Proactive Occupational Safety and Current Status Assessment

Assessment/auditing tool

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1. Proactive occupational safety and current status assessment

The organization is able to systematically evaluate and implement continuous proactive occupational safety management with this tool. The indicators have been partially modified from a checklist made by Mauri Hakala from the Institute of Occupational Health.

1. Machine and appliance safety
2. Occupational hygiene
3. Ergonomics
4. Order and cleanliness
5. Walkways and maintenance platforms
7. Personal protection
8. Proactive safety practices/culture of actions
9. Occupational health services, first aid and preparedness for emergencies

2. Instructions

This assessment applies to all employees of the company. Separate assessments can be made in different departments or workstations, so that any challenges can be addressed more closely. It is advisable to carry out the evaluation, together with staff representatives at the workplace, by discussing and conceptualizing better options for future actions. It is important to monitor the implementation of development targets and to maintain uncompromising maintenance of new operating models.

The questions of the assessment will be answered followingly:

All of the aspects will be gone through carefully and assessed as to the current situation at the workstation. The option that fits best to the current situation will be circled. Notes and observations can be written next to the corresponding aspects.

When creating the action plan, the four-of-risks (Ennakoiva työturvallisuustyö ja sen johtaminen; field book, "työkalut" portion) can be used; for example:

The answer options are:

1= In order; 2= Out of order; 3 = Not applicable for this workstation or department.

Criteria:

In order: The aspects meets government regulations, rules of the organization and operating principles.

Out of order: Does not meet the above requirements.

Not applicable: Is not applicable to the corresponding workstation or department.

If you are not sure about the situation, then the aspect is left open and the matter is defined by obtaining additional information.

3. Summary and safety index of proactive occupational safety

1. Machine and appliance safety			
2. Occupational hygiene			
3. Ergonomics			
4. Order and cleanliness			
5. Walkways and maintenance platforms			
6. Work guidance/orientation			
7. Personal protection			
8. Proactive safety practices/ culture of actions			
9. Occupational health services, first aid and preparedness for emergencies			
In total			

Safety index can be calculated in two ways:

Index = in order (1 or 0) / in order + out of order* 100 = xx%

Index = in order (xx%) / 9 = xx%

4. Indicators

1. Machine and appliance safety

1.1. Technical protection

1. Machines and appliances have CE-markings. 1 2 3
Machines bought or renovated after 1995 have to have CE-markings.
The Declaration of Conformity advises as to the standards and directives the machine meets.

2. Machine instructions are visible and available. 1 2 3
The most important machine instructions are clearly presented to the operator of the machine (for example, with pictures). Detailed use instructions, for those in need, are available in a designated place.

3. Machine maintenance instructions are available. 1 2 3

Maintenance instructions, for those in need, are available in a designated place.

4. Machine and appliance hazardous zones (e.g. fences with gates and tapings)are marked and protected. 1 2 3

5. Moving parts of machines (i.e. shaft ends, joints, chains, sprockets, wedge belts, belts, openings) are protected. 1 2 3

6. Protective parts have been attached to the machine according to the instructions. 1 2 3

Protective parts have been attached in a way that they cannot be bypassed or mistakes made.

7. Protective appliances of the machines are attached and in order. 1 2 3

Protective appliances are checked and tested regularly.
Protective appliances have not been bypassed.

8. There are emergency stops on machines and appliances. 1 2 3

Emergency stops are easy to use.
Color of the emergency stops is red and the background is yellow; a stop cable is on the entire length of the conveyor belt (on both sides).
The stops (and indication of where the stops have an effect) have been clearly indicated.

9. The danger of accidental start-ups is removed. 1 2 3
Maintenance and service switch with locks and reliable position indicator, when the interpretation is unambiguous.
Protection of start-up devices from unintentional start-up.
Preventing access to hazardous areas of machines; e.g. with protective gates.

10. Machine controls are designed to be safe. 1 2 3

Proper placement, installation and protection.
Unobstructed visibility to hazardous areas at the locations.
Controls are marked with pictures and/or text.
The movement directions are logical and positioned so that they have unobstructed access.

11. Electrical appliances are in order. 1 2 3
Electricians carry out regular and thorough inspections.
Testing and checking of emergency stops
Workstation personnel daily corresponding hardware external inspection.

12. Condition of the machines and functionality of fault reporting procedure. 1 2 3
Interruptions and faults are immediately reported to the immediate supervisor.
Fault messages are recorded and saved.
Faults are corrected as quickly as possible.
Work will not be continued in hazardous situations.
Temporary fixes are not allowed.

13. Systematic proactive maintenance of machines and appliances. 1 2 3
Periodic technical inspections are strictly carried out.
Service records are kept.

Special subject

Absolute demand to use harnesses. 1 2 3

19. Harnesses are used according to instructions. 1 2 3

The harness is put on before working on high platforms.
The rope has a reliable mounting point.
The rope lock is a fast locking type.
The rope is always tight.
All ropes are of the same length.
Safety harnesses are checked regularly.

