

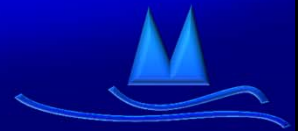
EU-Guide Machinery Directive

Interpretation
?



Legal update
?

Dipl.-Ing. Hans-J. Ostermann



Os

EU-Guide Machinery Directive



**Guide to application of
the Machinery Directive
2006/42/EC**

2nd Edition
June 2010
General Editor
Ian Fraser

**Edition 2.1 – July 2017
(Update of 2nd Edition)**

European Commission
Enterprise and Industry

Machinery Days Cologne 2017

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Maritim Hotel Cologne

Speaker:
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www.maschinenrichtlinie.de

Os

EU-Guide Machinery Directive





*“The purpose of the Guide is to provide explanations of the concepts and requirements of Directive 2006/42/EC in order to ensure **uniform interpretation and application throughout the EU.**”*


Comment from the author of this presentation:

“It can not be the purpose of this guide to change the legal text of the MD in order to get a “more convenient” result for a certain party. This is only a matter for the Member States and the Parliament!”

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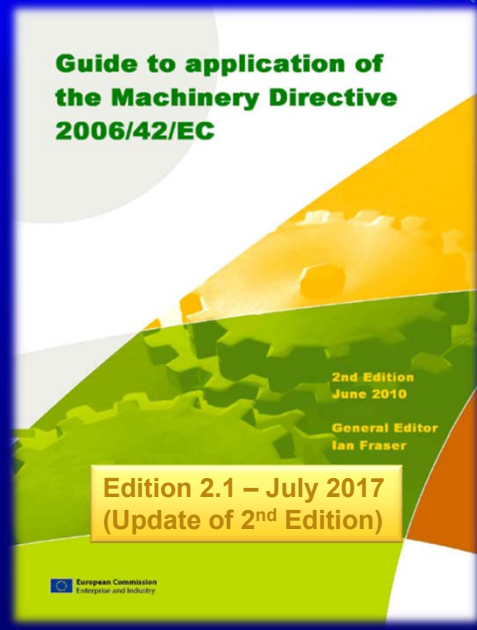
Os

EU-Guide Machinery Directive



Amendment to the introduction:


„This Update to the 2nd Edition of the Guide, further named Edition 2.1, has been completed to include the amendments made to the Machinery Directive by the Directive 2009/127/EC on Pesticide Equipment and the Regulation (EU) No 167/2013 on the approval and market surveillance of agricultural and forestry vehicles (Tractors). In addition, guidance on “partly completed machinery” and “assemblies” has been added, as well as inserting clarifications and corrections to the concepts of “safety components”, “new and used machinery”, “marking of machinery”. A number of key guidance decisions of the Machinery Working Group have been incorporated into this text. “



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Os

EU-Guide Machinery Directive




- EU-Guide versus Machinery Directive
- Essential amendments
 - Assembly of Machinery
 - New and used Machinery
 - Partly completed Machinery
 - Specific application
 - Safety components
 - Machinery without safety components
- Integrated Papers of the EU-Machinery Committee
 - Lifting accessory
 - Safety fences
 - Emergency stop devices
 - Guards for drilling machines
 - Manually loaded trucks for the collection of household refuse ...
 - Classification of equipment used for lifting loads with lifting machinery

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Os

EU-Guide Machinery Directive



- EU-Guide versus Machinery Directive
- Essential amendments
 - Assembly of Machinery
 - New and used Machinery

Comment:
 This presentation highlights some important points, which are added to the EU-MD-Guide in Edition 2.1 in July 2017. Some interpretations of the Guide are possibly not in line with the legal text of the MD. Some of the following examples should point this out.

- Manually loaded trucks for the collection of household refuse ...
- Classification of equipment used for lifting loads with lifting machinery

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INTRODUCTION

„It should be stressed that only the Machinery Directive and the texts implementing its provisions into national law are legally binding.“

The most important sentence!



- Assembly of Machinery



Os

Assembly of Machinery



EU-Guide

§ 38 Assembly of Machinery

[...]

The definition of assemblies of machinery does not extend to a complete industrial plant consisting of a number of production lines each made up of a number of machines, assemblies of machinery and other equipment, even if they are controlled together by a single production control system. Only if the plant (which may be any combination of machinery, partly completed machinery and other equipment resulting in machinery subject to the Machinery Directive) forms a single integrated line is it subject to the Machinery Directive as an assembly. So for the purpose of applying the Machinery Directive, most industrial plants can be divided into different sections, each of which may be a distinct assembly (of machinery) or even an independent machine (e.g. a mixing vessel). Even a single production line may be divided into separate assemblies and/or machines if there is no safety related connection between constituent assemblies or machinery.

[...]



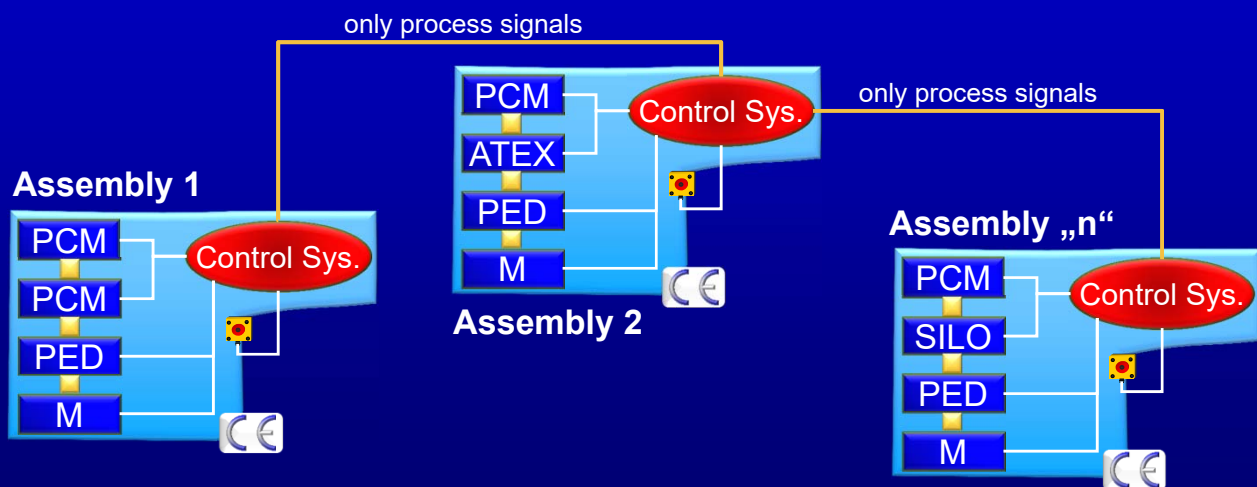
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Os

