

Fact-sheet – How to ensure the correct selection, use and maintenance of Personal Protective Equipment (PPE) in the factory?



What is the objective?

Why should the factory provide PPE to the workers? ¹ PPE should be used to **minimize a risk** and ensure a **safe and healthy workplace** to the workers. Indeed, in the factory, the workers might be exposed to physical and/or health hazards such as sharp edges, electrical connections, exposure to harmful dusts and chemicals, etc.

The factory should have implemented a **monitoring process** to:

- 1- **Identify** the needed PPE;
- 2- **Write** instructions and procedures for the use of PPE;
- 3- **Train** workers and management on how and why to use PPE;
- 4- **Supervise** and **encourage** workers to work safely and responsibly;
- 5- **Maintain** the PPE in proper conditions of functionality to ensure their full efficiency.

¹ The selection of PPE depends on the production process and the potential risk of every operation and the factory will have to conduct a risk assessment. The factory should also be aware of the legal requirements in the country regarding PPE (e.g. obligation to train the workers on how to use PPEs at least once a year, etc.).



How to achieve the objective?

Step 1: A **risk assessment** must be conducted in the factory to identify all the situations where workers are exposed to physical and/or health hazards. Risks must be assessed for every workstation.

Step 2: For all situations where there is a risk, **if there is no other solution to avoid or reduce the exposure to hazard** (such as replacing the use of a given hazardous chemical by another chemical less hazardous to avoid using a respiratory mask or taking measures to adapt a machine to make it less dangerous for a worker), **the adequate PPE required for each situation should be identified.**



¹ PPE (personal protective equipment): equipment worn to minimize exposure to a variety of hazards. Examples of PPE include items as gloves, foot and eye protection, protective hearing devices (earplugs, muffs) hard hats, respirators and full body suits. (Sources: www.osha.gov)

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How to select the correct PPE? For example:

- Dust masks: are needed in the areas where the operation generates dust (an air quality test should be done in all areas to verify the level of dust and decide whether the dust masks are needed or not);
- Metal gloves: are needed when manual cutters are used or when there is manipulation of sharp objects;
- Ear protection: is needed in the areas where the noise level is above the legal standard (noise level tests should be conducted in all the areas of the factory). Where the noise level is too high, construction can be reshaped with specific materials and adapted machineries (covers, new technologies, etc.). The use of ear protection is the last option if the noise is still too high;
- Chemical masks (respiratory masks): are needed where there are chemical vapors / check the SDS (safety data sheet) of the chemical product to control if a chemical mask is needed or not based on the volatility of the chemical;
- Goggles and apron: when skin contact with some chemicals is forbidden as per the MSDS (Material Safety Data Sheet), goggles and aprons should be used. For example, processes such as the permanganate potassium spray in a denim factory;
- Safety shoes: When a worker handles or work with heavy stuff during working hours (manual or not), safety shoes are needed.

See below examples of PPE recommended according to the type of operation:²

Operations	Personal Protective Equipment (PPE)
Warehouse (whatever the stored products)	Safety shoes
Cutting section	Metal gloves
	Dust mask
Sewing section– Knitting item (each operator)	Dust mask
Sewing section– Woven item (overlock operator)	Dust mask
Sewing section – Buttoning / Bartak	Eye protection (goggles OR plexiglass on machine)
Finishing section – Knit item	Dust mask
Chemical warehouse / Any worker handling chemicals	Chemical mask / goggles / gloves / closed shoes
Boiler	Mask / Gloves / Closed Shoes / Fireproof clothes
Knitting section (automatic / manual) / Winding section Weaving section	Dust mask / Ear protection (ear plugs, etc.)
Embroidery section	Ear protection (ear plugs, etc.)
Workers exposed to high temperature	Face protection / Gloves
Denim finishing processes (rinse washing, bleaching, PP spray, stone washing, etc.)	Goggles / Chemical mask / Gloves / apron / closed shoes
All workers (for any type of operations)	Closed shoes

Step 3: Update the related Health & Safety policies and related procedures to include the use of PPE as a compulsory rule.

Step 4: Workers should be trained about how to use the PPE and what are the benefits. Workers must understand how the PPE protects them when properly worn.

² This list is not exhaustive, PPE might be needed in other sections in the factory, these are only examples.

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Step 5: Ensure PPEs are **available, easily accessible and free of charge for all workers** needing those PPEs (for example the PPEs should not be stored in a locked room).

Step 6: **Line managers or middle managers** should be empowered to make sure workers are correctly wearing the PPE.

Step 7: Ensure **maintenance** and **good conditions** of the PPE. Management must understand that PPE should be maintained as per the supplier’s technical sheet and replaced when necessary or it will fail to provide the anticipated protection.

For example, for chemical masks (respiratory masks), it is important to select the proper type of respirator and cartridge for the airborne hazard, to control the proper fit on each worker’s face, to ensure the cartridge replacement, and to ensure equipment maintenance and cleaning.³

The factory should **establish a feedback channel** for workers to systematically inform when a PPE is not correctly functioning to be replaced immediately.



Common non-compliances

Metallic glove with hole



No eye protection



Open shoes



Good practices

- Proper wearing of PPEs :



³Source: Best Practices in Chemical Management for Textile Manufacturing, IDB, December 2014.