



Eurovent 9/11 - 2017

# Application of the machinery safety directive to cooling towers, closed circuit coolers, condensers and thermal storage products

Second 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.

### Modifications

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

Modifications as against	Key changes
1 <sup>st</sup> edition	First issue according to the Machinery Directive 89/392 EEC
2 <sup>nd</sup> edition	Second issue according to the Machinery Directive 2006/42/EC
3 <sup>rd</sup> edition	

## 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 the EUROVENT association 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.

### Adoption

It has been approved and adopted through a formal voting procedure by Europe's national member associations from 20+ European countries, which ensures a wide-ranging representativeness based on democratic decision-making procedures. More information on these members can be found at the end of this document.

The EUROVENT Association does not grant any certification based on this document. All certification-related issues are managed by the association's independent subunit EUROVENT CERTITA CERTIFICATION in Paris.

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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.

## Legal Context: Machinery Directive 2006/42/EC

The Machinery Directive 2006/42/EC defines the Partly completed machinery in Article 2 sub g as follows:

*“Partly completed machinery” is a totality which almost forms a machinery but in itself cannot fulfill any particular function. A drive system may constitute partly completed machinery. Partly completed machinery is intended only for installation in other machinery or other partly completed machinery or pieces of equipment or for combination with these, in other than to form machinery within the meaning of the Directive.*

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 functional 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 eventually 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.

## 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

## About Eurovent

We are Europe's Industry Association for Indoor Climate, Process Cooling, and Food Cold Chain Technologies – thinking beyond 'HVAC&R'

Eurovent is Europe's Industry Association for Indoor Climate, Process Cooling, and Food Cold Chain Technologies. Its members from throughout Europe, the Middle East and Africa represent more than 1.000 companies, the majority small and medium-sized manufacturers. Based on objective and verifiable data, these account for a combined annual turnover of more than 30bn Euros, 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.

Eurovent's roots date back to 1958. Over the years, the Brussels-based organisation has become a well-respected and known stakeholder that builds bridges between manufacturers it represents, associations, legislators and standardisation bodies on a national, regional and international level. While Eurovent strongly supports energy-efficient and sustainable technologies, it advocates a holistic approach that also integrates health, life and work quality as well as safety aspects. Eurovent holds in-depth relations with partner associations around the globe. It is a founding member of the ICARHMA network, supporter of REHVA, and contributor to various EU and UN initiatives.

## Our Members and 'Affiliated Manufacturers'

Our Members are national associations from Europe, the Middle East and Africa that are representing manufacturers in the area of Indoor Climate, Process Cooling, and Food Cold Chain technologies.



The more than 1000 companies within their networks (Eurovent 'Affiliated Manufacturers') can directly participate in Eurovent activities in a democratic and transparent manner.

