

Declarations of Incorporation – confused? You won't be now

Martin Keay, technical consultant takes a look at DOC and DOI

There is still a lot of confusion about when you should use a Declaration of Conformity (DOC) for a machine and when you should use a Declaration of Incorporation (DOI).

A widely held misconception is that you should issue a machine with a DOI if it is going to be part of a production or processing line, even if the machine could be used on its own and would normally be issued with a DOC.

From a purchaser's point of view a machine supplied with a DOI is a problem because it means that the purchaser cannot use the machine until some, usually unspecified, actions have been taken to make the equipment comply, a technical file has been assembled and a DOC issued.

In fact the DOI should be used only if the machine is partly completed and does not comply with the Machinery Directive unless something is added to it like, controls, a drive system or guards.

This point is underlined in the new Machinery Directive 2006/42/EC that will come into force in 2009 and which includes the following definition for a partly completed machine (PCM):

“An assembly which is almost machinery but which cannot in itself perform a specific application. A drive system is partly completed machinery. Partly completed machinery is only intended to be incorporated into or assembled with other machinery or other partly completed machinery or equipment, thereby forming machinery to which this directive applies”

Currently there are no requirements for partly completed machines, but the new directive requires suppliers of PCMs to:

- ▶ State which essential health and safety requirements (EHSRs) have been complied with and which not;
- ▶ Indicate how the equipment has to be installed so it can conform to the remaining EHSRs;
- ▶ Prepare a Technical Documentation File;
- ▶ Issue a Declaration of Incorporation.



However the new definitions for machines in 2006/42/EC will mean that some groups of machines, which up to

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now have been supplied with a DOI, can be provided with a DOC.

For instance machines that are only missing the components to connect them on site or to sources of energy and motion are now considered to be complete machines, as are machines like Hiab cranes that are ready to be installed and able to function as they stand only if mounted on a means of transport, or installed in a building or a structure.

What is still unclear is what you should do if a machine requires a dust extraction system or access platform to comply with the EHSRs, but these items are not being supplied by the machine manufacturer.

Do you issue the machine with a DOI even though the machine does not really comply with the definition of a partly completed machine or do you issue a DOC which makes it clear that the machine is only safe to be used when these accessories have been added?

This is one of the questions that the PPMA has raised with the European Commission through Orgalime and we hope will receive an official answer in due course.



HSE Inspectors focus on packaging machinery and conveyors

The 2007/2008 priorities for HSE inspectors include the safeguarding of both packaging machinery and conveyors. Conveyors cause 30% of the recorded machinery accidents and 90% of these are caused by belt conveyors.

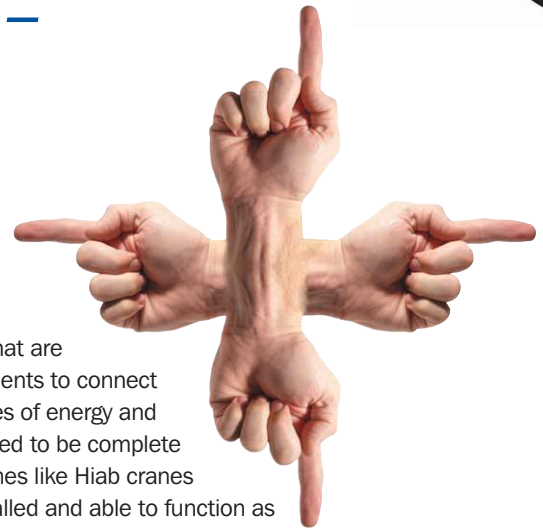
The HSE is concerned about packaging machinery in all industries, but is particularly concerned about thermoform, fill and seal machines, palletisers and depalletisers.

