



INSPECTION PROGRAMME FOR SAFE MACHINES

Verification Checklist

Objective

This checklist shall be used as a verification guide that a machine in a workplace is safe for use at various life stages.

About this Verification Checklist

This checklist is based on the Singapore Standard SS 537: Code of Practice for Safe Use of Machinery – Part 1: General Requirements and relevant provisions under the Workplace Safety and Health Act (WSH Act). It contains basic verification items and additional checks where relevant.

Each individual machine must be accompanied by its own completed checklist.

For a machine to be verified safe for use, all responses in the checklist must be “Yes” or “Not Applicable”, and if any response is “No”, the inspection company must discuss the implication and make an assessment whether the machine is safe for operation.

Verification by an Inspection Company

The verification shall be conducted by any Inspection Company listed on the Ministry of Manpower’s website, with the outcome documented in a report prepared by the Inspection Company.

The Inspection Company shall in its report cover all the items in this checklist and provide objective explanations and evidence for each item verified (document reviewed, equipment inspected, etc.).

The report shall conclude with either:

- “Verified to conform to requirements in the Singapore Standard SS 537: Code of Practice for Safe Use of Machinery – Part 1: General Requirements and relevant Workplace Safety and Health Act provisions”, **or**
- “Unacceptable for safe use” with recommended follow up actions.

1. Details of Machine

a) Owner	<ul style="list-style-type: none">- Name- UEN- Address- Contact Details
b) Manufacturer/Supplier	<ul style="list-style-type: none">- Name- Address- Contact Details
c) Brand/ Model	<ul style="list-style-type: none">- Brand- Model
d) Description of Machine	<ul style="list-style-type: none">- General description of physical appearance- Key components and functions/applications- Condition (New, Used, Refurbished, Operation history)- Date procured/acquired

2. Verification Scope

This checklist ensures that the specified machine is safe for its intended use in a work environment and can be operated safely, across the various life cycle stages:

1. Acquisition
2. Installation
3. Testing and commissioning
4. Operation
5. Maintenance and repairs

2.1 Acquisition of machine (new or used)

S/N	Items to Check	Y	N	NA ¹	Discussion of Evidence/ Comments
Safe when properly used					
2.1.1	a) Is the machine designed and built to applicable guidelines and standards?				- Discuss how the criteria is met with references to guidelines and standards.
	b) Is the machine tested and examined according to applicable guidelines and standards?				- Discuss how the criteria is met with references to guidelines and standards.
Suitable and safe for its intended use					
2.1.2	a) Is the machine suitable for its intended use?				- Discuss about the design use and intended use.
	b) Is there a manual provided with the machine?				
	i) In a language understood by the relevant personnel?				

¹ Y – Yes, N – No, NA – Not applicable. Provide comments for all 'NA'.

S/N	Items to Check	Y	N	NA ¹	Discussion of Evidence/ Comments
	ii) Are the instructions within comprehensive and clear?				
	c) Is technical support for the machine available?				- Describe what is available.
Suitable and safe for use in the intended environment					
2.1.3	a) Is there information on the recommended operating environment or limits on the operating environment for the machine (e.g. dust, temperature, etc.)?				- Discuss about environment the machine is or not intended to be used in.
	b) Is the machine suitable to be used in the intended work environment?				
Additional checks for used machine					
2.1.4	a) Is there proper documentation of the machine's operation, maintenance and repair history?				
	b) If there were modifications or retrofitting done to the machine, were these done according to information supplied by the designer, manufacturer or supplier?				

2.2 Installation

S/N	Items to Check	Y	N	NA	Discussion of Evidence/ Comments
Adequate information for safe installation					
2.2.1	a) Is there information on what needs to be prepared or done before the machine is delivered to the site?				- Describe what these are.
	b) Does the machine come with installation instructions?				

S/N	Items to Check	Y	N	NA	Discussion of Evidence/ Comments
	c) Is there information on the hazards relating to the installation of the machine?				- Describe what these are.
	d) Is there information on the precautions to take during installation?				- Describe what these are.
Adequate and suitable resources for the safe installation					
2.2.2	a) Is there information on personnel competency (e.g. training, licences) required for installation of the machine?				
	b) Are competency requirements for personnel carrying out installation of the machine met?				
	c) Are specialised tools required for installation of the machine available?				