Complete industrial plant



EU-MRL-Guide
§ 38



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Os Assembly of Machinery

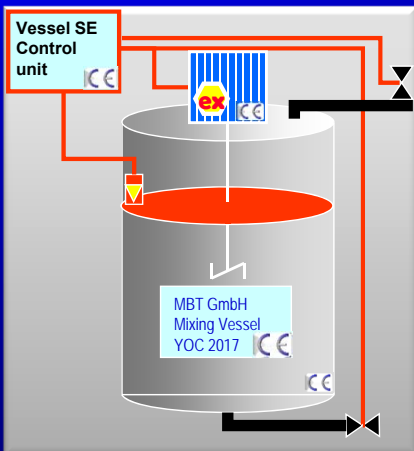
EU-Guide
§ 38 Assembly of Machinery
[...]

So for the purpose of applying the Machinery Directive, most industrial plants can be divided into different sections, each of which may be a distinct assembly (of machinery) or even **an independent machine (e.g. a mixing vessel).**

[...]

If the units concerned are placed on the market as complete machinery **that could also operate independently,** they must bear the CE marking and be accompanied by an EC Declaration of Conformity -

[...]



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Os Assembly of Machinery

EU-Guide
§ 38 Assembly of Machinery
[...]

Conclusion:
That means, the example is only applicable for mixing vessels, which are in line with article 2a second indent of the Machinery Directive 2006/42/EC:
„an assembly referred to in the first indent, **missing only** the components to connect it on site or to sources of energy and motion;“
Such mixing vessels are rare.

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Os

Assembly of Machinery



EU-Guide

§ 38 Assembly of Machinery

[...]

If the units concerned are placed on the market as complete machinery that could also operate independently, they must bear the CE marking and be accompanied by an EC Declaration of Conformity – [...]. If they are placed on the market as partly completed machinery, they must not bear the CE-marking, but note that if other legislation providing for CE marking also apply (e.g. ATEX Directive, Radio Equipment Directive, etc.), a CE marking will have been applied, in which case the Declaration of Conformity should state it only covers that legislation. In all cases the partly completed machinery must be accompanied by a Declaration of Incorporation under the Machinery Directive together with assembly instructions – [...].

[...]



DC + DOI

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Os

Assembly of Machinery



EU-Guide

§ 38 Assembly of Machinery

[...]

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[...]

Conclusion:

Where applicable, partly completed machinery must be accompanied by an EU-Declaration of Conformity + CE (e.g. for ATEX)

plus

a Declaration of Incorporation and the assembly instructions.



DC + DOI

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Os

Assembly of Machinery

EU-Guide
§ 38 Assembly of machinery
[...]

*Assemblies of machinery are subject to the Machinery Directive because their **safety** depends not just on the safe design and construction of their constituent units but also on the suitability of the units linked together and the safety of the interfaces between them. At the interface modifications to or extra, guarding/protection devices may need to be designed and fitted so that the assembly as a whole is compliant. The risk assessment to be carried out by the manufacturer of an assembly of machinery must therefore cover both the suitability of the constituent units for the safety of the assembly as a whole and the hazards resulting from the interfaces between the constituent units.[...]*

examination of the interfaces

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Os

Assembly of Machinery

EU-Guide
§ 38 Assembly of machinery
[...]

*Assemblies of machinery are subject to the Machinery Directive because their **safety** depends not just on the safe design and construction of their constituent units but also on the suitability of the units linked together and the safety of the interfaces between them. At the interface modifications to or extra, guarding/protection devices may need to be designed and fitted so that the assembly as a whole is compliant. The risk assessment to be carried out by the manufacturer of an assembly of machinery must therefore cover both the suitability of the constituent units for the safety of the assembly as a whole and the hazards resulting from the interfaces between the constituent units.[...]*


Conclusion:
The examination of the interfaces is a necessary part of the risk assessment.

examination of the interfaces

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Os

Assembly of Machinery




EU-Guide
§ 38 Assembly of machinery
[...]

The manufacturer of the assembly of machinery must:

- [...]
- *compile the technical file which must contain the results of the risk assessment and the design details of the interfaces (e.g. guards, linking conveyers, hoppers, feeders and electronic interface devices) between the items. It must also document any modifications that have been made to the constituent units when incorporating the new items into the assembly. [...]*


Technical file



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Os

Assembly of Machinery




EU-Guide
§ 38 Assembly of machinery
[...]

The manufacturer of the assembly of machinery must:

- [...]
- [...]

Conclusion:
Any modifications on the constituent units and interfaces must be documented.

Technical file



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EU-Guide

§ 38 Assembly of machinery

Conclusion:

The EU-interpretation is to a great extent in line with the national German Paper for “Assembly of Machinery”.

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- Assemblies of machinery comprising new and existing machinery



new + used

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Os

New + used machinery



§ 39 Assemblies comprising new and existing machinery

[...]

Where, one or more of the constituent units of existing assemblies of machinery may be replaced by new units, or new units may be added to an existing assembly of machinery, the question arises as to whether an assembly of machinery comprising new and existing units is, as a whole, subject to the Machinery Directive. It is not possible to give precise criteria for answering this question in each particular case. In doubt, it is therefore advisable for the person constituting such an assembly of machinery to consult the relevant national authorities.

