This risk analysis/assessment takes all the requirements of the Machinery Directive and other prevailing EC Directives into consideration.







## What is standard-compliant documentation and how can it be realised?

The EC Directives on Machinery Safety as well as the EMC and Low Voltage Directive lay down clear specifications regarding the content of the internal documentation and the user information, which must be supplied together with the machine or plant. Completeness and reproducibility are two essential conditions for the CE Conformity Mark labelling of a machine or plant.

In plain language, this means that these two issues are assessed to (almost) the same extent as the machine itself. This especially applies to the user information, which is understandable, considering that both during the machine operation and the maintenance, errors can be committed, which must be excluded by providing safety instructions to the operators and the maintenance staff.

The engineering companies of the CE-Network are very experienced in the preparation and creation of instruction manuals and the compilation of all documents, which are required for producing a complete documentation. The documents can be supplied in printed version, in electronic format or as online version; the choice is yours!

Besides preparing a standard-compliant instruction manual, the CE-Network also helps its customers with the translation of the documents in the language of the country where the equipment will be used.

Of course, the service offer of the **CE-Network** is also available to machine owners, who want to make sure that their production plants meet the harmonized standards and regulations.

## Which requirements must be met by the machine owner?

For new plants, the following possibilities basically must be considered.

### **Procurement of new plants and systems from external manufacturers**

The focus here is on the project management during the project term and the concluding acceptance, during which the compliance of the plant with the requirements of the directives is checked. "Safety" and "technical documentation" are the crucial keywords here.

### **Autonomous manufacturing of new plants and systems**

In this case, the production company is manufacturer and owner at the same time, as a result of which the complete conformity assessment procedure must be completed:

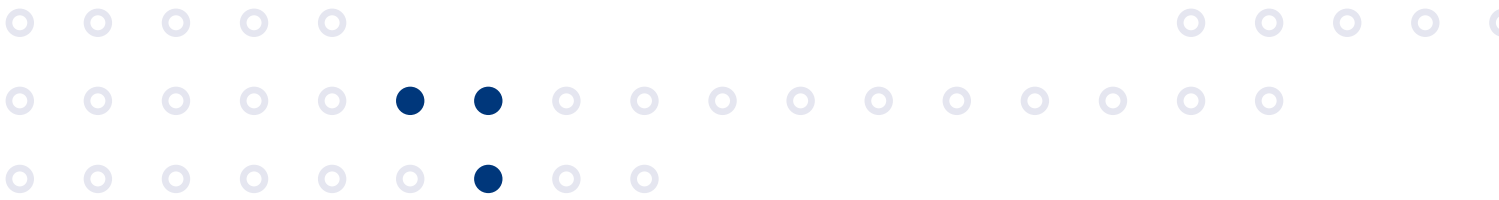
- Standards and directives enquiry
- Risk analysis
- Execution of all relevant checks and tests
- Preparation, creation and possibly translation of the technical documentation
- Issuance of the CE Declaration of Conformity and affixing the CE Conformity Mark

### **Interconnection of machinery and plants**

When machines, plants or plant parts (e.g. the control system) are purchased from different manufacturers and assembled to build an entity, the capacity of manufacturer and owner is also reunited in one entity, i.e. the production company.

### **For existing machines: CE labelling and audit according to the Ordinance on Industrial Safety and Health**

The CE-labelling is also required for existing "old" machines, i.e. which were put in circulation for the first time before 1995 and underwent essential changes as a result of a redesign operation after 1995. Machines, which were marketed for the first time before the year 1995 and to which no essential modifications have been made, must meet the requirements of the (German) Ordinance on Industrial Safety and Health (Betriebssicherheitsverordnung (BetrSichV)); their compliance with the specifications of this Ordinance must be checked. In this field, the CE-Network also provides support.



## When and where does the planning of the safety technology start?

The service providers of the **CE-Network** have comprehensive knowhow with regard to project management. If desired, the owner can turn to the **CE-Network** as soon as the planning of new machines and production plants is started, for instance when the specifications have to be drawn up.

Here, the network partners assume the task to follow up the project in the capacity of CE-labelling and occupational health supervisor. The subcontracting and delivery management is one of the items that are also included in their scope of responsibility.

This means that the service provider is already dealing with the project at the time that the individual machines and plants are still being constructed or assembled in the manufacturer's factory. In this way, he can already put things on the right track in the preliminary stage in order to come to a standard-compliant execution and a safe, productive machine operation in the end.

When the individual plant parts are sup-

plied and assembled to build a complete system, the **CE-Network** analyses and documents the interfaces and compiles an overall superseding and standard-compliant instruction manual.

All that is then left for the owner to do is to sign the prepared CE Declaration of Conformity and to affix the CE Conformity Mark. Things can be that simple, when you work with competent and reliable service providers.

## How can we help you?

Given the nation-wide presence of the CE-Network, you will always find a partner nearby. This nation-wide presence also enables the CE-Network to respond quickly to your request – and you will have local competency at hand at all times.

### Knowledge platform, even for special topics

The collaboration of the network partners creates a knowledge platform covering a comprehensive range of topics regarding machine safety: even if you have very specific or special questions, the CE-Network will undoubtedly be able solving it for you.

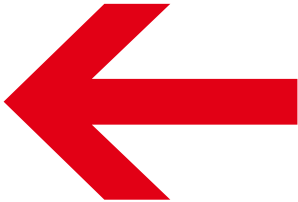
### Advanced training with an asset

We gladly share our knowhow with you; we therefore offer you seminars, training courses and workshops related to

machine safety and occupational safety. The seminars take place either in the offices of the CE-Network partners, at the new tec.nicum of the Schmersal Group located at Wuppertal or even in your premises.

### How can we help you?

If you would like to know more about the **CE-Network** or you have a specific question about machine safety, just send your request to [ce-network@schmersal.com](mailto:ce-network@schmersal.com). You can also directly contact a partner of the CE-Network. We are looking forward to collaborate with you. And we are pretty sure that we can help you along!



## We help you along

The machine safety topic becomes ever more complex. This is due to multiples causes:

- New directives and standards are passed and adopted.
- The range of available safety switching appliances is permanently extended.
- The new component generations enable additional functionalities, but simultaneously need more explanation.
- In the course of the internationalisation, the machine builders must fulfil the diverging requirements of the various export markets.

As it is difficult to stay on top of things, it is perfectly understandable that our customers often not only seek our advice on the selection of the appropriate safety switching appliances, but also ask us to provide them with support, e.g. when they need to conduct conformity assessments or when they need to design a standard-compliant safe machine.

In order to procure our customers comprehensive support in this field, we have initiated the establishment of a network of competent engineering companies with comprehensive knowhow regarding machine safety: the CE-Network.

The network currently consists of nine engineering companies, which have been dealing with machine safety and occupational health for many years already and which all have defined qualifications. The network partners can provide you qualified support for all issues regarding machine safety, thus helping you to manufacture machinery and plants, which meet the relevant standards and regulations and moreover feature a durable safe and productive operation.

Given the nation-wide presence of the CE-Network, you will always find a partner nearby.

This nation-wide presence also enables the CE-Network to respond quickly to your request – and you will have local competency at hand at all times.

The collaboration of the network partners creates a knowledge platform covering a comprehensive range of topics regarding machine safety: even if you have very specific or special questions, the CE-Network will undoubtedly be able solving it for you.

**We invite you to make use of this competent service offer. It will help you along.**

## CE-Network – Competent advice from our partners

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