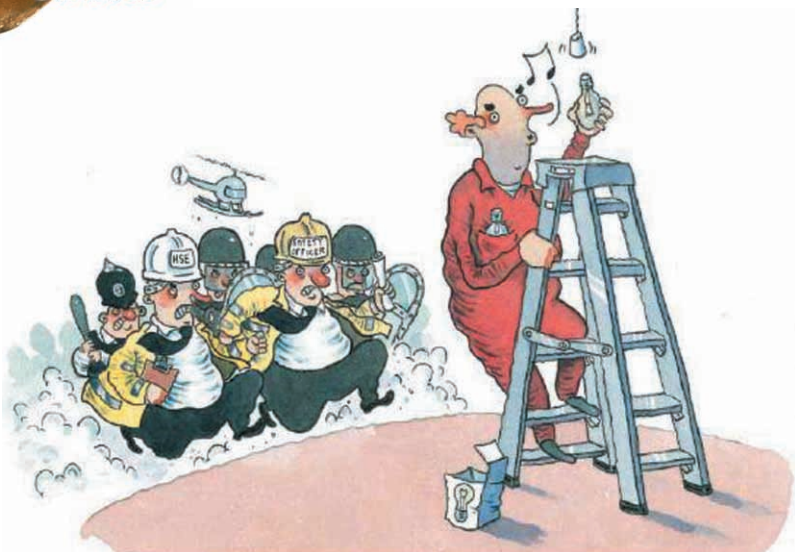
The HSE guidance for inspectors on packaging machinery makes direct reference to the published EN standards which now include the list below so make sure your equipment complies:

- BS EN 415-2 Safety of packaging machines – preformed rigid container packaging machines
- BS EN 415-3 Safety of packaging machines – form, fill and seal machines
- BS EN 415-4 Safety of packaging machines – palletisers and depalletisers
- BS EN 415-5 Safety of packaging machines – wrapping machines
- BS EN 415-6 Safety of packaging machines – palletwrapping machines
- BS EN 415-7 Safety of packaging machines – group and secondary packaging machines

The other priorities for HSE inspectors in the food industry are:

- ▶ muscular-skeletal disorders
- ▶ falls from height
- ▶ slips and trips
- ▶ occupational asthma
- ▶ workplace transport





HSE myth of the month: stepladders have been banned

The reality is that the HSE has not banned stepladders - nor has it banned ladders!

For straightforward, short duration work stepladders and ladders are a good option, but you wouldn't want to be wobbling about on them doing complex tasks for long periods. A large number of workers are seriously injured or killed using ladders and stepladders each year.

The HSE wants people to use the right equipment for the job and to apply commonsense when using ladders and stepladders, but they have not banned them!

Prevention of explosions in the food industry

HSE has just published new guidance on the prevention of dust explosions. Such explosions can have devastating effects and can be caused by dust from flour, sugar, grain, milk powder, instant coffee etc.

The guidance sets out precautions to protect against dust explosions and covers various processes and plant.
www.hse.gov.uk/food

DTI to BERR

One of the effects of our recent change in Prime Minister has been the disappearance of the DTI. However needless to say most of the things that the DTI used to do will be carried on by the same people who have just been moved to other departments.

The Department for Business Enterprise & Regulatory Reform (BERR) is currently drafting the new Supply of Machinery (Safety) Regulations that will implement the new Machinery Directive 2006/42/EC and is due to be published for public comment any day now.

Hot Issues

WASTE STRATEGY FOR ENGLAND: This 20 year strategy places particular emphasis on diverting waste from landfill and waste minimisation. So it is bound to have an impact on the use and content of packaging materials as well as the use of waste food for energy. This, in turn, will impact on the machinery sector.
www.defra.gov.uk/environment/waste/strategy/review/index.htm

UKTI ADVANCED ENGINEERING SECTOR ADVISORY BOARD: This new SAB has been created following the merger of the three Boards for automotive, aerospace and engineering. Already it has set up two working groups to investigate how to market the UK through its leading edge technology and how trade associations can help to market the UK by promoting advanced engineering. A separate focus group is studying how to exploit a major technology event in India next year. For further information please contact:
Brian Greenwood (MME) who represents DTI Business Relations on AdESAB.
brian.greenwood@dti.gsi.gov.uk

ENGINEUROPE: This major EU funded project to consider how the Mechanical Engineering sector can "continue to exploit and develop" its potential as an essential part of Europe's asset base has published a report on its findings (May 2007). The document covers areas such as IPR, market access, research and innovative skills as part of its remit to look at the sector's competitiveness. The full report is available at:
http://ec.europa.eu/enterprise/mechan_equipment/engin/study.htm

REACH: A report on how to enforce the REACH Directive will be published later this year following the completion of a consultation process in June 2007. The PPMA and its partners in EAMA/ORGALIME will continue to monitor this issue, which could well have some impact on the use of cleaning agents, surface treatments and lubricants used in engineering applications.
www.defra.gov.uk/corporate/consult/reach-enforce/index.htm

MANUFACTURING ADVISORY SERVICE: From 2008 the MAS will extend the services it offers through its network of regional offices. Full details are available on the MAS website and your closest office can be reached via the MAS helpline. As a free service with the potential to help you reduce costs in your business please contact them.
MAS helpline number 0845 658 9600
www.mas.dti.gov.uk

NUCLEAR POWER, HAVE YOUR SAY: The Government is seeking views about the future of Nuclear Power and is inviting comments via its interactive website until 10 October. So if you have an opinion express it here.
www.dti.gov.uk/consultations/page39704.html

Vexing questions on safety control system standards

The question of which category of safety related control circuit to use in a machine has been a vexed question ever since BS EN 954-1 Safety of machinery – safety related parts of control systems Part 1 General principles was published in 1997. However the situation has got even more complicated since the introduction of BS EN ISO 13849-1 with the same title which will replace BS EN 954-1.

