



Step 2
Sustainability

Online Course

UNIT 6 Health and Safety at Work (HSW) in Footwear Industry

***How to Implement Sustainable Manufacturing in Footwear
- New Occupational Profile and Training Opportunities -***

How to Implement Sustainable Manufacturing in Footwear - New Occupational Profile and Training Opportunities

Credits

Title

UNIT 6 - Health and Safety at Work (HSW)
in Footwear Industry

Coordination

Czech Footwear and Leather Association

Layout and Editorial

Salto Alto CTCP criativo

Date

January 2016

CONTENTS

1. Introduction	05
2. National and European legislation on HSW	06
2.1. National Legislation on HSW	06
2.2. European Legislation on HSW	06
2.2.1. List of EU Directives on HSW	07
2.2.2. Indicative content of major EU directives on HSW	08
3. Corporate Health and Safety Policy and Strategy. HSW for the company, workers and the workplace	10
3.1. Corporate HSW policy	10
3.2. HSW for the company, workplace and staff	11
4. Planning HSW. Risk management. Supervising, professional training and information	14
4.1. HSW Planning and Risk Management	14
5. Accidents (injuries) and investigations. First aid. Emergencies and reporting procedures.	18
5.1. Accidents and injuries in the workplace	18
5.2. First aid for injuries at work	18
5.3. The reporting procedure of emergency incidents at workplace	19
6. Safety – electricity, fire and gas	20
6.1. Fire protection in the workplace	20
6.2. Fire protection in footwear industry	24

CONTENTS

7. Safety of machinery, production equipment and maintenance equipment	25
<i>7.1. Principles of work safety on machines and technical equipment</i>	25
8. Harmful substances in the workplace. Control of regulations (directives, regulations) on health hazardous substances in footwear production.	36
<i>8.1. Handling of hazardous chemicals and products in the workplace</i>	26
9. Process risks in the footwear industry: cutting machines, bottom parts warehouse, closing and preparation, lasting, scouring, soles and heels attaching (bonding), moulding, finishing, cleaning	27
10. Test of knowledge	31
11. Annexes	40
<i>11.1. Annex no. 1B) National legislation of the Czech Republic in HSW</i>	40
12. Glossary	45
13. Bibliography	46

1. Introduction

This unit presents a comprehensive overview of the issue of health and safety at work (HSW, abbreviation OSH – Occupational Health and Safety is also common), including links to legal requirements (laws, government regulations, decrees).

The preventive approach to HSW emphasizes the strategic role of each organisation management and employees, when the condition for achieving strategic objectives in HSW, meaning employees injury and health damage prevention, is a systemic approach (connection between the organization requirements and legal requirements), order and complexity. Linking legal requirements for HSW to systemic approach in CR is addressed in the Standard OHSAS 18001: 2008, in the European Union (EU) there is a system of laws, Health and Safety Directives (the English translation of the abbreviation HSW - Health and Safety at Work).

HSW issue and its legal framework is very broad and confusing, especially concerning the linkage between the national and European legislative requirements. Enforcing a systemic approach to the management of organizations, covering both HSW and the environmental protection, is becoming or already exists as a part of the state policy in all developed countries. The EU individual member countries adapt to the applicable conditions by taking over legislation, procedures and methods used in the European Union and fulfilling the requirements of the Convention and recommendations of the International Labour Organization (ILO), including the principles and rules of so-called "Best practice in the management of health, environment and safety in industrial and other enterprises" (hereinafter the "Best Practice"). Therefore, the requirement to apply the systemic approach of organization management and to create adequate conditions for the implementation of HSW management systems in organizations by the state is embedded in the principles and policies of the National HSW of the individual countries.

Raising the standard of care for HSW and environmental protection, as well as the prevention of accidents and damage to employees' health should be an integral part of company policy to ensure the sustainability of one of the pillars of the footwear industry in Europe. The means to achieve this goal is primarily a systematic approach to managing HSW and environment protection, that will be taken into account by the organizations management in the context of management acts and measures taken in relation to the prevention of emergency events (accidents), while creating conditions for increasing the level of work culture and overall well-being of employees.

In addressing HSW, it is necessary to focus on:

- area of risk prevention (whether all steps in the area of risk prevention are carried out)
- area of technical prevention (state of workplaces, equipment and facilities - monitoring and reviewing, regulatory part etc.)
- the training and education (regular training sessions, determining the types of training needed, determining the form of training and qualification requirements for trainers or organizing the training at specialized companies)
- area of preventive health care (question of contracting facility providing occupational preventive medical examination, initial and output medical examinations, preventive examinations, work categorization, providing first aid, resolving work-related accidents and occupational diseases etc.)
- area of PPE (risk assessment in relation to the allocation of PPE, usage, distribution, etc.)
- control activities (method of carrying out inspection activities, assessing the suitability of external audits, the effectiveness of control activities etc.)