However, the following general guidance can be given:

[...]

new + used

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Os

New + used machinery



§ 39 Assemblies comprising new and existing machinery

[...]

1. If the risk assessment shows that the replacement or the addition of a constituent unit in an existing assembly of machinery does not add a new hazard, nor increase an existing risk, no action is required according to the Machinery Directive for the parts of the assembly that are not affected by the modification. The same applies where there is a new hazard, or an increase in an existing risk, but the existing protective measures present on the assembly before the modification are still sufficient so that the assembly can still be considered safe after modification. However, for those parts of the assembly that are affected by the replacement or the addition of a constituent unit, action under the Machinery Directive will be required. The employer remains responsible for the safety of the whole assembly according to the national provisions implementing Directive 2009/104/EC [...]



new + used

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Os

New + used machinery

§ 39 Assemblies comprising new and existing machinery

[...]

1. If the risk assessment shows that the replacement of a constituent unit in an existing assembly of machinery of the same type as an existing assembly, action under the Machinery Directive will be required. The employer remains responsible for the safety of the whole assembly according to the national provisions implementing Directive 2009/104/EC [...]

What is „... (not) affected ...“?
Only new parts? Only new hazards/increased risks? With no sufficient protective measures?

new + used

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Os

New + used machinery

§ 39 Assemblies comprising new and existing machinery

[...]

1. If the risk assessment shows that the replacement of a constituent unit in an existing assembly of machinery of the same type as an existing assembly, action under the Machinery Directive will be required. The employer remains responsible for the safety of the whole assembly according to the national provisions implementing Directive 2009/104/EC [...]

What is meant with the third sentence?
Are there “important changes” of those parts?
Otherwise the MD is not applicable.

new + used

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Os

New + used machinery



§ 39 Assemblies comprising new and existing machinery

[...]

- If the risk assessment for the new unit shows it does not have any safety implications (e.g. by requiring modifications) on the existing assembly and it is a complete machinery that could also operate independently, that bears the CE-marking and is accompanied by an EC Declaration of Conformity, then the addition of this new unit (as a complete machinery) into the existing assembly is to be considered as the installation of the new unit (machinery) and this does not give rise to a new conformity assessment, CE-marking or EC Declaration of Conformity for either the new unit (machinery) or the assembly to which is added.
- [...]



Addition of a complete machinery

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Os

New + used machinery



§ 39 Assemblies comprising new and existing machinery

[...]

- If the risk assessment for the new unit shows it does not have any safety implications on the existing assembly, does not give rise to a new conformity assessment, CE marking or EC Declaration of Conformity of the assembly.
- [...]



Addition of a complete machinery

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Os

New + used machinery

§ 39 Assemblies comprising new and existing machinery

[...]

- However, if the new unit to be added to the assembly comprises partly completed machinery (PCM) as defined by Art. 2 (g) , which must be accompanied by a Declaration of Incorporation and assembly instructions, the person incorporating the PCM into the assembly is to be considered as the manufacturer of the new unit (as by incorporating the PCM in the assembly, 'new' machinery is being put into service).
- [...]

→

Incorporating a PCM

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Os

New + used machinery

§ 39 Assemblies comprising new and existing machinery

[...]

- However, if the

Remark:
Also when incorporated into an assembly, a PCM will remain a PCM. By incorporating a PCM into an assembly it will not automatically become a complete machinery. There is also no need for this.

→

Incorporating a PCM

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Os

New + used machinery



§ 39 Assemblies comprising new and existing machinery

[...]

- [...] He must therefore assess any risks arising from the interface between the PCM, other equipment and the assembly of machinery, fulfil any relevant EHSRs that have not been applied by the manufacturer of the PCM, apply the assembly instructions, draw up an EC Declaration of conformity, compile the technical file for the modified parts of the assembly (essentially how the PCM has been put into service, including any changes to the existing assembly) and affix the CE marking to the new unit as assembled.
- [...]

Incorporating a PCM: Machinery Directive relevant

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Os

New + used machinery



§ 39 Assemblies comprising new and existing machinery

Unclear:

For what must the „manufacturer“ draw up an EC Declaration of conformity?

For the rebuild assembly of machinery, because this is subject to **important changes**?

- For the incorporated PCM there is no “new” manufacturer according to the Machinery Directive, unless it is completed to a “complete machinery” for its own. Therefore there is no CE to be affixed.

Incorporating a PCM: Machinery Directive relevant

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Os

New + used machinery



§ 39 Assemblies comprising new and existing machinery

[...]

- [...] For example, if a new automatic reel change unit, which is a partly completed machinery, is added to the end of a paper making line which will not affect the main parts of the line, then only the interface design and any modifications to the control system or to the existing assembly will need to be assessed for the purposes of CE marking the unit, as fitted.
- [...]

Incorporating a PCM: Machinery Directive relevant



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Os

New + used machinery



§ 39 Assemblies comprising new and existing machinery

[

The example is not in line with the preceding text:
According to the example a PCM shall be connected to an existing assembly only for process functions. That means, the assembly and the connected PCM are decoupled in reference to safety. Therefore the PCM will be completed to a "complete machinery" by its own. The new machinery in this case is not becoming part of the existing assembly.

Incorporating a PCM: Machinery Directive relevant



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Os

New + used machinery

**§ 39 Assemblies comprising new and existing machinery**

What cases should be explained in the EU-Guide:

- Building a new assembly from new and used units.
- Incorporating a new PCM or complete machinery into a used assembly with following results:
 - Important change of the whole assembly because of the modification
 - Important change of parts of the assembly because of the modification
 - No important change of the assembly because of the modification

Systematic by modifying an assembly of machinery

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Os



- Partly completed machinery



Photo: ABB

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Os

Partly completed machinery



§ 46 Partly completed machinery

“[...]”

