

May 1999

RECOMMENDATION
concerning
the Application of the Machinery Safety Directive
to
Standard Mechanical Draught Series Cooling Towers

1. This purpose of this recommendation is to be used as a guideline by manufacturers of Standard Mechanical Draught Series Cooling Towers.

2. It is important to remember and be kept in mind that the essential purpose of the Directives is to achieve a common level of safety and ensure the free movement of goods between member states who have signed the Treaty of European Union (TEU) and not to certify the quality level of the product or to guarantee product performance.

EUROVENT/CECOMAF
EUROPEAN COMMITTEE OF
AIR HANDLING, AIR CONDITIONING AND REFRIGERATION
EQUIPMENT MANUFACTURERS

Explanatory Note regarding application of European Directive MD 89/392 EEC known as Machinery Safety Directive with its additional clause no. 89/368 EEC dealing with Standard Mechanical Draught Series Cooling Towers

1. LEGAL CONTEXT

Standard Mechanical Draught Series Cooling Towers come under the purview of article 4 - 2 of the *Machinery Safety Directive 89/392 and 91/368* transposed into Law. In particular Article R-233-83-1 is relevant to Cooling Towers, for the reason that such machines are components designed to be incorporated into an overall process, and such machines cannot be considered to fulfil a precisely defined function when considered in isolation.

When protective mechanisms such as electric command and control units are provided by the installing agent or contractor, the overall safety level of the tower is no longer in strict conformity with the above Directive.

According to this Directive, implementation of the cooling tower only becomes lawful when the Machinery into which the cooling tower has been incorporated is in conformity with the Directive(s) in the relevant areas of application.

Thus, according to the enclosed confirmation received from the European Commission on 28/11/94, the manufacturer will provide a Declaration of Incorporation. A model of Standard Declaration of Incorporation is hereby enclosed.

* The cooling tower itself will, of course, have to satisfy a certain number of standards relating to safety, in particular Standard EN 294 (September 1992) *Safety distances to prevent access to dangerous areas by upper body parts*.

* In conformity with the foregoing texts, the installing contractor will be responsible for ensuring that the Machinery is in conformity with the Directive and to put the EC marking on the tower and put it into operation. Furthermore, to ensure conformity with the *Machinery Safety Directive* manufacturers are strongly recommended to give the installing contractor a *Warning Notice* at the time of contract signature, thus enabling the contractor to ensure that the cooling tower is in conformity with the safety level embodied in the Directive.

* The liability of the installing contractor is not limited to the basic requirements contained in the Directives, and the EC marking is not the final measure a manufacturer must take to ensure product safety. Product safety and the EC marking are two concepts which are very different in nature, and there should be no confusion between the two, even if both relate to product safety. (In fact, the application of an EC marking only indicates a presumed conformity of the product to any of the Directives, in order to enable freedom of circulation of the product between European countries of the Community in accordance with article 100 A of the Treaty of European Union).

Any manufacturer who would apply an EC marking onto its water cooling towers (while providing a Declaration of Conformity) on machinery which is not in conformity with the requirements of the Directive, would be guilty of :

* drafting a fraudulent certificate

* evading its obligations as advisor

* inducing the final user to draft a fraudulent Declaration of Conformity, thus exposing to legal redress or compensation, in accordance with the Law of the country of residence (because the final user is in good faith when he believes the Certificate provided dispenses him from having to undertake further

action to ensure safety of the machinery and bring it up to the level of conformity required by the Directive).

Any violation of the Machinery Safety Directive and a fraudulent marking of the EC mark entails serious consequences:

- * in European terms, the manufacturer would be ordered to withdraw all incriminated equipment from the market,
- * in national terms, such a conviction can involve a sentence of imprisonment of up to 5 years duration if an accident has occurred, in conjunction with a fine is also worth noting that the code of criminal procedure enables the individual person who has been responsible for the violation to become liable, for instance the head of the research and development section or the planning division of a company.

Note: Although a number of different pieces of machinery may be individually marked EC, additional safety equipment may be required for the overall assembly to justify an EC marking.

