



2<sup>nd</sup> January 2010

## EUROPEAN COMMITTEE OF ASSOCIATIONS OF MANUFACTURERS OF GEARS AND TRANSMISSION PARTS

### **Position paper regarding: The Classifying of Gears, Gearboxes, Geared Motors, Transmission Elements and Transmission Chains according to the EU Machinery Directive 2006/42/EC**

#### **1. Preliminary remarks**

The comments below are intended to provide the industry with a guide as to how gears, gearboxes, geared motors, transmission elements and transmission chains could be incorporated. In order to identify criteria for incorporation, the legal requirements are analyzed and reference is made to publications by the Commission.

#### **2. Legal foundation**

##### **2.1 EC Machinery Directive 2006/42/EC**

Partly completed machinery is defined in Article 2 g of the Directive as follows:

*“g) “Partly completed machinery” is a totality which almost forms a machine 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 (system), which will be CE-marked. Nonetheless, partly completed machinery must already have a character such that it “almost forms a machine”.

Machinery components: In the draft of the planned Directive, the following is stated under §35 of the guide of the new Machinery directive with regard to machines :

*“The Machinery Directive does not apply directly to machinery components, such as, for example, valves, hydraulic cylinders or gearboxes, that do not have a specific application as such but are intended to be incorporated into machinery, although the design and construction of such components must enable the complete machinery to comply with the relevant essential health and safety requirements.”*

##### **2.2 Electric motors in accordance with the Low Voltage Directive**

Electric motors with operating voltages within the voltage limits of the Low Voltage Directive 2006/95/EC (formerly 73/23/EEC) are exempted from the scope of the Machinery Directive 2006/42/EC and are thus covered by Article 1 (2) k, item six:

“(2) The following are exempted from the scope of this Directive:

k) *Electrical and electronic products of the following types, insofar as they fall within the scope of the Directive 73/23/EEC of the Commission of 19<sup>th</sup> February 1973 to harmonize the legal requirements of member states with regard to electrical equipment for use within certain voltage limits (3):*

- *Domestic appliances intended for household use*
- *Audio and video equipment*
- *Information-technology devices*
- *Usual office machinery*
- *Low voltage switchgear and control gear*
- *Electric motors;”*

### **3. Gears, Transmission Chains and Transmission Elements:**

Gears, Transmission Chains and Transmission elements are components, and are described above, do not fall with the scope of the EC machinery Directive 2006/42/EC.

### **4. Gearboxes**

#### **4.1 Normal Case**

Gearboxes are described as machine components, not as partly completed machinery. This represents a further development of the previous interpretation, which was in particular held by a number of national authorities.

It makes the following clear: Gearboxes, which do not almost form a machine within the meaning of the Directive, are not partly completed machinery but are components, which do not fall within the scope of the Machinery Directive 2006/42/EC.

**Gearboxes are components and, as described above, do not fall within the scope of the EC Machinery Directive 2006/42/EC.**

In order to place gearboxes into market, manufacturers do not require any technical documentation in accordance with Appendix VII Part B, assembly instructions in accordance with Annex VI or installation declaration in accordance with Annex II Part 1 Section B. Manufacturers must provide customers with technical documentation to allow gearboxes to be installed correctly and safely. The scope and language of the documentation to be supplied should be regulated by private contract.

#### **4.2 Certain case**

In certain cases gearboxes which are intended for specific applications with an expansion of functionality which is clearly described by the customer could be considered as partly completed machine.

In order to place gearboxes into market in this case, manufacturers require special technical documentation in accordance with Annex VII Part B, assembly instructions in accordance with Annex VI and a declaration of incorporation in accordance to Annex II Part 1 Section B. The assembly instructions must be written in an official language of the European Community which the customer accepts. It is therefore recommended that this language should be regulated by private contract.

The identification marking of the individual product must allow this to be correlated to the type used as the basis for the procedure for partly completed machinery.

## **5. Geared motors**

### **5.1 Normal case:**

If electric motors in accordance with the Low Voltage Directive 2006/95/EC are combined with a gearbox, for example by flange-mounting the gearbox to the electric motor, the resulting geared motor will fall within the scope of the Low Voltage Directive, and final documentation and CE marking shall be carried out on this basis.

The combination of an electric motor and gearbox can be seen as components like the gearbox on its own. In that case, they do not fall within the scope of the EC Machinery Directive 2006/42/EC.

### **5.2 In certain cases:**

In accordance with 4.2, gearboxes could be partly completed machinery and thus fall within the scope of the new Machinery Directive 2006/42/EC. This shall also apply to gearboxes combined to form geared motors. CE marking in accordance with the Machinery Directive must not be applied. If these geared motors are installed in devices which form machinery within the meaning of the Machinery Directive, the manufacturer of this completed machinery shall carry out a conformity assessment procedure in accordance with Article 12 of 2006/42/EC and shall in this way document conformity of the completed machinery to the Directive.

If the electric motor used is a product within the meaning of the Low Voltage Directive, the manufacturer of the combination of this motor with a gearbox in accordance with 4.2 can include the existing declaration of conformity of the electrical motor in the technical documentation."

## **6. Gearboxes and geared motors for certain client industries**

The new Machinery Directive 2006/42/EC also regulates the exceptions which relate to machinery which is actually machinery within the meaning of the Directive but is excluded from the scope of this by legal classification systems. Machinery for the purposes listed below does not fall within the scope of the EC Machinery Directive 2006/42/EC:

- Equipment in temporary fairgrounds and amusement parks
- Machines for the nuclear industry
- Agricultural and forestry tractors with regard to the risks covered by the Directive 2003/37/EC, with the exception of machinery installed on these vehicles
- Vehicles and vehicle trailers within the meaning of the Directive 70/156/EEC, vehicles within the meaning of Directive 2002/24/EC and competition vehicles
- Machinery on deep-sea ships and mobile offshore installations
- Machinery for military purposes
- Mineshaft conveyor equipment
- Machinery for the conveyance of performers during artistic presentations

If partly completed machinery is placed into circulation which is both used in the abovementioned areas and forms machinery within the meaning of the Machinery Directive, then all the relevant requirements of the Machinery Directive for partly completed machinery must be observed. If partly completed machinery is, for example, installed exclusively in machinery for military purposes, then the special requirement for the military field and the special acceptance regulations shall apply. The Machinery Directive shall not be applied to these products.

## 7. Contacts

Your contacts for matters relating to the EC Machinery Directive are as follows:

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