Partly completed machinery subject to the Machinery Directive is a product intended to form machinery that is in the scope of the Machinery Directive after incorporation.

“[...]”

Actually by:

- incorporation / assembling in / with other
 - machinery / assemblies
 - PCM

or

- assembling with equipment



Photo: ABB

PCM: Definition

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Os

Partly completed machinery



§ 46 Partly completed machinery

*[...] As an example, industrial robots are usually designed **without** a specific application [...] - see Article 2(g) of the Machinery Directive.*

“[...]”



Photo: ABB

PCM: EU-interpretation



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Os

Partly completed machinery

§ 46 Partly completed machinery
 [...] As an example
 us

„Article 2 g
 ‘partly completed machinery’ means an assembly which
 [...] cannot in itself perform a specific application. [...]“

Here, it is **not** written:
 „[...] which does not have a specific
 application “!

Photo: ABB

uM: EU-interpretation

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Os

Specific application

- Specific application

Photo: ABB

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Os
Specific application


Os

- Specific Application ...

- Specific application
(Article 2a)
- Intended use
(Article 2k, 4(1); 11(1); Annex I: General Principles 1, No. 1.1.1 h; No. 1.1.2. c)
- Reasonably foreseeable misuse
(Annex I: No. 1.1.1 I; No. 1.1.2. a, c)
- Foreseen conditions
(Annex I: General Principles 2; No. 1.1.2. a)
- Abnormal use
(Annex I: General Principles 2; No. 1.1.2. c)
- Necessary / foreseeable use
(Annex I: No. 1.1.2. d)

Os
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Os
Specific application


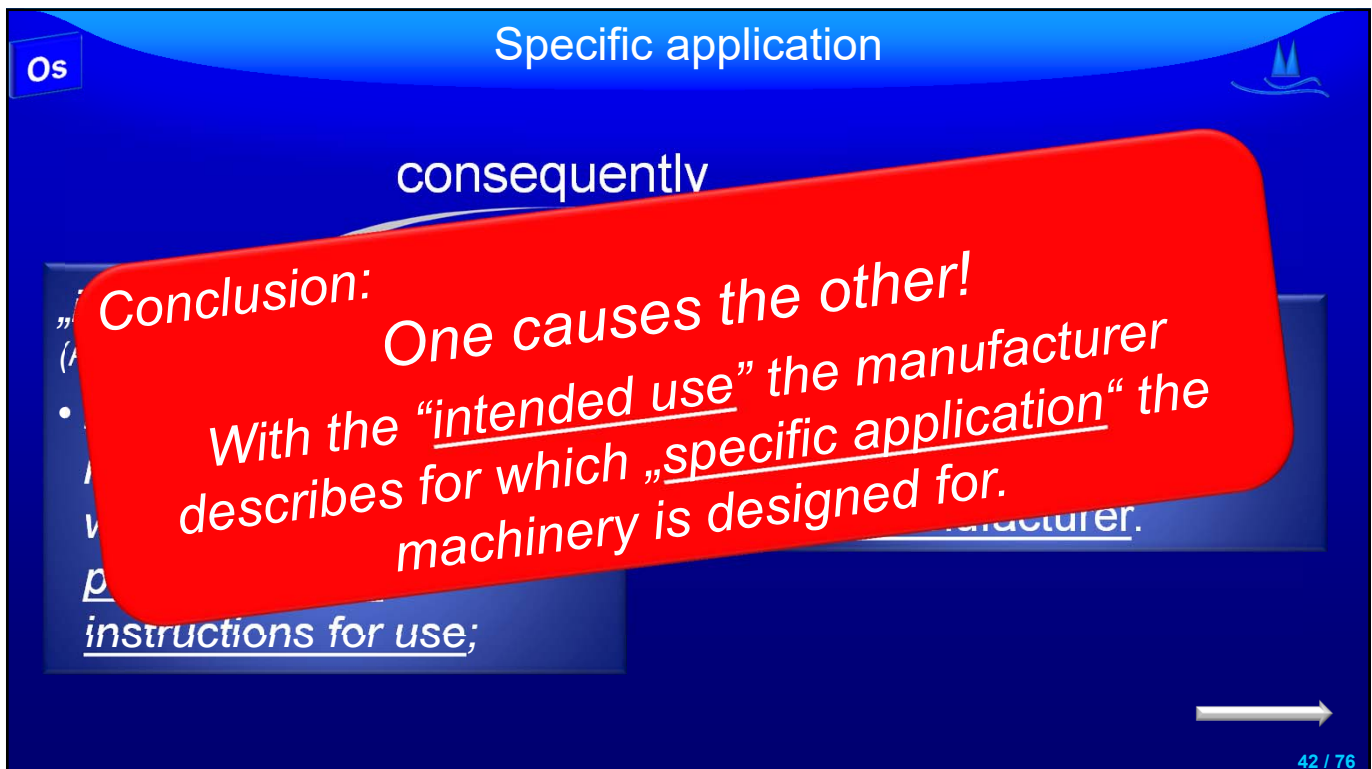
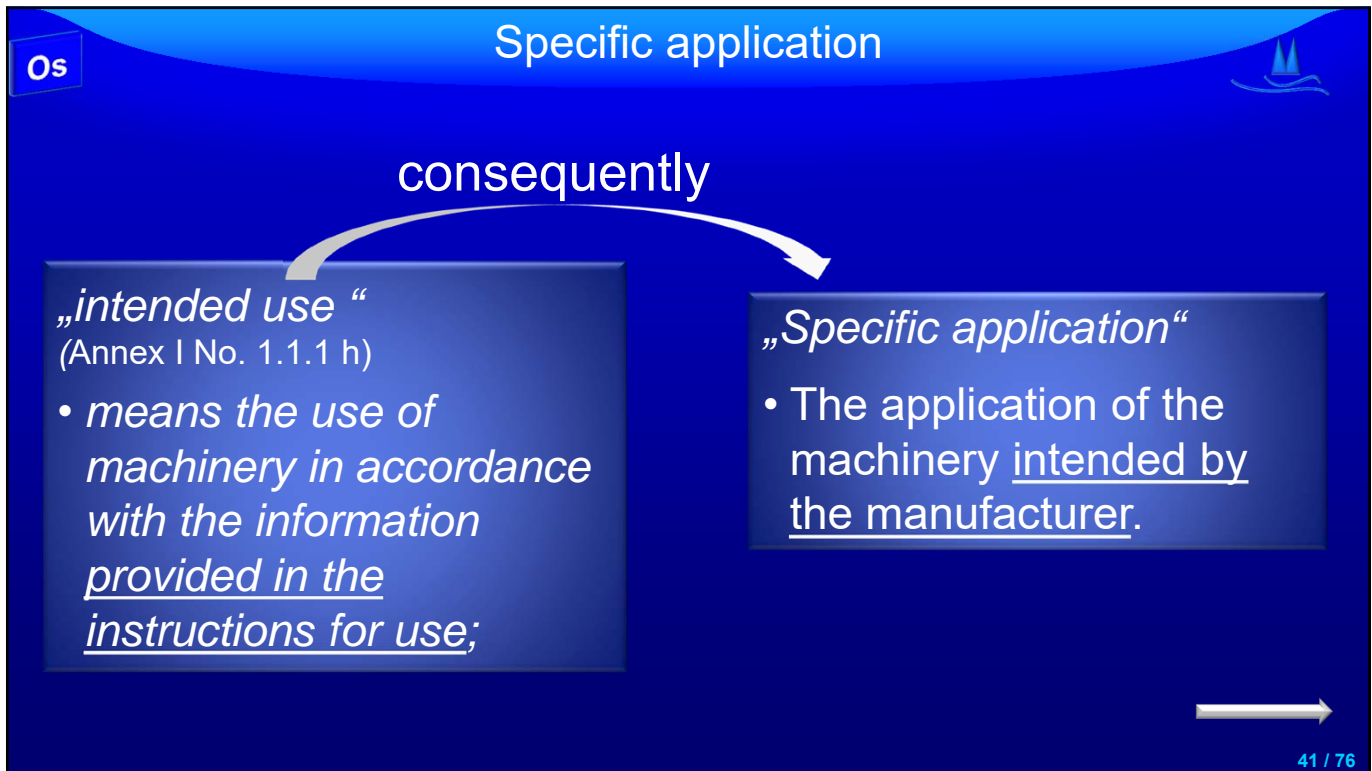
Os

