

JOB ROLE – SEWING MACHINE OPERATOR

Sector – Apparel, Made-Ups and Home Furnishing
(Qualification Pack Code: AMH/Q 0301)



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UNIT 5: HAZARDS IN INDUSTRY AND SAFETY MEASURES

Session 2: Health and Safety Measures for Sewing Machine Operator

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Session Objectives

The students will be able to:

- Describe health and safety measures for sewing machine operator
- Explain importance of good lighting
- Demonstrate safety measures while working with scissors, needles, spray guns, iron etc.
- Explain safety and navigation symbols

Introduction

The operators must be properly aware about their health, safety measures, and precautions to be taken at the time of working. It is the prime responsibility of an organisation to provide occupational health and safety conditions to the operators. First-aid kits, safety symbols/signs, proper ventilation, fire extinguishers, lighting, alarms, etc. are the most important safety measures in the manufacturing units.

Health and Safety Measures

The sewing machine operator should take precautions to guard against work-related illnesses and injuries. They should follow all safety precautions while working. Safety precautions are given below:

- (i) Always concentrate on the sewing machine and the task at hand
- (ii) Use shields and guard while working
- (iii) Use safety glasses and earplugs
- (iv) Always wear proper footwear to avoid leg and feet injuries.
- (v) Turn off the sewing machine before cleaning, oiling and while changing the parts and attachments.

- (vi) A cut wound, or any other injury should be clean and covered immediately.
- (vii) All tools and machinery should incorporate ergonomic design principles.
- (viii) Work area should be properly designed, appropriate working height and proper sitting arrangement is necessary.
- (ix) Adopt an appropriate sitting posture while working Avoid working in uncomfortable and awkward postures.
- (x) If there is constant use of pressing irons, the humidity level becomes very high, which may create discomfort for the workers.
- (xi) Provided short breaks to prevent muscular pains.

- (xii) Take proper physical rest and mental relaxation in order to prevent injuries.
- (xiii) Frequent bending and twisting of wrists, back and neck should also be avoided.

Good Lighting

Proper lighting at the workplace is very essential for productivity. Poor lighting can cause eye strain, fatigue, and headache, which results poor productivity.

Practices for good lighting:

- (i) Arrangement for proper natural lighting in the sewing department/unit, this may help decrease the electricity bill.
- (ii) Work stations that need more light should be moved closer to the windows.

- (iii) Use a combination of natural and artificial lighting and try to adjust the lighting at the work area such as, drafting and cutting.
- (iv) Ensure placing lighting fixtures in a way that the light should fall on the working surface from the left side or from the front. This promotes better visibility.

Benefits:

- (i) Good quality of work with less faults and high production.
- (ii) Decreased tiredness and work-related illnesses, like itching and strain in the eyes.
- (iii) Good health decrease the number of sick leaves, and increase productivity.

Safety measure to prevent accidents

Before using any tool or machine, the operator should be trained in safe working practices. Some of the measures are given below.

(a) Safety measures to prevent accidents with scissors:

Hand scissors can cause accidents when not used properly. In most cases, the table blade cuts the operator's hand and /or fingers. Injuries can also occur to other parts of the body. The following safety measures should be taken:

- (i) Use suitable storage system, such as racks, boxes, etc. (at a comfortable height)
- (ii) Prohibit carrying scissors in pockets, or in the hand when going from one place of work to another.
- (iii) Do not hold scissors with sharp sides up. Do not use it when the middle screw is loose.

- (iv) Fix disposal points for used blades.
- (v) Avoid leaving scissors around the work area. This can injure both the operator as well as others walking around.

(b) Safety measures to prevent accidents with needles:

- (i) Keep needles and pins at a fixed place. Do not leave them at the workplace.
- (ii) Do not hold the needle, pins, etc. In your mouth or tuck them in the clothes.

(c) Safety measures while using spray guns:

Spray guns are used to get rid off any stains on the fabric, these guns use a cleaning fluid (many times ethylene) which

may cause headache, dizziness and fatigue if inhaled, or spirit which can cause redness and excessive dryness of the skin, if exposed.

Note: Spray the cleaning fluid into a rag and then use the rag to clean, rather than spraying on the garment directly.

(d) Safety measures while ironing:

- (i) While using a hot iron as it can cause a major injury.
- (ii) Check for any faults with the cord before using it.
- (iii) Turn on and hold the plug with dry hands.
- (iv) Place the iron only on a heat-resistant stand.
- (v) Ensure that the cord does not touch the iron soleplate while ironing.