2. National and European legislation on HSW

All the following European and national legislation provisions are valid in 2015. If studying this learning material in later years, it is always necessary to find the current version of a given date.

2.1. National Legislation on HSW

The National legislation on occupational health and safety for individual states is elaborated in Annex 1. List of legislative and other provisions in force on 1 January 2015 ensuring the safety and health at work in the footwear industry can be found in the following annexes:

- 2.1.1. *Belgium*
- 2.1.2. *Czech Republic*
- 2.1.3. *Italy*
- 2.1.4. *Germany*
- 2.1.5. *Portugal*
- 2.1.6. *Romania*
- 2.1.7. *Slovenia*
- 2.1.8. *Spain*

2.2. European Legislation on HSW

The system of laws of the European Union (EU) - directives, decisions, recommendations, as well as statements of the European Court of Justice is called by the French term "acquis communautaire" and it is superior to the legislation of each member country.

The method of implementing the Community law is left to the will and practices of member countries.

EU directives on health and safety at work has its legal basis in Article 153 of the Treaty on the Functioning of the European Union (formerly Article 137 of the EC Treaty), which authorizes the European Union to adopt directives in this area. Member States may, in the interest of workers protection accept into national law stricter rules when implementing the EU directives, therefore the legislative requirements in the area of occupational safety and health can vary in individual EU Member States.

The issue of health and safety at work (HSW) is not marginal in the context of Community law, because the safety regulations can become equal hinder to free movement of goods and capital as different technical regulations, because higher levels of occupational health and safety increases the cost of merchandise.

EU directives on HSW are not written in so-called departmental approach (this means that they are not divided on work safety directives and health protection directives), but they solves the problems of HSW in their entirety, which can imply some problems with the implementation in some Member States. For example in the Czech Republic, the HSW issue is divided on the so-called health part (adverse factors such as noise, vibration, chemicals, dust, radiation, carcinogens, physical load etc.) within the competence of the Ministry of Health and the so-called safety part (working conditions, equipment, workplace, personal protective equipment, safety signs etc.) within the competence of the Ministry of Labour and Social Affairs.

A series of individual EU Directives focused on specific aspects of HSW was adopted pursuant to the Framework Directive on occupational health and safety (Directive 89/391 / EEC), adopted in 1989. If the individual directives contain more strict and specific provisions, these special provisions are decisive. Individual directives adapt the Framework Directive principles to:

- specific tasks (e.g. manual load handling)
- specific risks at work (e.g. exposure to dangerous substances or physical agents)
- specific workplaces and sectors (e.g. temporary workplace, mining industry, fishing boats)
- specific groups of workers (e.g. pregnant women, young workers, fixed term workers)
- certain aspects of labor (e.g. organization of working time).

The individual directives define how to assess those risks, and in some cases set limit values for certain substances or agents. Standards set out in the individual directives are minimum standards to protect workers and Member States may maintain or may prescribe a higher level of protection. For better orientation, the EU Directives on HSW are sorted by topic as follows:

- The OSH Framework Directive
- Workplaces, equipment, signs, personal protective equipment
- Exposure to chemical agents and chemical safety
- Exposure to physical hazards
- Exposure to biological agents
- Provisions on workload, ergonomical and psychosocial risks
- Sector specific and worker related provisions

Find the above EU Directives on HSW on
<https://osha.europa.eu>

2.2.1. List of EU Directives on HSW:

Find the list of EU Directives and Regulations on:
https://osha.europa.eu/fop/czech-republic/en/legislation/smernice.php?set_language=en

Find the below Directives on:
<https://osha.europa.eu/en/safety-and-health-legislation/european-directives>

Framework Directives

1. 89/391/EEC - Council Directive 89/391/EEC on the introduction of measures to encourage improvements in the safety and health of workers at work, amended by Regulation (EC) No 1882/2003, Directive 2007/30/EC and Regulation (EC) No 1137/2008. Consolidated text 2008-12-11 Followed by Directive 91/383/EEC and 2008/104/EC and Communication from the Commission COM(2007)62

2. 91/383/EEC - Council Directive 91/383/EEC supplementing the measures to encourage improvements in the safety and health at work of workers with a fixed- duration employment relationship or a temporary employment relationship amended by Directive 2007/30/EC

