

Instructions for performance of the FSS 5 Machine Safety Check according to the general checklist as laid down in Attachment1

The FSS 5 check should be carried out by a team of experts, including at least one electrical engineering specialist, one mechanical engineering specialist and the owner-operator of the machine / production line.

[Refer to section 2.5 of FSS 5 "Safety of Machines and Production Lines"]

The checklist is divided into 5 parts:

1. Cover sheet
2. Summary of findings
3. Overview of corrective action
4. Sections 1 to 7 (questionnaire covering individual categories)
5. Frequently asked questions (FAQ)

1. Cover sheet

The following information is entered on the cover sheet:

1.1 Nature of the inspection

- a. Initial inspection
- b. Repeated inspection
- c. Preliminary acceptance
- d. Case number = e.g. machine number / year

1.2 Details of the machine / production line

- a. Designation of the machine / production line according to the manufacturer (e.g. baling press)
Structurally identical machines operating under the same conditions may be grouped together
- b. Type, works serial number and year of manufacture
Details may be taken from the rating plate
- c. Manufacturer / supplier
Manufacturer of the machine (e.g. Campen, DESMA)
- d. Location
Department / production zone / production cell

1.3 Scope of the inspection

All safety related functions and components must satisfy the requirements of the FSS 5 General Machine Safety Checklist and local relevant standards as a minimum requirement.

NOTE: If machines are used in conjunction with other machines or equipment, a supplementary safety check must be carried out with reference to the checklist for concatenated systems and equipment (FSS 5_Attachment 2).

1.4 Results of the inspection

- a. The machine / equipment / production line complies with the requirements of the current FSS 5 checklist.
This option must be selected if the color "green" is shown in the "Rating" column for all aspects in the summary of findings [100%].
- b. The machine / equipment / production line does not meet every requirement of the FSS 5 checklist. However, the machine / equipment / production line may be used as the functions concerned are not critical in terms of safety.
- c. The machine / equipment / production line does **not** comply with the requirements of the current FSS 5 checklist.
This option must be selected if one of the checklist items is not fulfilled, particularly if the item concerned is critical in terms of safety. [Also refer to section 2.3 f of FSS 5]
More detailed information / fields must be provided / completed:
- d. The machine / equipment / production line will be upgraded.
Details of the initial cost estimate, date
In the event of slight deviations from the requirements of the checklist, the machine / equipment / production line must be upgraded within a reasonable period of time [4 weeks].
The SEO must be informed.
The effectiveness of implemented corrective action must be reviewed.
- e. The machine / equipment / production line must be decommissioned by "date" at the latest.
The machine must be decommissioned in the event of serious defects / nonconformities. The result must be reported to the SEO and owner-operator immediately.
The owner-operator will be held responsible for monitoring the expiry date and supervising the decommissioning of the machine / equipment / production line if organizational measures prove to be inadequate and safe operation can no longer be guaranteed.
Until this time, technical and/or organizational measures as laid down in the annex are being implemented to ensure that safe operation is guaranteed.
[Refer to section 2.3 g of FSS 5 "Safety of Machines and Production Lines"]
- f. Date of next scheduled inspection
The inspection should be repeated no later than 4 years after the check completion date. [Also refer to section 2.3 j of FSS 5]

1.5 Distribution list

- a. Responsible parties (SEO, owner-operator and HSE manager, BG HSE, CTO)

1.6 Performance of the inspection

- a. The people involved in assessing the check are recorded in these fields.
- b. Names must be easily legible.
- c. Date of the assessment
- d. Signature
- e. Other information *[other people consulted during the assessment, e.g. experts, qualified personnel, radiation safety officer, etc]*

2. Summary of findings

The results from each section are carried over into the "Summary" worksheet and displayed as percentages [%].

The diagram shows the percentage of results referred to the respective rating. *[OK = OK, NR = not relevant / irrelevant, NOK = not OK]*

3. Overview of corrective action

All of the ratings and corrective action from the various sections are carried over to this worksheet and are presented in the form of an overview.

You can use the *[view NOK]* button to display just the questions, which were answered with NOK. You can use the *[view ALL]* button to cancel the filter function.

A message next to the title of each section indicates whether all of the questions in the section have been answered;

- a. **incomplete** → at least one rating is missing.

1. Documentation / orderliness **incomplete**

- b. **complete** → all of the questions have been answered

1. Documentation / orderliness **complete**

- c. *The number [0] indicates that, although the question was answered with NOK, no corrective action has yet been defined.* In this case, return to the question concerned in the section and enter appropriate action.

1. Documentation / orderliness

Question	Rating	Action
1.1	NOK	0

- d. Other fields are completed automatically according to the rating for each question, e.g.:

Rating NOK = action taken or 0 [refer to c]

→ Entry 0% complete

Rating OK = Action [e.g. none] → Entry 100% complete

Rating NR = Action [e.g. none] → Entry 100% complete

1. Documentation / orderliness complete						69%
Question	Rating	Action	Who	Deadline	Effectiveness review	% complete
1.1	NOK		0			0%
1.2	OK	none				100%
1.3	NR	none				100%

The mean value is displayed as a % of the section concerned - 69% in the example given here.

- e. The overview of corrective action also serves as an action plan. Complete the [Who], [Deadline] and [Effectiveness check] fields.
- f. When action has been taken and the measures implemented, you can change the status according to the rules outlined below. To do this, simply enter the appropriate value from the table below in the cell concerned.

% completed

25 % Planning / conceptual definition
 50 % Implementation initiated
 75 % implemented
 100 % Action taken / measures implemented / effectiveness reviewed

Note: Do not change NOK values in the sections to OK!

4. Sections

Sections 1 to 8 share the same structure.

Column	Description
1	Section No.
Owner-op. Mech. Electr.	Suggestion as to the department with the specialist knowledge to provide support in the assessment. This entry may be adapted to the specific situation in the plant concerned.
Documentation / orderliness	Name of the section Questions on the individual sections

Column	Description
Rating [Option]	Option fields for the assessment: BLANK → Question marked in red [<i>not assessed</i>] NOK → Rating marked in red OK → Rating marked in green NR → Rating marked in gray
Directive / standard	References to various directives / guidelines / standards
FAQ	Link to an explanation of the question – click on the link in FAQ to return to the question
Comments	Enter the checked item, e.g. circuit diagram dated x, values, in this column
Actions	Having entered NOK in response to a question, enter the action to be taken in this column – if the column is blank/empty, the value [0] is carried over into the overview of corrective action. [Refer to 3 c.]

5. Frequently asked questions (FAQ)

Frequently asked questions

This worksheet contains explanatory notes on most of the questions and they are intended to help you answer them.

Example:

Click onto the link [No] to return to the section / question.

No.	Contents
1.1	<p>Every machine must be marked visibly, legibly and indelibly with the following particulars as a minimum requirement:</p> <ul style="list-style-type: none"> — Business name and full address of the manufacturer and, where applicable, his authorized representative, — Designation of the machine, — CE Marking (refer to Attachment III), — Series or type designation, — Serial number, where applicable, — Year of construction, i.e. the year in which the manufacturing process was completed.