

## III - Summary of key EC requirements

### If you are the designer or the manufacturer of a new machine

*You must:*

- *establish a technical construction file*
- *certify your machinery's compliance with the technical requirements*
- *attach an instruction manual to each machine*

#### 1. Establish a technical construction file (Machinery Directive, Annex V)

This comprises:

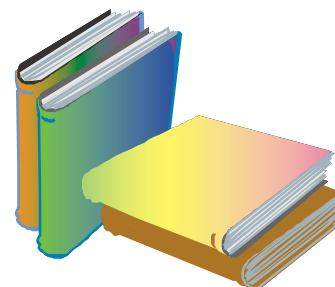
- an overall drawing of the machinery together with drawings of the control circuits
- full detailed drawings, accompanied by any calculations, notes, test results, etc., required to check the conformity of the machinery with the essential health and safety requirements
- a list of the essential requirements of this Directive, applicable standards and other technical specifications which were used when the machinery was designed
- a description of the methods adopted to eliminate hazards presented by the machinery
- any technical report or certificate obtained from a competent body or laboratory
- any technical report giving the results of tests carried out, either by yourself or any competent body or laboratory, if you are declaring conformity with any harmonized standard.

It also contains a copy of the instructions for each machine, and the means to identify the machine. It must be available for inspection by national authorities.

Details of internal quality systems and other

measures to ensure that machinery and components can be manufactured in conformity should also be documented.

You should also carry out any necessary tests on machinery and components to ensure that by its design and construction it can be erected and put into service safely.



#### 2. Certify your machinery's compliance with the technical requirements applying to it. (Machinery Directive, Chapter II)

Whatever the machinery, the certification must include:



- furnishing the buyer with a signed EC declaration of conformity
- affixing the CE mark of conformity in a visible place

☞ If the machinery or its safety components **are not listed** in Annex IV, you can **self-certify** your equipment by signing the EC declaration of conformity.

## Certification symbols of the best known approval organizations



Centre Européen de la Photoélectrique  
Honeywell Cometa  
B-2110  
38240 Meylan Cedex - France  
Tel.: (33) (0) 76 41 72 20  
Fax.: (33) (0) 76 41 72 20

**HONEYWELL - EUROPEAN PHOTOELECTRIC CENTER  
QUALITY ASSURANCE DEPARTMENT**

**CE declaration of conformity**

We: Honeywell-Cometa  
ZIRST B.P. 81  
21, Chemin de Vieux Chêne  
38240 Meylan Cedex - France

Declare: under our sole responsibility that the protective equipment catalogued:  
**Safety light curtain FF-SYA series**

to which this declaration relates is in conformity with the technical requirements of the standards and the provisions of the essential requirements of the Directives detailed below.

Directives:

- **Machine Directive 98/37/EEC**, to which the EC-type examination certificate<sup>(1)</sup> delivered by the Institut National de Recherche et de Sécurité relates. Our Quality Assurance System guarantees that the presently delivered product is identical to the sample which passed the EC-type examination.
- **Low Voltage Directive 73/23 EEC**
- **Electromagnetic Compatibility Directive 89/336 EEC**

Standards:

- EN 61496-1 : Safety of Machinery - Electro-sensitive Protective Equipment - part 1 : General requirements and tests.
- EN 61496-2 : Safety of Machinery - Electro-sensitive Protective Equipment - part 2 : Active Optoelectronic Protective Devices

Safety category: type 4 as per EN 61496-1 and pr EN 61496-2

Legal Representative in Europe:

- Place of issue: Meylan
- Quality Manager: Patrick Cloud
- Signature:

Date: 15/12/98  
General Manager: Lionel Heitz  
Signature:

(1): Available upon request.

**Figure III.A**  
**Declaration of conformity**

If the machine, or its safety components, **are listed** in Annex IV of the Machinery Directive, you will need independent help from a **notified body** to certify your machinery. These bodies are authorized by the individual member States, and approved by the European Union. They deliver an EC type examination statement valid for all member states.