You will find all of them HERE

<https://osha.europa.eu/en/safety-and-health-legislation/european-directives>

Individual Directives

1. 89/654/EEC - Council Directive 89/654/EEC concerning the minimum safety and health requirements for the workplace (1st individual Directive within the meaning of Article 16 (1) of Directive 89/391/EEC), amended by Directive 2007/30/EC, amended by Directive 2014/27/EU
2. 89/655/EEC - replaced by Council Directive 2009/104/EC concerning the minimum safety and health requirements for the use of work equipment by workers at work
3. 89/656/EEC - Council Directive 89/656/EEC on the minimum health and safety requirements for the use by workers of personal protective equipment at the workplace (3rd individual Directive within the meaning of Article 16 (1) of Directive 89/391/EEC), amended by Directive 2007/30/EC, amended by Directive 2014/27/EU
4. 89/686/EEC - Council Directive 89/686/EEC on the approximation of the laws of the Member States relating to personal protective equipment, amended by Directive 93/68/EEC, 93/95/EEC and 96/58/EC, Commissions opinion 2009/C249/01, Commission Decision 2010/165/EU, 2010/170/EU and 2011/211/EU
5. 90/269/EEC - Council Directive 90/269/EEC on the minimum health and safety requirements for the manual handling of loads where there is a risk particularly of back injury to workers (4th individual Directive within the meaning of Article 16 (1) of Directive 89/391/EEC), amended by Directive 2007/30/EC, amended by Directive 2014/27/EU
6. 90/270/EEC - Council Directive 90/270/EEC on the minimum safety and health requirements for work with display screen equipment (5th individual Directive within the meaning of Article 16 (1) of Directive 89/391/EEC), amended by Directive 2007/30/EC, amended by Directive 2014/27/EU

7. 90/394/EEC - replaced by Council Directive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens or mutagens at work (6th individual Directive within the meaning of Article 16(1) of Council Directive 89/391/EEC) (codified version) (Text with EEA relevance), amended by Directive 2014/27/EU
8. 92/57/EEC - Council Directive 92/57/EEC on the implementation of minimum safety and health requirements at temporary or mobile construction sites (8th individual Directive within the meaning of Article 16 (1) of Directive 89/391/EEC), Communiqué of the Commission COM(2008) 698, amended by Directive 2014/27/EU
9. 92/58/EEC - Council Directive 92/58/EEC on the minimum requirements for the provision of safety and/or health signs at work (9th individual Directive within the meaning of Article 16 (1) of Directive 89/391/EEC), amended by Directive 2007/30/EC, Communiqué of the Commission COM(2008) 698, amended by Directive 2014/27/EU
10. 92/85/EEC - Council Directive 92/85/EEC on the introduction of measures to encourage improvements in the safety and health at work of pregnant workers and workers who have recently given birth or are breastfeeding, amended by Directive 2014/27/EU
11. 98/24/EC - Council Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work (14th individual Directive within the meaning of Article 16(1) of Directive 89/391/EEC), amended by Directive 2007/30/EC, amended by Directive 2014/27/EU
12. 98/37/EC - replaced by Council Directive 2006/42/EC on the approximation of the laws of the Member States relating to machinery
13. 13) 2002/44/EC and 2003/10/EC - Directive of the European Parliament and of the Council on the minimum health and safety requirements regarding the exposure of workers to the risks arising from physical agents 2002/44/EC (vibration) and 2003/10/EC (noise), amended by Directive 2007/30/EC, amended by Directive 2014/27/EU
14. 2006/25/EC – Directive 2006/25/EC of the European Parliament and of the Council on the minimum health and safety requirements regarding the exposure of workers to risks arising from physical agents, amended by Directive 2007/30/EC, amended by Directive 2014/27/EU, replaced by 2013/35/EU
15. 2009/148/EC – Directive 2009/148/EC of the European Parliament and of the Council on the protection of workers from the risks related to exposure to asbestos at work (codified version)

You will find all of them HERE

<https://osha.europa.eu/en/safety-and-health-legislation/european-directives>

2.2.2. Indicative content of major EU directives on HSW:

Directive 89/391 / EEC: This is a so-called framework directive, which states the main duties of employers and employees in health and safety and determines areas of HSW, for which specialized, so-called sub directives will be issued. Clearly identifies the employer as the person responsible for HSW, establishes his obligation to seek risks and make arrangements for their removal or restriction. It also introduces a so-called employee representative with special responsibility for issues of safety and health at work. Through this representative, the employer informs his employees about issues of health and safety and workers raise requests and comments about workplace health and safety through this representative.

Directive 89/654/EEC: Sub directive, which deals with the requirements for workplaces equipment and facilities in terms of occupational health and safety (strength of building structures, electrical safety, escape routes, flooring, ventilation, lighting, sanitary facilities, fire protection, first aid, etc.).

Directive 89/655/EEC: Sub Directive, which specifies the basic requirements for health and safety in the use of work equipment at work (employer's obligation to provide work equipment, its selection, to inform and train employees regarding work equipment and general technical requirements for working installations - security guards, drivers, lighting, etc.).

Directive 95/63/EEC: Sub directive amending the earlier directives with annexes determining general technical requirements for higher-risk work devices (lifting equipment, mobile work device).

Directive 2001/45/EC: Sub directive amending the Directive 89/655 / EEC with Annexes concerning the safety requirements for scaffolding, ladders and tools for working at heights.

Directive 92/57/EEC: Sub directive specifying the basic requirements for health and safety on construction sites (on-site facilities, assigning of the so-called coordinator for safety and health).