2.3 Testing and Commissioning

S/N	Items to Check	Y	N	NA	Discussion of Evidence/ Comments
Adequate information for safe testing and commissioning					
2.3.1	a) Is there information on what needs to be prepared or done before testing and commissioning the machine?				- Describe what these are.
	b) Is the machine provided with testing and commissioning procedures? (e.g. tests to be conducted, checklists, etc.)				
	c) Is there information on the hazards relating to the testing and commissioning of the machine?				- Describe what these are.

S/N	Items to Check	Y	N	NA	Discussion of Evidence/ Comments
	d) Is there information on the precautions to take during testing and commissioning?				- Describe what these are.
	e) Is the machine configured for the intended use?				
Adequate and suitable resources for the safe testing and commission					
2.3.2	a) Is there information on personnel competency (e.g. training, licences) required for testing and commissioning of the machine?				
	b) Are competency requirements for personnel carrying out testing and commissioning of the machine met?				
	c) Are specialised tools required for testing and commissioning of the machine available?				

2.4 Operation

S/N	Items to Check	Y	N	NA	Discussion of Evidence/ Comments
Adequate information for the safe operation					
2.4.1	a) Is there information on what needs to be prepared or completed before operating the machine?				- Describe what these are.
	b) Is the machine provided with instructions for safe operations?				
	c) Is there information about safety features, safety devices or warnings/precautions?				- Describe what these are.
	d) Do the safety features and safety devices function as intended?				

S/N	Items to Check	Y	N	NA	Discussion of Evidence/ Comments
	e) Is there information on the safe operating limits of the machine?				- Describe what these are.
	f) Are there unusual hazards or complicated machine features, and have they been identified?				- Describe what these are.
	g) Is there information about residual risks posed by the machine?				- Describe what these are.
	h) Are there troubleshooting instructions provided for the machine?				
	i) Is there information on emergency response procedures?				
Hazards/risks have been identified and mitigated					
2.4.2	a) Have the hazards associated with operating the machine identified and control measures established? List what they are and how they are mitigated:				
Hazards (see Annex B for examples)		Discussion on Adequacy			
	- List hazards	- Discuss whether risks are adequately mitigated			

2.5 Maintenance and Repairs

S/N	Items to Check	Y	N	NA	Discussion of Evidence/ Comments
Adequate information for maintenance and repairs					
2.5.1	a) Is there information on maintenance and repair requirements for the machine?				

S/N	Items to Check	Y	N	NA	Discussion of Evidence/ Comments
	b) Is the machine provided with instructions on its maintenance and repair?				
	c) Is there information on the hazards relating to the maintenance and repair of the machine?				- Describe what these are.
	d) Is there information on the precautions to be taken during maintenance and repair of the machine (eg. LOTO)?				- Describe what these are.
Adequate and suitable resources for the maintenance and repairs					
2.5.2	a) Is there information on personnel competency (e.g. training, verification) required for maintenance and repair of the machine?				
	b) Are competency requirements for personnel carrying out maintenance and repair of the machine met?				
	c) Are specialised tools required to carry out the maintenance and repair of the machine available?				

3. Discussion

[This section shall discuss the findings and assessment by the inspection company such as if any response in the checklist is “No”, the inspection company must discuss the implication and make an assessment whether the machine is safe for operation.]

4. Conclusion

[This section shall conclude if the machine inspected is

verified to conform to requirements in the Singapore Standard SS 537: Code of Practice for Safe Use of Machinery – Part 1: General Requirements and relevant Workplace Safety and Health Act provisions,

or

unacceptable for safe use, with recommended follow-up actions in Annex A.]

Inspector Name and Signature

Approved Signatory's Name and Signature

Inspection Company's Name

DD/MM/YYYY

Date of Verification

Annex B: Examples of hazards

- a. sharp edges/corners and protruding parts
- b. crush, shear, and entanglement points
- c. contact or entanglement with the machinery
- d. trapping between the machine and any material or fixed structures
- e. ergonomic hazards
- f. being struck by ejected parts of the machinery
- g. being struck by material ejected from the machinery
- h. electrical shock
- i. chemicals that are toxic, irritant, flammable, corrosive, explosive
- j. fire and explosion
- k. combustible dust
- l. noise and vibration
- m. temperature (high, low)
- n. inhalation of mist, fume and dust
- o. overpressure