- If harmonized standards exist, and you have followed them, you will need to submit the technical construction file to the notified body. They will acknowledge receipt, and then provide verification that the applicable standards have been correctly applied. The notified body will then draw up a certificate of

adequacy for the file, and you can complete the declaration of conformity. Alternatively, you can submit a model of the machinery for an EC type examination.

- If you have not completely followed harmonized standards, or if no such standards exist, then you should submit a model of your machinery to the notified body for an EC type examination. They will certify that the model satisfies the provisions of the applicable Directive(s). Only then can you complete the declaration of conformity and affix the CE mark.

Fachausschüsse Eisen und Metall in  
und Hebezeuge II  
**Prüf- und Zertifizierungsstelle**  
im BG-Prüfamt

Hauptverband der gewerblichen  
Berufsgenossenschaften

**EC-Type Test Certificate** 99413  
no. of certificate

**Translation**

Name and address of the holder of the certificate (Customer):  
Company: Honeywell-Cometa  
Chemin de vieux Chêne  
B.P. 81 - 38243 Meylan Cedex  
France

Name and address of the manufacturer:  
Ref. of customer: Ref. of Test and Certification Body: Date of Issue:  
EM III 612.1.612.23-UB (Ld/sy) 22.05.1995

Product description: Single-way light curtain for accident protection  
FF SB 14 E/R (ex) (\*\*) 2 - (range 10 m)  
(ex) 04, 06, 08, 10, 12, 14 (height (cm))  
Type: (\*\*\*) K - 115/230 VAC D - 48 VAC (\*) plugs S = DIN 43652  
C = 28 VAC S = 28 + 48 VDC = DIN 43651  
(e.g. FF SB 14 E/R 06 CS 2 -)

Intended purpose: As electro-sensitive protective device on power operated machines and power operated presses for the working of metal.

Testing based on:

- Directive 89/392/EEC (Safety components in accordance with Annex IV B, n° 1)
- prEN 50100 part 1: "Safety of machinery, Electro-sensitive protective equipment, Part 1: General requirements and tests", edition 08.1994, draft.

Remarks:

- prEN 50100 part 2: "Safety of machinery, Electro-sensitive protective equipment, Part 2: Particular requirements for systems using active opto-electronic protective devices", edition 08.1994, draft.

The type tested complies with the provisions laid down in the directive 89/392/EEC (Machinery), amended by the directives 91/085/EEC and 92/44/EEC.

The present certificate will become invalid on 30.06.1998 at the latest.

Further provisions concerning the validity, the extension of the validity and other conditions are laid down in the Rules of Procedure for Testing and Certification of Januar 1993

Fachauschüsse Eisen und Metall II  
Prüf- und Zertifizierungsstelle  
im BG-Prüfamt  
Kreuzstraße 45 - 40210 Düsseldorf  
(Dipl.-Ing. Rentel)

Signature:

Postal Address: Postfach 10 18 15 40201 Düsseldorf Office: Graf-Beck-Straße 89 40229 Düsseldorf Phone: 02 11 89 08 5 0 Fax: 02 11 89 80 8 44

**Figure III.B**  
**EC type test certificate**

### 3. Attach an instruction manual to each machine

This manual must contain:

- conditions of use of the machine
- handling, installation, regulating and maintenance instructions
- specific risks that users should be aware of.