2. Occupational hygiene

2.1. Air pollutants/Supplant gases

1. The plant has a mechanical dust removal system. 1 2 3

Where needed:

Input funnels
Scales
Conveyors
Conveyor transfer points

2. Enclosures of dust sources have been implemented. 1 2 3

Tight enclosures
Dust removal vacuums
Pressurized housings

3. Dust exposure has been reduced. 1 2 3

Materials that fall from the conveyor are removed immediately.
Dust is bonded and removed from outside areas.

4. The amount of exhaustion gases has been reduced in indoor workspaces. 1 2 3

Exhaust removal vacuums in washing rooms.
Prohibitions and instructions on car idling.

5. The emission of exhaust gases into control rooms has been reduced. 1 2 3

The control rooms are overpressurised.
Openings in the open air, e.g. opening for consignment notes, are closed.
Control room air intake is filtered.

6. The plant has mechanical ventilation. 1 2 3

Replacement air is heated during winter.
The airflow direction is always from a cleaner state to a dirtier one.
The supply air intakes are located away from the openings of exhaust air or from sources of contamination.
Air supply directions have been implemented so that they do not blow powerfully to workstations (preventing draft).

2.2. Noise

7. Workplace noise mapping has been done. 1 2 3

Noise measurements done, e.g. by occupational health care.
Noise areas marked with signs indicating the noise levels.
Signs indicate the need for hearing protection.

8. Surfaces of the workspace are coated with sound absorbing material. 1 2 3

Coating walls and ceiling with acoustic board. Cleaning possibilities are considered.

9. Noise producing machines and equipment are isolated from the rest of the workspace. 1 2 3

Sound absorbing space, if possible.

10. Noise sources are enclosed. 1 2 3

Enclosure and linings are coated with sound absorbing material (heavy duty boards).
Screens used for noise suppression.

11. Noise levels are considered when acquiring new machinery. 1 2 3

Selection criteria.

2.3. Lighting

12. Sufficient light levels in the workplace. 1 2 3

Lighting measurements are done during the darkest season.

Recommendations:
For outdoor spaces, the target level is 50 lux.
For indoor spaces, the target level is 100 lux.
Powerful spotlights for transport vehicles.

13. Sufficient light levels in the workstation. 1 2 3

See previous point.
Spotlights, if necessary.

14. Sufficient and proper light levels in walkways, staircases, entrances and gates. 1 2 3

No shadow areas.

15. Occurrence of direct or indirect shine or glare. 1 2 3

Bright points of light in the field of view.
Dazzling lamps.

Lampshades.
Right direction of light (from behind the employee from the side to the workplace).

16. Lighting maintenance has been arranged. 1 2 3

Lights are cleaned regularly.
Light bulbs are replaced in groups.

2.4. Temperature; air conditioning

17. Temperature in the work area is in the recommended range. 1 2 3

Targets for temperature and air velocity depending on the physical workload. The first value is the air temperature and the second is the air flow velocity.

Light sitting work: 21-25; under 0,15
Other light work: 19-23; 0,2-0,5
Medium-heavy work: 17-21; 0,3-0,7
Heavy work: 12-17; 0,4 --

18. Draft to workspaces has been noticed and prevented. 1 2 3

Prevention of door draft:
- Vestibule
- Warm air curtains
- Pedestrian entrances in big doors

The condition of rubber seals in lifting and folding doors is good.
Air conditioning is not strongly directed at workers.
Excess pressure in production facilities caused by air conditioning.

19. Air conditioning appliances are serviced and checked regularly. 1 2 3

Monitoring of functionality, e.g. indication smoke, threads.
Ductwork cleaning.
Locating and patching leakages.
Filter cleaning and replacement.
Airflow monitoring and control.

3. Ergonomics

1. Ergonomically adequate manual lifting. 1 2 3

Good lifting form - recommended maximum load is 25 kg.
If lifting is done over 1h/day, or there are more lifts than 1 lift/5 min, or lifting form is uncomfortable, recommended load should be significantly reduced.

2. Lifting and carrying is made easier with equipment. 1 2 3

Nosturit cranes.
Lifting tables.
Balance lifters, balancers, conveyors.

3. Employees given adequate guidance in lifting form, e.g. lifting guides from the occupational health office, work guidance. 1 2 3

4. Workspace has enough work and assistance platforms. 1 2 3

Work and storing tools, etc...

5. Adequate workspace. 1 2 3

Minimum of 80 cm of free space between a standing workspace and an obstruction.
Workspace separated from storage and walkways.

4. Order and cleanliness

1. Common rules considering order and cleanliness have been settled at the workplace. 1 2 3

Instruction boards, color coding, places for tools, auditing, etc.

2. Unused cables and hoses are stored in their own place. 1 2 3

Correspondent storage areas, not on the floor.
Overhead electrical outputs and compressed air outputs.

3. Waste compartments are proper and big enough. 1 2 3

Cleanliness of waste compartment areas.
Unbroken waste bins.