3. Corporate Health and Safety Policy and Strategy. HSW for the company, workers and the workplace

Not only better health at work and the associated reduction of occupational accidents, occupational diseases and the loss of lives and property, but also a higher level of work culture and well-being can be achieved by sustained increase in the level of occupational health and safety in organizations. Raising the standard of care for safety, health and environmental protection, is also a necessary condition for achieving greater prestige of the organization and its success within the business. An organization that meets the requirements for ensuring health and safety not only within their operations, but also towards its neighborhood, is positively and favorably perceived by its business partners, as well as the surrounding public and this is one of the important prerequisites for achieving sustainability in footwear industry.

However, the introduction of effective HSW management system will always depend on the capabilities of the organization's management to persuade all employees to cooperation on security policy compliance and the set targets and to engage them in activities that increase the level of safety and health. A prerequisite for wider systemic approach to HSW management in organizations is the processing of corporate handbooks, based on the following principles and rules.

3.1. Corporate HSW policy

Organizations are obliged to create favorable working conditions and to ensure HSW and the compliance with legal and internal regulations. Monitoring the requirements of the above mentioned law, both in the control activities and in the training of employees is part of risk prevention in particular.

The organization director must appoint an employee responsible especially for HSW, so-called management representative for MS HSW (Management System of Health and Safety at Work), who is required among other things to assert the responsibility for compliance with applicable security policies in the organization among the employees. Organizations elaborate the duties and responsibilities for HSW in the tables of responsibilities in MS HSW.

Documents related to HSW in the organization must be kept in a controlled mode. A qualified person for HSW (PQP OSH) must comment the HSW documents in organizations with more than 25 employees.

Requirements that must be met when setting the company's HSW policy (the concept of HSW management system):

- Commitment to prevent accidents and injuries
- Commitment to respect and fulfil the legal requirements and other regulations
- Commitment to continually improve the HSW management system
- Organization's moral code

HSW Policy of the company must be published for the employees (bulletin board, email, internet ...)

When addressing the HSW, it is necessary to focus on:

- area of risk prevention (whether all steps in the area of risk prevention are carried out)
- area of technical prevention (state of the workplaces, equipment and facilities - monitoring and reviewing, Regulatory part etc.).
- the training and education (regular training sessions, determining the types of training needed, determining the form of training and qualification requirements for trainers or organizing the training at specialized companies)
- area of preventive health care (question of contracting facility providing occupational preventive medical examination, initial and output medical examinations, preventive examinations, work categorization, providing first aid, resolving work-related accidents and occupational diseases etc.)
- area of PPE (risk assessment in relation to the allocation of PPE, usage, distribution, etc.)
- control activities (method of carrying out inspection activities, assessing the suitability of external audits, the effectiveness of control activities etc.)

At the request of the International Labour Organization (ILO), each EU country must develop through its bodies and provide to organizations so-called Corporate manuals with instructions how to implement HSW management system that would be based on national handbooks prepared in accordance with the methodical instructions specified in the manual ILO - OSH 2001.

Guidelines on occupational safety and health management systems ILO OSH 2001 you can find [HERE](http://www.ilo.org/wcmsp5/groups/public/---ed_protect/---protrav/---safework/documents/normativeinstrument/wcms_107727.pdf).

http://www.ilo.org/wcmsp5/groups/public/---ed_protect/---protrav/---safework/documents/normativeinstrument/wcms_107727.pdf

3.2. HSW for the company, workplace and staff

The employers' basic obligations to its employees in the field of health and safety are as follows:

1. The employer is obliged to ensure the safety and health of workers at work with regard to the possible risk to their lives and health that relate to job performance (hereinafter referred to as "risk").
2. Employer's duty to ensure the health and safety at work applies to all persons who reside at his workplaces with his knowledge.
3. The senior employees at all levels of management within the scope of their functions are responsible for carrying out the employer's tasks in the care of safety and health at work. These tasks are equal and integral part of their work duties.
4. Where employees of two or more employers fulfill the tasks at one workplace, employers are obliged to inform each other in writing about the risks and cooperate in ensuring occupational safety and health. Each employer is obliged:
 - a. To ensure that the activities and work of his employees were organized and carried out in such manner that also employees of the other employer are protected
 - b. To cooperate to ensure a safe, non-toxic and non-lethal health working environment for all employees in the workplace.
5. Costs associated with ensuring the safety and health at work are covered by the employer.

