

Application of the machinery safety regulation for cooling towers

Third Edition

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Document history

This Eurovent Industry Recommendation / Code of Good Practice supersedes all of its previous editions, which automatically become obsolete with the publication of this document, as soon as the new Machinery Regulation will enter into force.

Modifications

This Eurovent publication was modified as against previous editions in the following manner:

Modifications as against	Key changes
1 st edition	First issue according to the Machinery Directive 89/392 EEC
2 nd edition	Second issue according to the Machinery Directive 2006/42/EC
3 rd edition	Third issue according to the Machinery Regulation (EU) 2023/1230

Preface

In a nutshell

- This recommendation is to be used as a guideline by the manufacturers of Cooling towers,
 closed circuit coolers, condensers and thermal storage products
- Cooling towers, closed circuit coolers, condensers and thermal storage products shall be intended as partly completed machinery
- Manufacturers are not allowed to fix a CE marking on the above products

Authors

This document was published by Eurovent and was prepared in a joint effort by participants of the Product Group 'Evaporative Cooling Equipment' (PG-CT), which represents a vast majority of all manufacturers of these products active on the EMEA market.

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Important remarks

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Background

The Machinery sector is an important part of the Engineering Industry. Machinery consists of an assembly of components, at least one of which moves, joined together for a specific application. The drive system of machinery is powered by energy other than human or animal effort.

One of the main legislations governing the harmonisation of essential health and safety requirements for machinery at EU level is the Machinery Directive 2006/42/EC.

This Directive:

- promotes the free movement of machinery within the Single Market
- guarantees a high level of protection for EU workers and citizens.

The evaluation showed that the directive is relatively flexible to technological developments in the digital era, thanks to its 'new approach' underpinnings. Furthermore, it is generally relevant, effective, efficient, coherent and has EU added value.

However, some of its provisions require better legal clarity and improved coherence with other legislation. Several administrative requirements that affect the Directive's efficiency could also use simplification. Finally, the evaluation indicates that the directive's effectiveness has been affected by shortcomings in monitoring and enforcement.

Therefore, the revision process led to a **new Machinery Regulation (EU) 2023/1230** that will replace the current Directive from 20 January 2027, with some provisions entering into force at an earlier stage.

Legal Context: Machinery Regulation (EU) 2023/1230

The Machinery Regulation (EU) 2023/1230, that will supersede the Directive 2006/42/EC, defines the Partly completed machinery in Article 3 sub 10 as follows:

"'partly completed machinery' means an assembly which is not yet machinery as it cannot in itself perform a specific application and which is only intended to be incorporated into or assembled with machinery or other partly completed machinery or equipment, thereby forming machinery;"

Partly completed machinery does not as such perform a particular function. Its intended purpose is to be installed in completed machinery or a totality of machines (systems), which will be CE-marked.

Evaporative cooling equipment (being cooling tower, closed circuit cooler, condenser or thermal storage products) are missing the components to connect it to the source of energy and motion. As defined above, the equipment (assembly) is not only missing the components to connect it to the sources of energy and motion, but for the crucial function also the refrigerant to cool, the fresh water needed to evaporate and the air to transfer (transport) the rejected heat to the atmosphere and all in a controlled way.

Evaporative cooling equipment are custom made and are designed to address the specific needs and safety measures for a specific application. Each application requires a uniquely designed and integrated operational, control and safety strategy that links all components of the installation and eventuality a back-up system in a safe and controlled way. Disregarding this integrated approach will create a danger situation for the surrounding and human life.



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Measures to be followed by the manufacturers

The Manufacturers are not allowed to fix a CE marking on Cooling towers, closed circuit coolers, condensers and thermal storage products because they are defined as partly completed machinery.



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About Eurovent

Eurovent is Europe's Industry Association for Indoor Climate (HVAC), Process Cooling, and Food Cold Chain Technologies. Its members from throughout Europe represent more than 1.000 organisations, the majority small and medium-sized manufacturers. Based on objective and verifiable data, these account for a combined annual turnover of more than 30bn EUR, employing around 150.000 people within the association's geographic area. This makes Eurovent one of the largest cross-regional industry committees of its kind. The organisation's activities are based on highly valued democratic decision-making principles, ensuring a level playing field for the entire industry independent from organisation sizes or membership fees.

Our Member Associations

Our Member Associations are major national sector associations from Europe that represent manufacturers in the area of Indoor Climate (HVAC), Process Cooling, Food Cold Chain, and Industrial Ventilation technologies.

The more than 1.000 manufacturers within our network (Eurovent 'Affiliated Manufacturers' and 'Corresponding Members') are represented in Eurovent activities in a democratic and transparent manner.

→ For in-depth information and a list of all our members, visit <u>www.eurovent.eu</u>

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