4. Daily cleaning of workspaces and hallways. 1 2 3

5. Deep cleaning of workspaces is done regularly. 1 2 3

6. Dust is removed from outside areas and they are kept clean. 1 2 3

Bonding dust by watering.
Mechanical cleaning.

5. Walkways and maintenance platforms

1. Walkways are wide enough for walking and are at least 80 cm wide and 210 cm high. 1 2 3
Recommended clearance width next to walkways for forklift and other traffic is 120 cm.

2. Exits, electrical cabinets and fire extinction equipment are freely accessible. 1 2 3

3. Walkways are separated from transport (when possible). 1 2 3

4. No goods are stored on walkways - inside or outside. 1 2 3

5. Walkways in outside areas are in order. 1 2 3

Snow removal, sanding, roughing the ice.
Covering wear and tear of the pavement.

6. Necessary maintenance and service platforms, as well as stairs and slopes leading to them, are in place in the subject. 1 2 3

Stairs or slopes to 50 cm (minimum height) high maintenance platform.
Ladders for temporary service.
Safety railings and back braces in fixed ladders.

7. Service platforms and their walkways are according to requirements. 1 2 3

Width at least 60 cm, non-slip structure, e.g. grating, maximum hole size 30 mm, fixed and sturdy structure.

8. Service platforms and walkways have been equipped with railings, e.g. railings are present on the walkways of silos and settling tanks. 1 2 3
Railings are on walkways higher than 50 cm, height min. 100 cm, equipped with intermediate railings.

6. Work guidance/orientation

1. Work guidance is given regularly on special occasions. 1 2 3

Work tutor has been assigned.
The understanding of instructions and operating models is ensured.

2. Special groups and situations have been taken into account in guidance and instructions: 1 2 3
- New employees, young employees
- Long sick leave, change of work position
- New work methods, machines or appliances
- Dangers, experiences

3. Repeating work practices have been standardised (best known way to work). 1 2 3

4. Instructions are visible and easily available in special situations and are kept up to date: 1 2 3
- Lock out/tack out. Separation of power/locking instructions
- Malfunctions
- Maintenance, control and repair
- Cleaning
- Personal protection
- Work in a closed space

7. Personal protection

1. Protective devices are appropriate and sufficient. 1 2 3

What are the demands for protective devices?

- Hearing protection
- Eye and face protection
- Respirators (power-driven if over 15 min/use or 2 h/day, recommendation)
- Protective footwear
- Protective gloves, protective clothing
- Helmets

2. Protective equipment is in good condition, clean and stored in a proper manner. 1 2 3

The person responsible
Clean storage space

3. Protective equipment is in good condition and clean. 1 2 3

8. Proactive safety practices/culture of actions

1. Supervisors guide staff to assess personal risks in their own work. 1 2 3

Identifying risks and planning ahead.

2. Supervisors carry out regular safety meetings. 1 2 3

Current safety matter 5-15 mins, e.g. safety observation.

4. Supervisors carry out regular safety meetings in different workspaces. 1 2 3

15-30 mins visit at the workspace, a group of up to three people.

5. Management regularly conducts discussions on occupational safety. 1 2 3

Current state of work safety and future measures have been made visible.

6. Safety auditing conducted at the workplace. 1 2 3

Third party auditing every 1-3 years - more frequently in the beginning.

7. Employees avoid unnecessary risks and use personal protection. 1 2 3

Are work safety plans made from hazardous work?

- Bypassing protective equipment
- Cleaning machine when operating
- Smoking and handling open fire in flammable work
- Using an unsuitable tool
- Overload of appliances
- Understanding health hazards
- Regular contact with other employees when working alone

8. Supervisors immediately intervene in incorrect procedures. 1 2 3

Early intervention, direct feedback, monitoring, purposeful, consistent but friendly leadership.
Procedures are not resumed before they have been fixed.

9. Partners are consistently demanded the same level of security as our company. 1 2 3

Guidance, instructions, auditing.

10. Personnel are involved in safety development. 1 2 3

Problem solving forums, good interaction, pride in profession.

9. Occupational health services, first aid and preparedness for emergencies

1. Occupational health care is provided at the workplace, the content of which corresponds to the needs of the workplace. 1 2 3

A statutory occupational health contract with a service provider.
Occupational health care workplace statements are up to date (1-3 year intervals).
Occupational health care is kept up-to-date with changes in circumstances (work methods, chemicals, etc.).

2. Sufficient number of people who have first aid training at the workplace. 1 2 3

One person per 10 persons: SPR EA-1 course
Upkeep and refresher course: 3-year intervals
Constantly working people; the names of the people visible and known to the staff.

3. First aid equipment is suitable for the workplace. 1 2 3

First aid kits in accordance with SPR's industry-specific recommendations in place and ready for use. The staff know their location and have been instructed in their use. Emergency numbers are visible.

4. Workplace fire safety and rescue capabilities are in order. 1 2 3

- Fire extinguishers are available, well marked and serviced
- Self-ignition is prevented by containers with lids
- Fire and rescue training is organized
- Rescue routes are marked (self-illuminated signs, lighting) and free
- Rescue routes are not locked