Workplace and work environment

The employer is obliged to ensure that workplaces are spatially and structurally arranged and equipped so that the working conditions for employees in terms of safety, hygiene and health at work, meet the safety requirements and hygienic limits on the working environment and the workplace, in particular:

- a. Working rooms, corridors, stairways and other communications must have specified dimensions and surface and be equipped for activities performed here,
- b. workplaces must be properly lit, if possible by daylight and have specified climatic conditions, especially as regards to the amount of air, ventilation, humidity, temperature and water supply,
- c. facilities for personal hygiene, dressing, storing personal belongings, leisure and catering of staff must have specified dimensions, design and equipment
- d. emergency exits and roads must be always free,
- e. ensure regular maintenance and cleaning in the areas referred to in subparagraphs a) to d)
- f. workplaces must be equipped with first aid kit and means for calling emergency medical services in the extent agreed with the facility providing preventive care

Working Tools and Equipment

1. The employer is obliged to ensure that machinery, technical equipment, vehicles, tools and equipment were suitable for the work, they will be used for in terms of health and safety at work. Machinery, technical equipment, transport equipment, instruments and tools must be
 - a. equipped with protective devices to protect the life and health of employees,

b. equipped or modified to avoid exposing workers to particularly uncomfortable working position and undesirable effects of noise and vibration,

c. regularly and properly maintained, inspected and reviewed.

2. Government regulation sets out detailed requirements for safe operation and use of machines, technical equipment, vehicles, equipment and tools.

Risk factors of working conditions and minimum measures to protect the health of employees:

- Lighting
- Heat stress and cold stress and minimum measures to protect the health of workers
- Providing cool drinks
- Workplace ventilation
- Physical stress and space requirements associated with physical stress
- Health risks and health protection measures during manual handling of loads
- Forcing the pace of work, monotonous work and psychological stress related to work
- Health risks of work on display screens devices and health protection measures
- Health risk evaluation of chemical factors and dust
- Evaluation of health risks from exposure to lead and its ionic compounds and measures to protect the health of workers
- Chemical carcinogens, work processes with the risk of chemical carcinogenicity and mutagens
- Evaluation of health risks when working with biological agents
- Measures to protect the health of workers
- Measures to protect the health of employees when using personal protective equipment

Hygiene requirements for workplace equipment:

- Water supply
- Sanitary and auxiliary equipment

Environment and working conditions care:

- Noise and vibration

Occupational health:

- Work categorization
- Hazardous Work
- Evidence of hazardous work
- Hot water for personal hygiene of staff

Employees' rights and obligations:

- An employee has a right to HSW, information about the risks of his work and information how to protect against their effects
- An employee is entitled to refuse to perform work which is reasonably considered to directly and seriously threaten his live or health
- An employee has a right and obligation to participate in creating a safe and healthy working environment by participating in addressing issues of HSW
- An employee is obliged to care for his own safety, his health and the safety and health of individuals who are directly affected by his actions or omissions at work
- An employee is obliged to
 - a. participate in training
 - b. undergo preventive medical examinations
 - c. comply with legal and other regulations and instructions of the employer, which he was duly informed about to ensure the HSW

- d. follow specified work practices, use established working equipment, transport equipment, personal protective equipment and safety devices
- e. not to use alcohol and other addictive substances in the workplace and during working hours also outside the workplace
- f. notify the employer about shortcomings and defects in the workplace, which endangers or could endanger the safety or health of workers at work and if in his capacity contribute to remove the shortcomings identified
- g. promptly notify his employer about his accident at work
- h. submit to a test upon the employer's instruction, whether he is not under the influence of alcohol or other addictive substances

Certified Management System enables an organization to control the risks to safety and health at work, improve safety in the enterprise and create a safe environment for employees and suppliers. The manual ILO - OSH 2001 specifies the principles established for occupational health and safety management systems, while respecting the principles and rules of standardized management systems (quality management system and environmental management system), including the requirements of OHSAS 18001.

Benefits of HSW management system certification:

- demonstrating the commitment to secure and enhance the occupational safety and health adopted at all levels and all functions of the organization, especially senior management
- demonstrating the systematic risk reduction, or reduction of dangers that threaten the safety and health of all persons affected by activities, products or services of the organization
- reducing the incidence of occupational diseases and accidents at work
- minimalizing the costs related to accidents in the workplace
- demonstrating the commitment to meet legal and regulatory requirements concerning safety and health at work
- creating self-controlling system responding flexibly to changes in the laws and regulations, safety requirements and changes within the organization (e.g. new technologies, organizational changes, etc.).

4. Planning HSW. Risk management. Supervising, professional training and information.

Experiences from accidents and investigations of occupational accidents prove that most of them can be prevented by appropriate prevention.

The introduction of HSW management system, favoring prevention and preventive measures can help prevent damage resulting from incidents and thereby reduce the costs associated with their elimination. Greater involvement of the management and all employees of the organizations in raising the level of health and safety and environmental protection in connection with the operation of the organization also contribute to one of the pillars of footwear industry sustainability.

4.1. HSW Planning and Risk Management

Importance of risk assessment and risk management objectives

The aim of periodic risk assessment is constant refinement of information about threats and risks of work, which helps to improve working conditions for employees and create conditions for safer operation. The employer is obliged to constantly seek dangerous agents and processes in working environment and working conditions, determine their causes and sources and based on these findings to search and evaluate risks and take measures to eliminate them. The risk management process should be described in the internal regulations of the organization.