- Specific application ...

EU-Guide § 35:
... which are joined together for a specific application ...

Machinery must be useable for a specific application as applying to the complete machine and its intended use. Typical machinery specific applications include, for example, the processing, treatment, or packaging of materials, or the moving of materials, objects or persons.

Os
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Os

Specific application

Examples for the „specific application“ of an industrial robot

- lifting of loads
- positioning of loads
- welding
- drilling
- grinding
- painting



Photo: ABB

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Os

Specific application

Quote^{*)} from ABB on the issue
„intended use“:

[...] is the IRB 6700 the ideal robot for use in different industrial segments. Typical fields are for example spot welding, material handling and machine loading.“

Quote^{**)} from KUKA on the issue
„intended use“ of KUKA „KR AGILUS sixx“:

“The industrial robot is used for the handling of tools and fixtures or for treating and transporting of components or products.“



Photo: ABB

^{*)} Translation by the author

^{**) https://www.kuka.com/-/media/kuka-downloads/imported/48ec812b1b2947898ac2598aff70abc0/spez_kr_agilus_sixx_de.pdf}
Translation by the author

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Os

Specific application

Consequently the „**specific application**“ of industrial 6-axis-robots can be described as:

- Positioning of a tool in a 3D area with high position precision

and

- Traversing a given trajectory with high precision regarding position and time

while

- Carrying a maximum load of X kg




Photo: ABB

*) Translation by the author

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Os

Specific application

Consequently the „**specific application**“ of industrial 6-axis-robots can be described as:

- Positioning of a tool in a 3D area with high position precision

and

- Traversing a given trajectory with high precision regarding position and time

while

- Carrying a maximum load of X kg




Photo: ABB

*) Translation by the author

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Conclusion:
 The term “specific application” is not reduced to only one single and very concrete application. It can also mean different and more general applications.

Os

Specific application

Every product has a „specific application“!

Photo: Ostermann

Photo: Ostermann

Foto: Comes

Foto: OKUMA

Photo: EU-MD-Guide

Photo: Ostermann

Photo: ABB

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Os

Specific application

Every product has a „specific application“!

*The only question is:
Is the product able to perform its
“specific application” (safely) on its
own or not?*

Photo: Ostermann

Photo: Ostermann

Foto: Comes

Foto: OKUMA

Photo: EU-MD-Guide

Photo: Ostermann

Photo: ABB

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Os



- Back to partly completed machinery



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Os

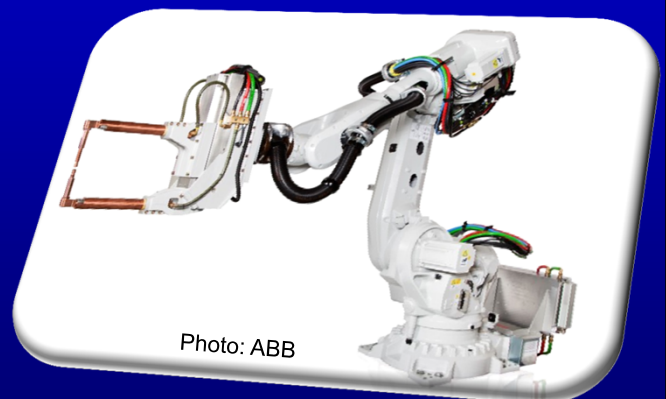
Partly completed machinery



§ 46 **partly completed machinery**

[...] In practice, only an industrial “stand and function alone-robot” provided with both an end-effector and control system so that it can itself perform a specific application, is a complete machinery under the Machinery Directive.