## **Machinery Directive 98/37/EC, Annex IV**

**Types of machinery and safety components for which the EC type examination procedure must be applied.**

### **A. Machinery**

1. Circular saws (single or multi-blade) for working with wood and analogous materials or for working with meat and analogous materials.
  - 1.1 Sawing machines with fixed tool during operation, having a fixed bed with manual feed of the workpiece or with a demountable power feed.
  - 1.2 Sawing machines with fixed tool during operation, having a manually operated reciprocating saw-bench or carriage.
  - 1.3 Sawing machines with fixed tool during operation, having a built-in mechanical feed device for the workpieces, with manual loading and/or unloading.
  - 1.4 Sawing machines with movable tool during operation, with a mechanical feed device and manual loading and/or unloading.
2. Hand-fed surface planing machines for woodworking.
3. Thicknessers for one-side dressing with manual loading and/or unloading for woodworking.
4. Band-saws with a fixed or mobile bed and band-saws with a mobile carriage with manual loading and/or unloading, for working with wood and analogous materials or for working with meat and analogous materials.
5. Combined machines of the types referred to in 1 to 4 and 7 for working with wood and analogous materials.
6. Hand-fed tenoning machines with several tool holders for woodworking.
7. Hand-fed vertical spindle moulding machines, for working with wood and analogous materials.
8. Portable chain saws for woodworking.
9. Presses, including press-brakes, for the cold working of metals, with manual loading and/or unloading, whose movable working parts may have a travel exceeding 6 mm and a speed exceeding 30 mm/s.
10. Injection or compression plastics-moulding machines with manual loading or unloading.
11. Injection or compression rubber-moulding machines with manual loading or unloading.
12. Machinery for underground working of the following types:
  - machinery on rails: locomotives and brake-vans,
  - hydraulic-powered roof supports,
  - internal combustion engines to be fitted to machinery for underground working.
13. Manually-loaded trucks for the collection of household refuse incorporating a compression mechanism.
14. Guards and detachable transmission shafts with universal joints as described in section 3.4.7 of 98/37/EC.
15. Vehicles servicing lifts.
16. Devices for the lifting of persons involving a risk of falling from a vertical height of more than three metres.
17. Machines for the manufacture of pyrotechnics.

### **B. Safety components**

1. Electrosensitive devices designed specifically to detect persons in order to ensure their safety (non-material barriers, sensor mats, electromagnetic detectors, etc.).
2. Logic units which ensure the safety functions of bi-manual controls.
3. Automatic movable screens to protect the presses referred to in 9, 10 and 11.
4. Roll-over protection structures (ROPS).
5. Falling-object protective structures (FOPS).

