

Safety and Health in Maxwell mechanical labs

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MGC - FM

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Safety module in Maxwell technical institute on the third year

Objectives

- Learning several health regulations about the correct use of machine tools and mechanical equipment
- Developing health skill behaviour in the working environment

Contents

- Safety instructions in different labs
- Safety instructions on the machines
- Safety instructions on the correct use of the equipment

SAFETY MODULE IN ITIS

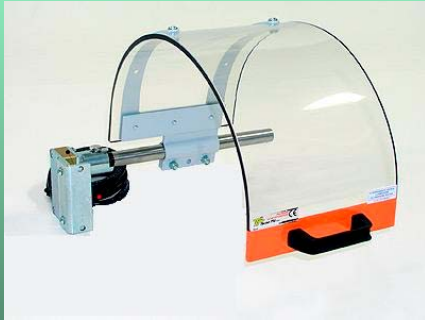
- The safety module is introduced to the students at the beginning of the year for about 10 hours.
- It includes theoretical and practical aspects.
- A final test is given to the students at the end of the module.
- The teachers take care of the correct application of the most suitable behaviour during the lab activities.

PRACTICAL SAFETY RULES DURING THE LAB ACTIVITIES



- File work on the bench
- Tracing and chasing on the bench
- Drilling machine activity
- Machine tool work
- Sheet metal work
- Welding
- Electrical appliances

MACHINE TOOL PRACTICAL RULES



- Proper use of the machine
- Assembling stable piece tool when the machine is off
- Do not remove or disable protection systems and safety
- Wearing protective goggles is compulsory
- Don't touch any chip without protective gloves
- Work on special insulating platform

FILE WORKING ON THE BENCH



- Use an appropriate work bench to the height of the operator or a platform if necessary
- Insulating devices are necessary
- Use the file correctly
- Remove iron dust with a brush in order to avoid dangers for the eyes

DRILLING MACHINE



- Take care of the placement on the grip
- Don't use your hands to remove chips
- Don't wear too large clothes
- Wear protective goggles

TRACING and CHASING

- Use the surface gauge very carefully tilting it in an appropriate way
- After working cover the tool with an appropriate hood



SHEET METAL WORKING



- Wear protective gloves and a leather apron to handle the sheet metal
- Pay attention to the sheet metal movement during the cutting

WELDING



- Provide the perfect working of the plant intake
- Use a wooden platform to carry out the electrical welding
- Wear the protective mask or appropriate equipment
- Don't weld too close to inflammable substances

ELECTRICAL APPLIANCES



- Every electrical plant must be certified according to the European law regulations.
- Every electrical tool must be connected to the ground by a yellow-green wire.
- Plugs must be provided with a protective cover.
- Tools must be provided with insulating handles.

TEST SIMULATION

Thick the correct answer:

- 1) The danger signals are:
a) red b) green c) yellow d) light blue
- 2) The info signals are:
a) red b) green c) yellow d) light blue
- 3) The default signals are:
a) red b) green c) yellow d) light blue
- 4) The prohibition signals are:
a) red b) green c) yellow d) light blue
- 5) When you work with molatrice you wear:
a) helmet b) goggles c) boots d) inflammable apron
- 6) The professional diseases are due to:
a) the worker age b) the worker unskill c) some specified risks d) some unpredictable risks

Test simulation

Thick true or false:

It is necessary to stop the machine tool in order to take a measure of the piece: (T) (F)

A skillful worker doesn't need to learn the working instructions of a machine tools: (T) (F)

The banned signals are only necessary for the unskillful staff: (T) (F)

The physical exhaust can be a risk element: (T) (F)

Respecting the safety rules in a company increases the production costs: (T) (F)

Accidents only happen to the uncareful people: (T) (F)