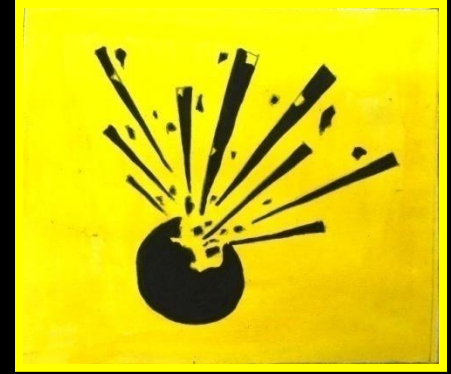
Other points to be considered:

- (i) Many a times, chemicals are used for different processing in textile and garment industries. Dyes, solvents and other chemicals are used to create different fabric finishes. Hence, proper ventilation, respiratory protection, and other personal protective equipment should be readily available to protect operators during chemical processing.
- (ii) Use protective footwear with adequate resistance to slipping and penetration from a dropped scissors or other sharp objects.
- (iii) Provide even floor surfaces with slip resistance so the operators do not slip.
- (iv) Free the work surface and floor off debris (pronounced as day-bree) and other waste to avoid tripping and falling.

Safety and navigation symbols

A signage or symbol is a picture, written word or mark that represents a message. There are two type of symbols-safety and navigation symbols. Safety symbols are those used for warning and the protection to be taken. Navigation symbols are used to show the direction or placement of a certain object or department. Some of the commonly used symbols are given below:

➤ Symbol for “explosives or an explosion hazard”



➤ Sign to prohibit “flames and smoking”



➤ Sign indicates “flammable gas”



➤ Hazard symbol for “nonflammable gas”



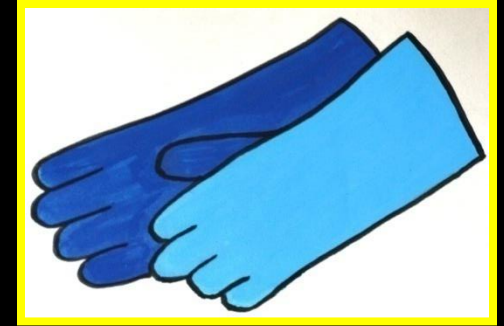
➤ Sign for “protective eyewear”



➤ Sign for “eye protection required”



➤ Symbol for “gloves required”



➤ Sign for “protective footwear”



➤ Sign for “protective clothing”



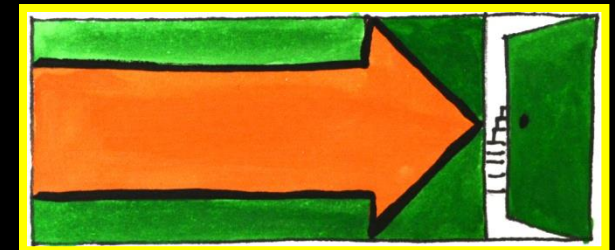
➤ Sign for “ear protection required”



➤ Sign for “fire extinguisher”



➤ Sign for “escape route”



➤ hazard symbol for “toxic”



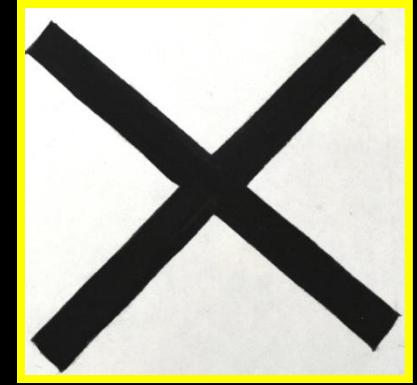
➤ hazard symbol for “corrosive substance”



➤ Symbol for “fire exit”



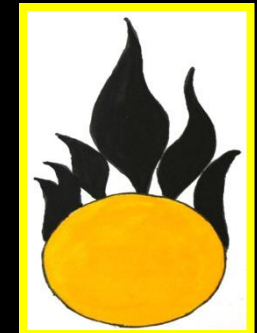
➤ hazard symbol for “harmful or irritant substances”



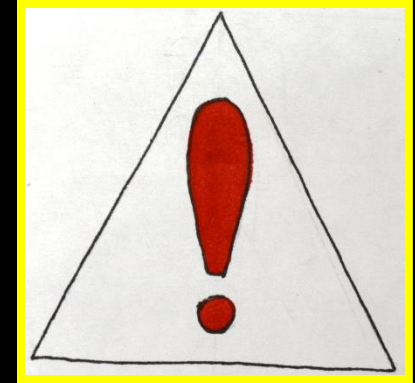
➤ hazard symbol for “flammable”



➤ hazard symbol for “oxidising”



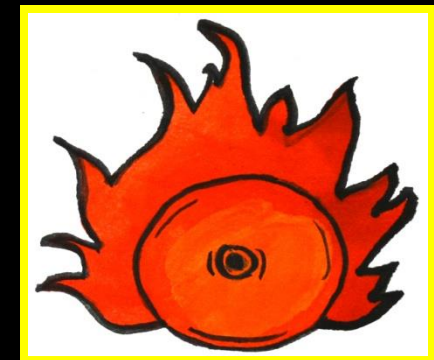
➤ “warning” sign



➤ Symbol for “no sitting”



➤ Sign for “fire alarm”



Summary

In this session, you have learnt about health and safety measures for sewing machine operator, importance of good lighting, safety measures while working with tools (ex. scissors, needles, spray guns, iron etc.) and safety & navigation symbols.

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