The categories B, 1, 2, 3 and 4 were essentially about circuit architecture and in BS EN ISO 13849-1 it has been recognised that the reliability of components is also an important issue and three classes of components with different mean times to a dangerous failure (MTTF) have been identified.

13849-1 also introduces another new concept of five “performance levels” a, b, c, d and e which must be selected on the basis of the risk.

Having identified the required performance level for the safety related circuit, the designer has different options to achieve that performance level either by choosing a more reliable component, monitoring the performance of components or duplicating them.

If you find all of this very confusing you are not alone, but do book your place on the PPMA seminar on “Functional safety of control systems” scheduled for 22 November.

Contact Emma Corney at: emma.corney@ppma.co.uk or telephone 020 8773 8111 for more details.

New Electromagnetic compatibility directive

With all of the excitement of the holiday season you can be forgiven for missing the fact that a new EMC Directive came into force on 20 July 2007.

The new directive (2004/108/EC) has some significant differences from the current EMC Directive that will impact particularly on companies that combine equipment to make fixed installations like process plant or packaging lines, which covers most members of the PPMA.

The directive applies to components and sub-assemblies as well as electrical apparatus and although the emissions and immunity requirements have not altered, the procedures for claiming conformity to the directive have changed as have the requirements for what used to be called the “technical construction file”.

However the biggest changes are the application of the directive to fixed installations. The new EMC Directive has different duties for suppliers of electrical apparatus that is used generally from suppliers of electrical apparatus made specifically for a fixed installation, which may have the effect of significantly lightening the load for PPMA members.

Creators of fixed installations or system integrators have different duties again from suppliers of apparatus and so if your company carries out this kind of work you will need to be up to speed. You can download a copy of the Directive in whichever European language you prefer, by putting 2004/108/EC into Google and following the link to the European Commission website.

i Directive Seminar

Reading a Directive and understanding it are two quite different things so you may want to sign up for the PPMA seminar on the subject on 22 November 2007.

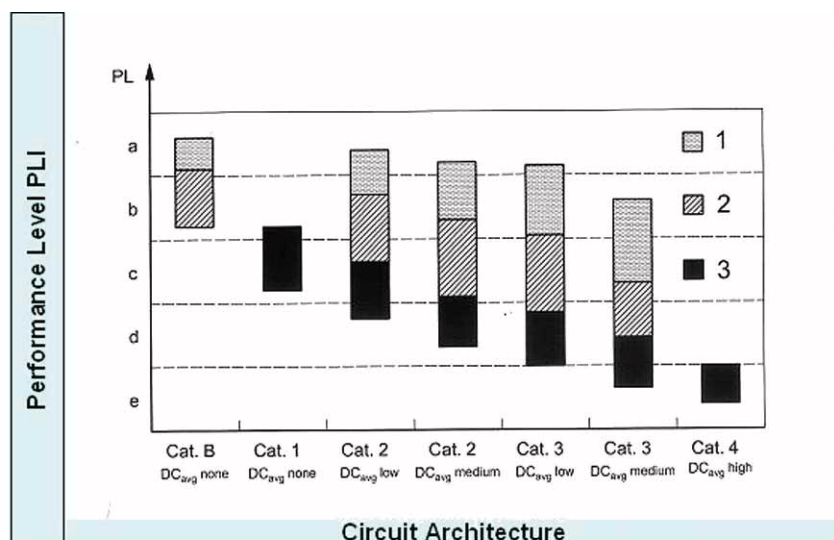
This course, which is being run by EMC expert Chris Marshman from York EMC, will not only bring delegates up to date with the requirements of the new directive but also the European standards that support the legislation.

Contact Emma Corney, PPMA to book your place:

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Choosing components and circuit architecture

BS EN ISO 13849-1



	Mean time to Failure of Components MTTF
1	3-10 years
2	10-30 years
3	30 – 100 years