

Documentation guidelines for machines, machine parts and safety components pursuant to EC Machinery Directive

1 Area of application

These guidelines are valid for machines or incomplete machines in the sense of the Article 1 of the EC Machinery Directive.

2 Documentation

2.1 General

In general, documents are to be supplied in standard form and also in compliance with the current version of the EC Machinery Directive and associated standards at the time of distribution.

Pursuant to the EC Machinery Directive, documents must be supplied in German and in the user's official language.

The documentation is to be completed in accordance with our end customers' specifications or after coordination with our specialized departments in accordance with the respective agreements.

The specialized departments will provide authoritative information about the type and amount of documentation that is to be supplied (e.g. only paper, only data media or data media and paper).

If the paper documentation is required in addition to data storage media, then the contractor explicitly agrees to supply free of charge the quantities of this documentation agreed upon in paper form to GROB-WERKE and to its end customers.

In addition, one set of documentation is to be delivered in German for our commissioning department.

Required contents and specifications of the respective chapters of the documentation can be obtained from the following sections.

Caution:

Documentation must **not** be delivered to the installation location together with the machine/assembly. The documents must be delivered to the respective department separately.

(Delivery address see page 2-4)

2.2 Certificate of conformity

- Installation declarations and assembly instructions without CE mark (pursuant to Appendix II B of the EC Machinery Directive) for incomplete machines in the sense of Article 13 of the EC Machinery Directive are to be supplied.

Sections 2.3 to 2.9 are valid for all other documentation.

- EC Declarations of Conformity with CE-marks (pursuant to Appendix II A of the EC Machinery Directives) for machines as defined by Article 12 of the EC Machinery Directive are to be supplied.

2.3 **Operating manual**

- Installation and commissioning instructions
- Operating instructions
- Programming instructions
- Maintenance instructions (includes preventive maintenance, inspection and, if necessary, repair instructions)

Guidelines for the operating instructions are available using the following address:

Technical Documentation and Customer Training

Mr. Klaus-Hans Eschenbach
GROB-WERKE GmbH & Co. KG
Industriestrasse 4,
87719 Mindelheim, Germany

Phone: +49 (8261) 996 135

Fax: +49 (8261) 996 219

e-mail: klaus.eschenbach@grob.de

2.4 **Parts lists for mechanics, electrics and fluids**

Parts lists for the machine, the assemblies and the sub-assemblies (mechanics, electrics and fluids) are to be supplied. Spare and wear parts need to be clearly marked in these parts lists.

A specific layout concept (parts list layout) is not required.

E = spare part, V = wear part

The following points must be observed:

- Parts lists on drawing sheets are not accepted.
- The parts contained in the parts lists must be itemized in the assembly drawing or the diagram.
- Order numbers of the original manufacturer must not be replaced by synonymous numbers.
- Parts lists are to be delivered as an Excel table or as a table in a searchable PDF file. Tif files or non-searchable PDF files will not be accepted.
- No prices must be entered into the lists to be delivered.
- Even though the documentation is in accordance with customer instructions, the parts lists must be delivered in any case, even if this is not requested in the customer instruction.

Parts lists must contain the following information:

Parts list header

- Assembly number (manufacturer's number)
- Designation
- Created by:
- Issue date
- Revision index

Parts list table (column structure)

- Item number
- Quantity (assemblies/parts)
- Designation
- Material (entry not required if purchase/DIN/ISO)
- Original manufacturer (supplier)
- Manufacturer's part number (order number or DIN/ISO must be stated)
- Spare and wear part designation (E / V)

2.5 List of contact data of involved suppliers

Additionally, a separate list of the contact data for all the following suppliers involved in the project is to be delivered as an Excel file.

- Manufacturer (supplier)
- Address
- Zip code
- Location
- Country
- Telephone number
- Fax number
- E-mail

2.6 Electrical documentation

- Functional diagrams
- Circuit diagrams
- Terminal assignments
- Insert diagrams and the relevant wiring diagrams
- Complete PLC documentation as printout that can be copied and as files on data media
- Declaration of incorporation for risk assessment
- Layout plan and device list (mechanical)
- Function / interface description
- Data sheets

Guidelines for the electrical documentation are available using the following address:

Department: KO-EL Electrical Engineering
Mr. Wolfgang Negele
GROB-WERKE GmbH & Co. KG
Industriestrasse 4,
87719 Mindelheim, Germany

Phone: +49 (8261) 996 305
Fax: +49 (8261) 996 95305
e-mail: wolfgang.negele@grob.de

2.7 Fluid documentation

(separate for hydraulics, pneumatics, coolants, lubricants)

- Fluid diagram: EPLAN Fluid version 2.3 GROB standard
- in case of customer requirements EPLAN Fluid according to customer sample project

Guidelines for the fluid documentation are available using the following address:

Department: KO-FL Fluid Engineering
Mr. Anton Kuhn
GROB-WERKE GmbH & Co. KG
Industriestrasse 4,
87719 Mindelheim, Germany
Phone: +49 (8261) 996 300
Fax: +49 (8261) 996 95300
e-mail: anton.kuhn@grob.de

2.8 Mechanical drawing documentation

See customer specifications (design specifications / general specifications / equipment specifications / product requirement specifications).

Guidelines for the mechanical drawing documentation are available using the following address:

Department: KO-ZD Drawing Documentation
Mr. Robert Greisel
GROB-WERKE GmbH & Co. KG
Industriestrasse 4,
87719 Mindelheim, Germany
Phone: +49 (8261) 996 355
Fax: +49 (8261) 996 219
e-mail: robert.greisel@grob.de

2.9 Delivery date

The documentation documents are to be supplied together with the delivery of the ordered equipment at the latest. Section 2.4 is an exception. The replacement and wear parts lists need to be delivered prior to initial machine acceptance.

With larger components, preliminary designs must normally be submitted for approval after coordination with the specialized department.