2. MEASURES TO BE FOLLOWED BY MANUFACTURERS OF STANDARD MECHANICAL DRAUGHT SERIES COOLING TOWERS

2.1 At the design and fabrication stage, they must ensure that the relevant regulations governing safety and health principles, as expressed in the Machinery Directive, are properly taken into account.

2.2 Possible dangers should be clearly marked on each piece of equipment, as well as all required procedures to be followed in order to avoid any accident. A report analysing risks of this type should be included in the technical documentation.

2.3 The manufacturer should provide a Declaration of Incorporation as well as Warning Notice upon receiving the order.

2.4 Along with the apparatus, the Manufacturer must provide the following technical documentation, to be drafted in the language of the country of destination, including the Instructions for Use, along with:

- * The description of the product (name and address of manufacturer, technical data, ownership, safety provisions, required surrounding conditions, possible types of application, sound levels)
- * Assembling guide
- * Commissioning
- * Maintenance guide
- * All required information on machinery transport and storage, (weight, handling system, safety during transportation, ownership, conditions of storage).

2.5 The manufacturer must keep a technical file available for consultation by public authorities at all times, to include:

- * The drawings for the execution of the machinery
- * All plans, calculations, measurement protocol etc., which would indicate that the safety and health provisions in the Directive have been followed
- * A list of the basic requirements in the Directive, indicating which standards and technical specifications have been adopted
- * A description of the solutions enabling the manufacturer to avoid any danger relating to the use of the machinery
- * Reports and certificates that may have been established by authorised laboratories
- * A copy of the Instruction notice.

This technical file is not to be given to the client. In case of any litigation involving the apparatus, its distribution would only be undertaken under the responsibility of the relevant public authority;

Important note: The fact that a Declaration of Incorporation has been given out, does not free the manufacturer from the responsibility of giving the final user the Instruction notice nor to draft a complete technical file as required by the Directive.

<p style="text-align: center;">DECLARATION OF INCORPORATION (Article 4 paragraph 2 of Directive 89/392/CEE)</p> <p style="text-align: center;">(MODEL)</p> <p><u>MANUFACTURER :</u></p> <p>DECLARES THAT THE MACHINERY PART DESIGNATED AS :</p> <p>- Standard Cooling Tower with the serial number :</p> <p style="text-align: center;">.....</p> <p>. MUST NOT BE PUT INTO SERVICE UNTIL THE MACHINERY INTO WHICH IT IS TO BE INCORPORATED HAS BEEN DECLARED IN CONFORMITY WITH THE PROVISIONS OF THE DIRECTIVE</p> <p>DATE</p> <p>NAME OF RESPONSIBLE PERSON :</p> <p>SIGNATURE :</p>	<p style="text-align: center;">CONFIRMATION RECEIVED FROM THE EUROPEAN COMMISSION</p> <p>COMMISSION EUROPEENNE Direction Generale Industrie Affaires industrielles et industries des biens d'équipement mécaniques et électromécaniques Bruxelles, le 28/11/94</p> <p style="text-align: center;">TELEFAX</p> <p>Venant de/From: M. MASSIMI Fax : 296 62 73</p> <p>Adressé à/to : Mr MAGER Fax : 33 1 40 26 01 26</p> <p>Date : 28/11/94</p> <p>Objet : votre fax du 17 Octobre 1994</p> <p>Message : Quand vous évoquez les tours de refroidissement et les condenseurs, il est évident que ces produits pris isolément ne peuvent pas assurer une fonction définie. Ils sont donc à considérer dans le cadre de l'article 4 paragraphe 2. L'élimination des risques visés par la Directive machines devra être assurée par l'installateur final qui apposera le marquage « CE » sur l'installation et signera la déclaration de conformité. Il en résulte qu'il doit avoir les compétences nécessaires et en conséquence être choisi par le donneur d'ordre.</p> <p>Salutations.</p> <p>English translation :</p> <p><i>Concerning cooling towers and condensers it is obvious that this equipment taken alone could not provide the defined function. Therefore they have to be considered under article 4 paragraph 2. Elimination of risks requested by the Directive shall be performed by the installer who will affix the CE Marking on installation and sign the Declaration of Conformity. He must have necessary competence and be selected on this basis.</i></p>
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