

INTRODUCTION

Hand tools can be defined as devices used to perform work individually and that only require motive power to activate them.

There are several hand tools, the most common are summarized as follows:

Chopping tools (hammers, chisels, etc)

Sharp tools (knives, axes, etc)

Cutting tools (pliers, pincers, scissors, etc)

Tension tools (screwdrivers, wrenches, etc)

The accident rate caused by the use of hand tools is high. Even though the accidents are not severe, it represent approximately:

- 8% of minor accidents
- 3% of severe accidents
- 0.03% fatal accidents

The most important risks are knocks and cuts in hands or other parts of the body; eye injuries due to discharges and sprains due to abrupt gestures; being the main causes of the accidents:

Inappropriate use of tools

- Use of low quality or defective tools
- Incorrect maintenance
- Deficient transportation or storage

BASIC PREVENTIVE CRITERIA

With the objective to reduce or eliminate to the minimum the risks derived from the use of hand tools, a preventive program must be created contemplating the aspects that affect the process.

Acquisition

The person in charge of purchasing the hand tools must know the work for which they will be used, have basic ideas about the different types of tools to acquire the ones suitable for the needs, and look for suppliers that grant good quality.

Training-Usage

- When starting any work, choose the appropriate tools and check their good condition
- Training of the workers from the supervision groups in the use of tools is fundamental.
- Also, among others, the following precautions must be taken into consideration:
- Choose the appropriate tools depending on the work to be performed with it, considering the shape, size and dimension from the ergonomic point of view.
- The tools must not be used for different purposes than the ones established
- Confirm that the handles are not cracked or splinted and are well fixed to the tools (hammers, screwdrivers, files, saws, etc.)

- Verify that the gripping jaw, mouth and arms of the pressing tools are not distorted (wrenches, screwdrivers, pliers, pincers, etc)
- Take care that the cutting and sharp edge tools are well sharpened (knives, scissors, chisels, etc)
- Take into consideration that the metallic heads must not have burrs
- Check the conditions of the teeth of files, saws, etc
- Make sure that the individual protective devices are certified whenever they need to be used
- Isolated protection tools will be used if there is a risk of electric contact and anti-sparks tools in flammable environments
- All the individual protective equipment must be certified and must be personal

Storage

- Keep the tools in perfect order, in boxes, panel or appropriate shelves where each tool has its own place
- Tools must not be kept in hallways, stairs or other elevated places that they can fall from
- The best solution is to keep a control in a warehouse. If this is not possible, perform periodic inspections of its condition and location. If the tools are personal, provide better conservation

Maintenance and repairs

- Check the conditions of the tools periodically (handles, isolation covers, sharpness, etc)
- Repair those in bad conditions if possible, or discontinue them
- Temporary repairs that might have risks must not be made
- All repairs must be done if possible by specialized personnel

Transportation

The following are precautions that will be taking into consideration when transporting the tools:

- Use boxes, bags, and belts designed for it
- Use the appropriate covers for cutting or sharp tools
- Never carry the tools in the pocket
- When going up or down a portable ladder, the tools must be transported in bags that leave the hands free

BASIC REGULATION

General ordinance of Hygiene and Safety at work (Order of MT of March 9th 1971)

Royal Decree 773/1997 about the minimum health and safety dispositions related to the use from the workers of individual protective equipment

Royal Decree 1215/1997 about the minimum health and safety dispositions related to the use from workers of the working equipment

Royal Decree 1627/1997 about the minimum health and safety dispositions in construction sites

ENVIRONMENTAL CONDITIONS

4. HAND TOOLS

People affected

Area of work

Date

Date for next revision

By

1. The tools that are used are manufacture for a specific work	YES	NO	Add appropriate tools
2. The tools that are used have an ergonomic design	YES	NO	Procure that the tools are easy to work with and appropriate for the workers
3. The tools are of high quality	YES	NO	Purchase high quality tools
4. The tools are clean and well preserved	YES	NO	Clean, repair or remove all tools in bad conditions
5. If taking into consideration the amount of workers and the type of productive process, the amount of tools available is enough	YES	NO	Always account with more tools
6. There are suitable places and/or means to locate in order the tools	YES	NO	Create spaces and elements to place the tools
7. The cutting or sharp tools are protected with the appropriate covers whenever they are not in use	YES	NO	Use the appropriate protective covers
8. Correct working manners are observed	YES	NO	Correct all inadequate manners, and train the workers accordingly
9. The workers work safely without abrupt movements or excessive efforts	YES	NO	Improve the working methods, avoiding forced postures or excessive efforts
10. The workers are well trained in the handling of the tools	YES	NO	Train the workers accordingly to use each tools
11. Personal protective equipment is used when risks of cuts or discharge might be possible	YES	NO	Use googles and/or gloves whenever necessary

ASSESTMENT CRITERIA

VERY POOR	POOR	NEEDING IMPROVEMENT
Three or more very poor	1, 7, 10, 11	2, 3, 4, 5, 6, 8, 9

EVALUATION RESULTS

	VERY POOR	POOR	NEEDING IMPROVEMENT	CORRECT
OBJECTIVE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SUBJECTIVE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

MEASURES TO BE TAKEN IN ORDER TO CORRECT THE DETECTED DEFICIENCIES