The employer is obliged to provide employees with training on legal and other regulations to ensure HSW that complement their professional qualifications and requirements for the job. The employer is obliged to provide the training at the onset of the employee to work, as well as when changing employment status or type of work, the introduction of new technology or changing technology or workflows. Planned training overview of each employee is a part of the job descriptions.

The employer is obliged to perform tasks in risk prevention through a professionally qualified person (PQP OSH).

HSW Planning

Principles of safe work at selected workplaces, in accordance with the respective technical standards; among other things include the assessment of risks in the workplace and list of high-risk workplaces. It also includes:

- handover of workplaces and construction sites
- orders for welding in dangerous environments
- procedures for assembly and disassembly of selected units

Work Safety on Machines and Technical Equipment

determines the principles of safe work on machinery and technical equipment, in accordance with the respective technical standards including, among other:

- technological procedures
- instructions from the manufacturer
- roadworthiness testing plan

PPE (Personal Protective Equipment) contains:

- identification of hazards and risk factors at the workplace
- list for the allocation of PPE and hygiene products
- PPE purchasing principles approved by accredited testing
- organization of PPE issuing and maintenance

Accident records

handles the records and registration of occupational accidents in relation to the allocation of responsibility for damage during work accidents and occupational diseases, and subsequent compensation

Own control activities

address the internal control system in all subject areas with regard to:

- control axis of the company and identifying specific responsibilities
- method of checks and records
- conducting regular comprehensive audits

Legislation contains:

- method of complying with generally binding legal norms
- internal legislation elaborated on the conditions of the company

Vocational training of HSW

coordinates training for all employees in HSW from senior employees at individual levels of management to ordinary employees. Among others, it contains:

- initial and periodic training outline
- verification of workers' knowledge
- determining the frequency of training at individual branches
- informative letters on selected issue

Certificates (professional competence of the company and employees)

coordinate the acquisition and registration of the required company and individual employees authorizations in various fields, including selected machinery and equipment, and includes:

- Plans of revisions, inspections and tests
- Reports from revisions, inspections and tests
- Contracts with the relevant revision technicians

Recommended outline of the risk management internal regulation:

1. Purpose of the regulation
2. Aim of the regulation
3. Terms and Definitions
4. General Information
5. Legal and other regulations
6. The responsibilities, duties, powers
7. Communication, participation, consultation
8. Documentation and document management
9. The process of risk management
10. Corrective and preventive actions
11. Survey records
12. Related Documentation
13. Annexes

Staff training in HSW

There is an obligation for the employer following legal and other regulations to regularly train all employees on the issue of safety and work hygiene according to the current curriculum - see below. Training schedule of all activities for which this is required by legislation handles the organization's internal regulations.

Example of training outline for HSW:

1. The basic rights and obligations of employees and employers' obligations required by the Labour Code and related regulations
2. Health fitness, the risk factors of working conditions - categorization, occupational health care
3. Working and operating buildings and spaces - basic principles, familiarization with risks
4. Production and working tools and equipment
5. Safety signs, markings and signals (Picture 1, 2, 3, 4)
6. Materials Handling
7. Injuries monitoring

UNIT 6 - HEALTH AND SAFETY AT WORK (HSW) IN FOOTWEAR INDUSTRY

8. Workers' competence in electrical engineering, the use of electrical appliances
9. First aid for electric shock
10. Providing first aid
11. Work with display screens
12. Operation of motor vehicles, drivers - employees
13. Special warnings



F1. Beware of electrical equipment

Warehouses

14. Warehouses and open-air storage
15. Shelves (Picture 5)
16. Pallets and stacking

Production

17. Sewing Machines
18. Moulding Machines - risk of physical injury (cutting, pressing, punching, sole pressing)
19. Special shoe machines and pulling and lasting machine (or. Nailing machines or pressing)
20. Scouring, polishing, skiving, cutting, trimming and roughing machine - the risk of catching a rotary tool
21. Disposal of hazardous chemical substances and products (Picture 6)



F2. Smoking and the entry with the flame prohibited, workplace with increased fire risk, no entry to unauthorized

Maintenance

22. Manual and mechanical tools
23. Metalworking
24. Welding, cutting metal - possible danger and protection
25. Pressure vessels for transporting gas - handling, loading and storage (Picture 7)
26. Wood cutting - workshop production
27. Hand chain saw – apart from timber harvesting
28. Construction activities and related activities
29. Working with the danger of falling from heights or into depths (Picture 8, 9)
30. Maintenance of lawns - mowers, brush cutters



F3. Emergency exit



F4. Floor marking



F7. Oxygen, acetylene



F5. Shelves marking



F8. Do not walk under a suspended load, Beware workspace crane



F6. Hazardous chemical substances and products



F9. Beware danger of falling from above and into the depths

5. Accidents (injuries) and investigations. First aid. Emergencies and reporting procedures.

5.1. Accidents and injuries in the workplace

Each organization must elaborate a system of accidents investigation, reporting and sending the record of the accident in accordance with applicable regulation. The organization is obliged to ensure that there are Injury Books in all workplaces for keeping records on all accidents, even minor injuries. Each injury record must contain precise particulars set by the regulation.