## Steps to CE conformity

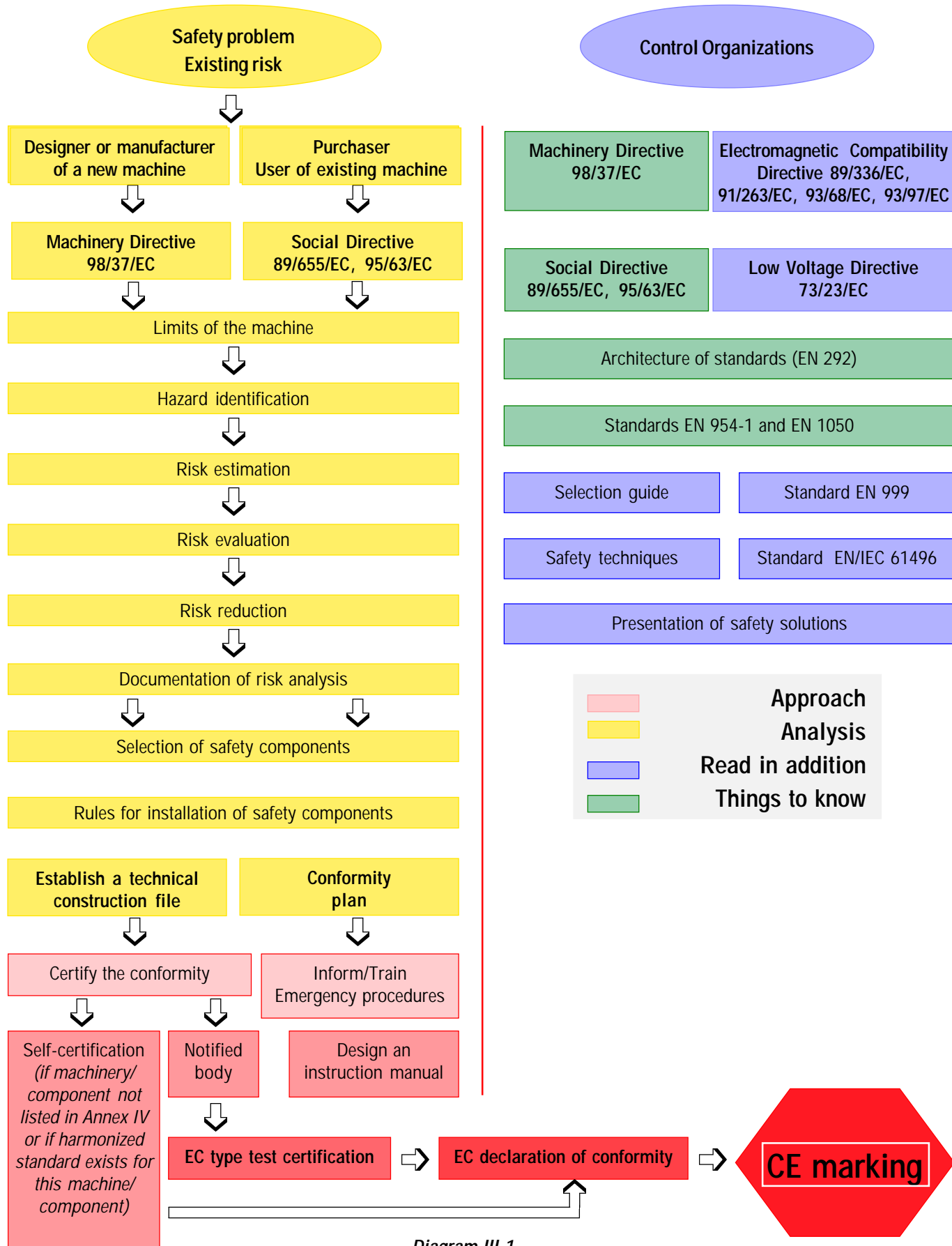


Diagram III.1

## If you are the purchaser or the user of a new or used machine

*You must:*

- ➔ *purchase approved machinery*
- ➔ *bring existing machinery into compliance*
- ➔ *properly use and maintain your machinery*

### 1. Purchasing safe and approved machinery

First you should analyze your needs, taking into account physical and chemical environmental constraints. You can then specify the machinery you want and talk with manufacturers on that basis.

Honeywell recommends that if you are purchasing new machinery, you should demand that it carries the CE mark, and that the manufacturer provides a signed declaration of conformity and a full instruction manual.

If you are purchasing used machinery, you should demand that it be delivered in compliance with its declaration of conformity.

In either case you should demand that the manufacturer or supplier provides training for your operators.

**Note:** You are strongly advised to verify the presence of the CE marking and the EC declaration of conformity. It is your responsibility to ensure the safety of your employees under the Use of Work Equipment Directive.

If you are assembling a complex machine from a number of smaller machines or components you must also make a **declaration of incorporation** and thereafter affix the CE mark to the assembled machine. If the complex machine also appears in Annex IV of the Machinery Directive, a notified body will have to perform an EC type examination.

### 2. Bringing existing machinery into compliance

The Use of Work Equipment Directive mandates:

- protection against risks created by mobile elements

- protection against electrical risks
- the establishment of control, stopping, alarm and signalling devices
- protection against physical risks

To achieve this, the Directive suggests a compliance plan which covers an inventory of the measures to be taken, a timetable for implementation and an estimate of costs. In practice, compliance involves measures such as:

- ensuring that operators and other employees cannot gain access to danger zones whilst the machinery is working
- setting up forms of protection to prevent access to transmission components while they are in motion
- limiting access to moving elements through the use of guards, etc.
- preventing the machinery self starting after a stoppage
- fitting the machinery with emergency stop devices
- fitting machinery with the means to disconnect it easily and efficiently from its power sources
- carrying out examination and maintenance of the machinery and associated electrical equipment
- ensuring that warning devices be unambiguous and easily perceived and understood

A full list is given in the Annex to the Use of Work Equipment Directive, 89/655/EC, as amended by 95/63/EC.

It is your responsibility to bring your machinery into compliance with the Directive.

### 3. Properly using your machinery

You have obligations to inform, train and explain safety intervention procedures to your employees, to use machinery in accordance with manufacturer's instructions, to keep the machine in compliance with the applicable Directives and to regularly maintain it.