[...]



complete machinery?

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Os

Partly completed machinery

§ 46 partly completed machinery

[...] In practice, only an industrial “stand and function alone-robot” provided with both an end-effector and control system so that it can itself perform a specific application, is a complete machinery under the Machinery Directive.

[...]



Reversing circuit:

A portable drilling machine without a tool therefore does not have a “specific application” and will be a partly completed machinery?

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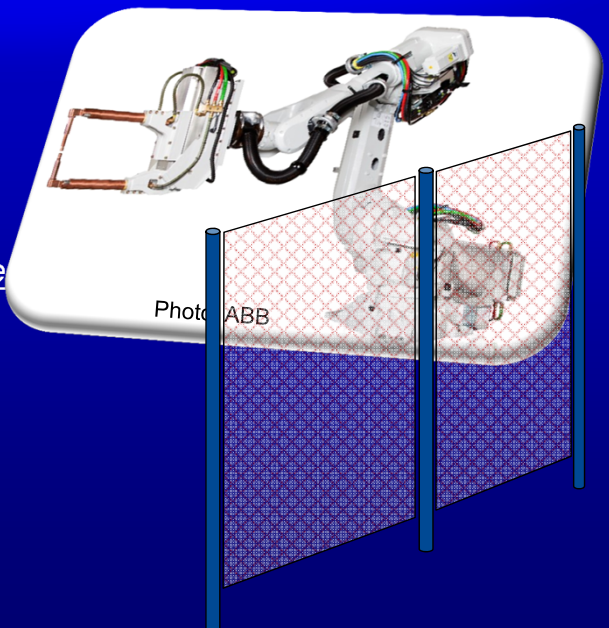
Os

Partly completed machinery

§ 46 partly completed machinery

[...]

Machinery that meets the definition in the first three indents of Article 2(a) so it can in itself operate independently, performing its specific application – see §35: comments on the first indent of Article 2 (a) – but which only lacks the necessary protective means or safety components, such as guards, is not to be considered as partly completed machinery. Such incomplete machinery does not meet the requirements of the Machinery Directive and must not be CE marked and cannot be placed on the EU/EEA market [...]



machinery without safety components

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Os

Partly completed machinery

§ 46 partly completed machinery

[...] In practice, only an industrial “stand and function alone-robot” provided with both an end-effector and control system so that it can itself perform a specific application, is a complete machinery under the Machinery Directive.

[...]

Would this also be an „incomplete“ complete machinery, not allowed to be placed on the market?



Photo: Comes

vollständige Maschine?

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Os

Partly completed machinery

§ 46 partly completed machinery

[...]

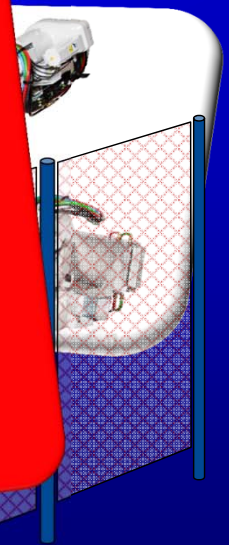
The EU-Guide is introducing a new group of products:

„incomplete machinery“

But there is

no legal basis

in the MD!



machinery without safety components

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Os Partly completed machinery

§ 46 partly completed machinery
[...]
Machinery that meets the following conditions is considered to be partly completed machinery:

Such an – according to EU-MD-Guide – „incomplete machinery“ is according to the legal text of the MD a partly completed machinery, missing „equipment“ (e.g. safety components), and thus not fulfilling all requirements of MD article 5(1) on complete machinery.

That is the reason, why such a PCM “cannot in itself” perform a specific application. That means a PCM -missing necessary equipment- “cannot in itself” (safely) perform its specific application.

must not be placed on the EU/EEA market [...]

machinery without safety components

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Os Partly completed machinery

§ 46 partly completed machinery
[...]
For example, an internal combustion engine or a high voltage electric motor placed on the market ready to be fitted, i.e. with the connections necessary for the fitting, to machinery that is subject to the Machinery Directive are to be considered as partly completed machinery. [...]
[...]




Photo: LIEBHERR-HYDRAULIKBAGGER GMBH

Motor

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Os

Partly completed machinery

§ 46 *partly completed machinery*

[...]

„Article 2(g)
[...] A drive system is partly completed machinery. [...]“

Motors of all kind are „drive systems“.

The restrictive interpretation “ready to be fitted” in § 46 is not in line with the legal text of the MD. In § 35 the EU-MD-Guide requires therefore only, that for a complete machinery, supplied without a “drive system”, the “means of connection” for this “drive system” have to be specified by the machinery manufacturer. But these “means of connection” are not required as part of a motor, for it to become a “drive system” in the sense of Article 2(g) of the MD.

Motor

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Os

Partly completed machinery

§ 46 *partly completed machinery*

[...]

[...] *Electric motors that are marketed for a wide variety of uses and hence not specifically designed or equipped for fitting to a particular type of machinery are not partly completed machinery.*

[...]




Photo: Friedrich Schwingtechnik

Electric motors are not PCM?

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Os

Partly completed machinery

§ 46 partly completed machinery

[...]

[...] Exclusions according MD Article 1(2):

[...] k) Electrical and electronic products falling within the following areas, insofar as they are covered by Council Directive 73/23/EEC of 19 February 1973 on the harmonisation of the laws of Member States relating to electrical equipment designed for use within certain voltage limits:

- [...]
- **electric motors;**

[...] photo. Friedrich Schwingtechnik

Electric motors are not PCM?

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Os

Partly completed machinery

§ 46 partly completed machinery

[...]

[...] *Electric motors that are marketed for a wide variety of uses and hence not specifically designed or equipped for fitting to a particular type of machinery are not partly completed machinery.*

[...]