Injury Recordkeeping

Occupational injury (OI) is an injury or death of an employee, which happened beyond his control through short-term, sudden and violent action of external influences when performing his job or in direct connection with it. Performing the job is also work done for the employer at the initiative of other employees, or activity undertaken on his own initiative, if the employee does not need special permissions or if he does not perform it against explicit prohibition, as well as voluntary assistance.

Details of all occupational injuries even without the necessity for sick leave must be recorded in the Injury Book by the employer.

Furthermore, the following must be done:

- Immediate notification of superior employee about the work-related accident
- Leaving the workplace in its original state
- Determination of objective reasons
- Providing documentation about machines and equipment, qualifications
- Reporting work-related injuries with hospitalization longer than 5 calendar days

5.2. First aid for injuries at work

Selected employees trained by the provider of medical services to provide first aid must be at all workplaces. Principles for providing first aid in the workplace in case of emergency:

- The reporting procedure to the employer (first aid means - aid kits, tel. numbers, etc.)
- In case of fractures (closed, open)
- In case of bleeding (capillary, venous and arterial)
- In case of burns, scalding,
- In case of contact with chemicals
- Resuscitation (clearing the airways, heart massage and artificial respiration)
- Transport of injured

Providing first aid concerns all states threatening life and health. The most important thing is to help the injured people, both with work-related and non-work injuries, so that the damage to health and the accident consequences are minimized.

For this purpose, there is a first aid plan (traumatology plan), which provisions order all employees to fulfil and comply with the following rules.

Employers' duties

- To provide the workplaces with the necessary number of first aid kits
- To determine the content of the first aid kits for individual workplaces, or ensure this by contractual medical doctors
- To ensure regular inspection of first aid kits associated with the control of medicaments and materials expire dates and dispensing records
- To specify the number of employees who organize providing first aid and to ensure their training by the contracted medical doctor

Duties of a person responsible for the first aid kit (Picture 10):

- To check the first aid kits equipment at least once every three months
- To add the missing equipment, if necessary or replace the expired medicines
- To keep records of dispensing medication and medical supplies

Any harmful effects of forces caused by human activity, natural effects and also accidents threatening life, health, property or the environment and requiring rescue and relief operations are called emergency incident.



F10. First aid kit

5.3. The reporting procedure of emergency incidents at workplace

The reporting procedure of emergency incident

1. An employee who is present to an emergency incident (as a witness, participant or someone who caused it) shall immediately report this fact to his immediate superior, when there is a suspicion of a criminal offense, cooperation of Police is necessary.
2. A senior employee performs an investigation of an incident with a participant or a witness at the earliest possible time and writes the form "incident report." He ensures immediate transfer of the forms to the director (or a designated employee in charge) for registration.
3. The organization director (or the designated employee in charge) will decide on further action and will issue the relevant regulations. Depending on the nature of this incident he will investigate it or designate an employee (or commission) to investigate it thoroughly. The employee's or the commission's duty is to gather evidence of the suffered damage, the cost of repairing the damage, protocols of cooperating authorities, etc.
4. The organization director reports to the authorities and the police about the emergency incident already during its investigation. The reporting and informing must not cause a delay in the management of measures aimed at saving lives and health of employees. Reporting duty to rescue teams and the Police is an integral part of the "Emergency incident activities."
5. The telephone report content and time must be recorded in writing. The organization director will decide about responsibility for reporting to press and other media during occurrence of the emergency incident and addressing its effects.
6. The investigating employee or commission will forward the investigation findings of reported emergency incidents and the measures taken to the organization director and he will inform his subordinates in the extent, he finds appropriate.

Content of the report to the higher authority:

- a. the date, time and place of the incident
- b. the nature and character of the emergency incident
- c. so far identified consequences of the emergency incident
- d. the numbers of injured, dead or missing children and staff
- e. the measures taken

6. Safety – electricity, fire and gas

The employer must maintain operational documentation, meaning the statutory inspections, revisions and tests of any technical device. Performing them is determined by legislation in individual areas, as well as technical standards, or the manufacturer's documentation for the given technical equipment. A schedule of dates when revisions, inspections, tests, etc. were made and the dates of their future performance is prepared for these purposes. These include electric, gas, pressure and lifting equipment, shelving, ladders, fire extinguishers and hydrants, self-powered lift trucks, and more.

