

Machinery Directive FAQ's

To what does the Directive apply?

For the purposes of this Directive, "Machinery", means an assembly of linked parts or components, at least one of which moves. It also covers an assembly of machines which are arranged and controlled so that they function as an integral whole. The latest amendment to the Regulations introduces Safety Components, placed on the market separately, into their scope. These are defined as components which are placed on the market "to fulfil a safety function when in use and the failure or malfunctioning of which endangers the safety or health of exposed persons".

Thus, the term Machinery covers any equipment, whether for domestic, commercial or industrial applications, that has parts actuated by a power source other than manual effort. However, there are some exceptions; excluded from the Directive are certain machines where the risks are wholly covered by other Directives. For example, machinery where the risks are mainly of an electrical origin are covered by the Low Voltage Directive (73/23/EEC). Such machinery is already covered by standards listed under the Low Voltage Directive in the Official Journals of the European Community, C210, 15 August 1992, C319, 26 November 1993 and C199, 21 July 1994.

How is compliance to be demonstrated?

Compliance is demonstrated by CE marking affixed to the equipment when complete and supported by a Declaration of Conformity signed by the manufacturer or his representative within the Community. CE marking carries a presumption of compliance with the requirements of relevant Directives to permit the goods free passage within the member states of the European Community and former EFTA countries, the so-called European Economic Area (EEA). Implementation of the Machinery Directive and the necessity for affixing the CE marking

From 1 January 1995, machines supplied within the EEA must: 1. Satisfy wide-ranging health and safety requirements for example on construction, moving parts and stability and 2. In some cases be subjected to type examination by an approved body and 3. Carry CE marking. The manufacturer/importer will generally have to draw up a file containing technical information relating to the machine and a Declaration of Conformity with the Regulations. These rules also apply to Safety Components they were subject to a later transition period requiring full compliance by 1 January 1997.

What do the Regulations require?

Broadly the Regulations split machinery into two categories:

1. Machinery of a particularly hazardous nature which is listed in the Directive at Annex IV. These are equipment such as circular saws, chainsaws, hand-fed woodworking machinery, injection and compression moulding machines, cold metal presses etc and certain safety components. These products must be submitted to an approved body which will undertake full testing, or, where transposed harmonised European Standards exist, verify from the technical file that they have been correctly applied. Then the manufacturer or importer must make a Declaration of Conformity and affix CE marking. A copy of the technical file must be held by the approved body.
2. All other machines must also conform with either the essential health and safety requirements listed in Annex 1 of the Directive but the manufacturer or importer may complete the assessment of conformity himself. He must then draw up a technical construction file, a Declaration of Conformity and affix CE marking.

Further requirements for the affixing of CE marking:

CE Marking indicates that the manufacturer or importer claims compliance with the relevant requirements of all directives within the scope of which the product falls (with certain allowances for transition periods). For example, CE marking on an electronically controlled and electrically powered machine would indicate compliance with the Machinery Directive (from 1 January 1995), the EMC Directive (from 1 January 1996) and the Low Voltage Directive (from 1 January 1997). The technical file should show which Directives have been invoked.

What is the status of the Machinery Safety Standards?

Compliance with European harmonised standards is one way of meeting the essential health and safety requirements of the Machinery Directive. The European Committee for Standardisation (CEN) is working to produce a complex of European standards at three levels in support of the Machinery Directive. The first (A) level comprises general principles for the design of all types of machinery (e.g. EN 292 Mechanical Design and EN 60204 Electrical Design). The second (B) level covers specific safety devices and ergonomic aspects of ranges of machinery types (e.g. EN 418 Emergency Stop Equipment). Finally, the third (C) level covers specific classes of machinery by calling up the appropriate standards from the first two levels and addressing requirements specific to class (e.g. EN 60204-31 Sewing Machines). Most of the Level A and B standards have been published but some 600 technical committees and working groups are working to produce the Level C standards with priority given to Annex IV categories of machinery.

It will be several years before all these Level C standards are published. Meanwhile conformity with the essential requirements of the regulations can be demonstrated by using Level A and B standards and calling up criteria from the most appropriate generic product standard.

How can BSI help?

It is clear that the Directive will create different problems for different sectors of the manufacturing industry. BSI can provide a range of services to help industry resolve these problems. Information on the progress of standards and the operation of the various committees can be obtained from the relevant BSI members of staff. Copies of the Standards, including draft versions which have been issued for comment, are available from: BSI Product Services, Maylands Avenue, Hemel Hempstead, Hertfordshire, HP2 4SQ. Tel No. 01442 278 607 Fax No. 01442 278 630 or product.services@bsi-global.com.

BSI Product Services is an approved body (No.0086) for completing EC Type Examination of machinery and safety components listed in Annex IV of the Directive and for issuing EC Type Examination Certificates to support the manufacturers Declaration of Conformity and CE marking. Our experience indicates that manufacturers and importers of machinery not listed in Annex IV also find the process of compiling a technical file and assessing conformity to be a challenging task. We have had considerable experience and daily practice in this procedure and can help you achieve compliance for little extra expense. Furthermore, the inclusion of an independent test report in the technical file provides extra confidence, shares the responsibility and proves due diligence on your part. BSI Product Services is also a competent body under the EMC Directive for assessing technical construction files.