Why are then all electric motors, including those “for a *wide variety of uses*” excluded from the MD via Article 1(2)? →

Electric motors are not PCM?

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Os

Partly completed machinery

§ 46 partly completed machinery
[...]

~~[...] Electric motors that are marketed for a wide variety of uses and are not specifically designed or equipped for fitting to a particular type of machinery are not partly completed machinery.~~

[...]

Answer:
Because all electric motors, including those “for a wide variety of uses”, are otherwise in the scope of the MD as PCM!

Electric motors are not PCM?

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Os

Partly completed machinery

§ 69 Electric motors
[...]

The exclusion does not apply to electric motors that are intended for use in potentially explosive atmospheres and that are subject to the ATEX-Directive 2014/34/EU, because such motors are excluded from the Low Voltage Directive.

Electric motors that are intended for use in potentially explosive atmospheres are therefore subject to the Machinery Directive.

All such electric motors, that means also those, „that are marketed for a wide variety of uses“.

This is correct but not in line with § 46!

ATEX-Electric motors are PCM!

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Os

Partly completed machinery

§ 46 partly completed machinery

[...] The Machinery Directive does not apply as such to separate machinery components or subassemblies such as, for example seals, ball-bearings, pulleys, elastic couplings, solenoid valves, hydraulic cylinders, and the like, that do not have a specific application and that are intended to be incorporated into machinery; [...].

Note:
Every product has a “specific application”.
See slides “specific application”!

Components

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Os

Partly completed machinery

§ 46 partly completed machinery

[...] The Machinery Directive does not apply as such to separate machinery components or subassemblies such as, for example seals, ball-bearings, pulleys, elastic couplings, solenoid valves, hydraulic cylinders, and the like, that do not have a specific application and that are intended to be incorporated into machinery; unless they fulfil one of the other definitions of products, [...].

Note:
The example „flange-connected gearboxes“ is fortunately cancelled!

Components

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Os

Partly completed machinery

§ 46 partly completed machinery

[...] The Machinery Directive does not apply as such to separate machinery components or subassemblies such as, for example seals, ball-bearings, pulleys, elastic couplings, solenoid valves, hydraulic cylinders, and the like, that do not have a specific application and that are intended to be incorporated into machinery; unless they fulfil one of the other definitions of products, [...].

Note:
The examples „solenoid valves” and “hydraulic cylinders” are PCM because they are or they include “drive systems”!

Components

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Os

Partly completed machinery

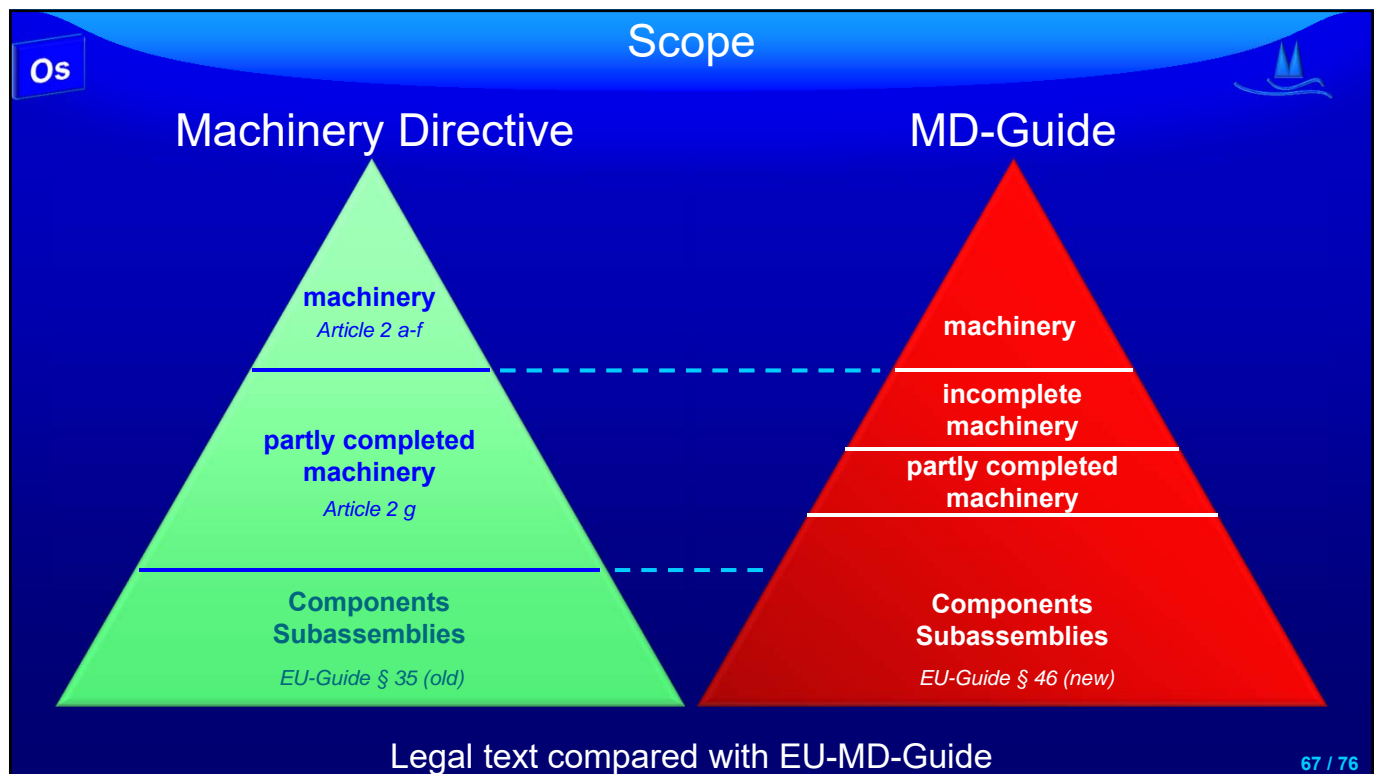
§ 46 partly completed machinery

[...] The Machinery Directive does not apply as such to separate machinery components or subassemblies such as, for example seals, ball-bearings, pulleys, elastic couplings, solenoid valves, hydraulic cylinders, and the like, that do not have a specific application and that are intended to be incorporated into machinery; unless [...] are partly completed machinery [...].

A bit funny:
Components are not PCM, unless they are PCM!

Components

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Os

- Lifting accessories

Photo: Comes GmbH

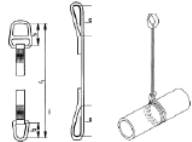


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Os

Lifting accessories



§ 412 Classification of equipment used for lifting loads with lifting machinery

Nº	Picture / examples	Designation	Description	Standard / Reference	Lifting accessory covered by Directive 2006/42/EC	Work equipment not covered by Directive 2006/42/EC
1		Textile slings and their components	Assembly of one or more sewn webbing components for attaching loads to the hook of a crane or other lifting machine	EN 1492 parts 1, 2 & 4	X	
20		Reusable big bag	Big bag specifically intended for lifting bulk material or debris and not used for packaging, storage or transport			X
24		Lifting wheel barrow	Wheel barrow with lifting eyelets intended for transport and application of concrete and mortar within a building site			X

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Os

Lifting accessories



§ 412 Classification of equipment used for lifting loads with lifting machinery

[...] This guidance gives examples of equipment that are considered as lifting accessories and other examples of equipment used for lifting loads that are not considered as lifting accessories. [...]

Criteria for Lifting accessories according Art. 2d:

- not attached to the lifting machinery
- placed between the machinery and the load
- allowing the load to be held
- [...]



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Lifting accessories



Not a lifting accessory?



Not a lifting accessory?

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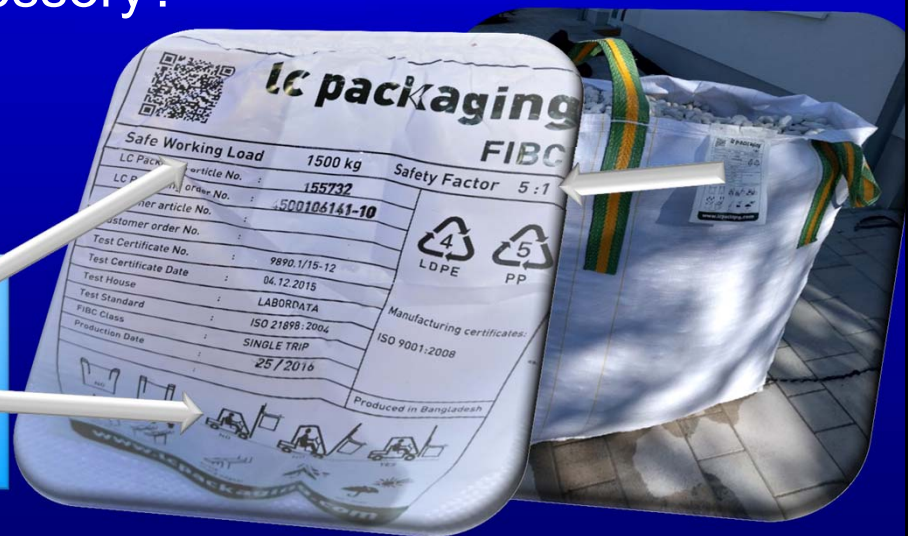
Os

Lifting accessories



Not a lifting accessory?

Specific application:
 •Lifting of bulk
 (load) with a lifting
 machinery!

~~Not~~ a lifting accessory?

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Os

Lifting accessories

Not a lifting accessory?

Artikel 2d:
„lifting accessory’ means a component or equipment not attached to the lifting machinery, allowing the load to be held, which is placed between the machinery and the load or on the load itself, [...]“

FITS!

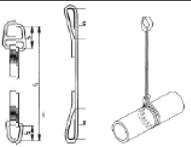


Conclusion:
A “BigBag” and a “lifting wheel barrow” are lifting accessories.

~~Not a lifting accessory?~~

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Os

Lifting accessories

N°	Picture / examples	Designation	Description	Standard / Reference	Lifting accessory covered by Directive 2006/42/EC	Work equipment not covered by Directive 2006/42/EC
1		Textile slings and their components	Assembly of one or more sewn webbing components for attaching loads to the hook of a crane or other lifting machine	EN 1492 parts 1, 2 & 4	X	
20		<u>Reusable</u> big bag	Big bag specifically intended for lifting bulk material or debris and not used for packaging, storage or transport		X	
24		<u>Lifting</u> wheel barrow	Wheel barrow with <u>lifting eyelets</u> intended for transport and application of concrete and mortar within a building site		X	X

What is the “specific application”?

Inter alia: Load lifting!

Column is not needed!

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Os

Lifting accessories

Judgment „BigBag“ Court in “Hamburg” 28.9.2010 – 10 K 1128/09

Occasion: Accident in UK

What do we win with the EU-interpretation on lifting accessories?

Nothing!

What do we loose with the EU-interpretation on lifting accessories?

The free movement of goods!

1. *So-called big bags or FIBC must also meet the requirements of § 4 GPSG*), if they are only "disposable packaging" for the actual product (here melamine from China) imported into the European economic area.*
2. *Compliance with the safety requirements is to be proven by the importer solely by complying with the relevant DIN EN ISO 21898 or a specific, individual case-related risk assessment.*
3.

Because these containers must be nevertheless transported, handled and emptied, the lifting of the containers e.g. cannot be prevented and thus also not that people (e.g. the forklift operator) are endangered by the BigBags.

*) German "Equipment and Product Safety Act", now ProdSG

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EU-Guide Machinery Directive

Interpretation
?

Legal update
?

Thank you

Dipl.-Ing. Hans-J. Ostermann