6.1. Fire protection in the workplace

Fire Protection:

General provisions:

Legal and natural persons running a business must fulfil the obligations in the field of fire protection in all spaces of their business operation. With legal persons, the executive officer is responsible for fulfilling the obligations in the field of fire protection and the natural persons are responsible themselves or their legal representative. In case there are more legal persons or natural persons running a business on the same premises, the owner of the premises fulfills the obligations in field of fire protection, unless they agree in an agreement otherwise. The agreement must also contain determination of a person responsible for fulfilling the obligations in the field of fire protection.

Business activities can be categorized according to the degree of fire risk on activities:

- With no fire risk,
- With increased fire risk,
- With high fire risk

The extent of obligations depends on the activity category.

Obligations of the organization:

- Keeping records of fire protection
- Providing material resources for fire protection (fire extinguishers, hydrant systems, electrical fire alarm etc.), inspecting and repairing them or ensuring their inspection and repair
- Installing safety signs, commands, prohibitions and guidelines in the workplace and other places (Picture 11, 12)
- Regular monitoring of compliance with the fire protection regulations, including fire book keeping and cooperation on removing the identified defects



F11. Fire extinguisher



F12. Hydrant and direction to the main water shut

In case of running a business with increased fire risk, the following must be also performed:

- Arranging the fire protection organization through directives or guidelines
- Defining the fire safety conditions of the business activities
- Processing the documentation of fire protection in the following extent:
 - Fire Regulations
 - Fire alarm directives,
 - Fire evacuation plan,
 - Firefighting documentation,
 - Rules of fire registration office,
 - thematic and time schedules of staff training for fire protection and training of employees assigned to fire prevention patrols,
- Training of managers in fire protection,



F13. Fire alarm

How to Pull a Fire Alarm

1. Find a nearby pull station. A pull station is the device found on the wall with instructions such as "pull down".
2. Pull the lever on the pull station.
3. If the pull station is dual action, depending on the pull station, you have to either lift or push in a panel or smash a piece of glass, then pull the lever.
4. If there is a cover on the pull station, lift the cover and then pull the lever on the pull station. The pull station cover might sound a local alarm, but it doesn't set off the building's fire alarm system. To set off the building's fire alarm system, you have to pull the lever.
5. Some older systems have break glass stations. These have a striker plate with spikes which breaks a glass sheet, releasing a button within the station. To activate one of these, simply: - Find the nearest station, - Using the side of your clenched fist, forcefully strike the plate that rests in front of the glass sheet, - Sometimes the glass gets so old it thickens and might not break from the impact of your fist, and you obviously don't have time to locate a bodybuilder. Therefore you might have to hit it several more times, kick the station, or use something with more heft (bookbag, baseball bat, etc), - If that still does not work, you'll have to find another pull station in a safe location quickly.
6. Sometimes (not very often), old systems will have coded pull stations. These are much larger than normal pull stations and have a gear mechanism that is wound up when pulled. This mechanism pulses a code (ex.:1-4-2) to the horns/bells that building security would use to determine where the fire is.
 - Find the nearest pull station,- The lever in these pull stations will go back up, so don't go crazy pulling it over and over, it works just fine. However, these pull stations only transmit four rounds of code before resetting themselves, so you might need to pull it more than once if security doesn't come right away, and preferably tell somebody about the fire after pulling a second time.
7. If you are in Europe, the UK, Australia, Japan, or on a majority of large seagoing vessels (cruise ships, ferries, charter boats, riverboat casinos, etc.) they will more likely have what are called call points. These look like pull stations but instead use a thin piece of glass to hold the button in. Simply: - Locate the nearest call point, - Press your thumb on the center dot (usually with an "X" or "O" in it), breaking the glass and releasing the button.
8. If there are no pull stations in the building or you don't know where they are, go to a desk or office to report the fire, or tell a nearby employee.

HOW TO USE A FIRE EXTINGUISHER

Remember the Phrase **PASS**



F14. How to use a fire extinguisher



F16. Fire protection training is important and mandatory



F15. Training of managers in fire protection.

- Training of employees assigned to fire prevention patrols,
- Staff training and security services employees training for fire protection

In case of running a business with high fire risk, danger to people, animals and property is also taken into account.

Firefighting assistance:

- Personal Assistance
- Material Assistance
- Exemption from the obligation to provide personal and material assistance
- Compensation for loss of earnings
- Reimbursement
- Entrance to the property

Basic requirements for equipping premises with fire protection material resources and fire safety equipment:

- The location of fire extinguishers
- Types of selected firefighting equipment, fire protection material resources and fire safety equipment
- Design of firesafe equipment
- Installation of firesafe equipment
- Operation, inspection, maintenance and repair of firesafe equipment
- Fire Alarm Systems
- Common requirements for the design, installation and inspection of serviceability of firesafe equipment and fire extinguishers

The method of determining fire safety conditions and fire danger assessment:

- Method of determining fire safety conditions in operations with increased fire risk
- Method for assessing the fire hazard of activities with high fire danger
- Method for determining activities with increased and high fire danger
- Complicated conditions for intervention
- The accidental fire load values

Verification of professional competence and staff training in fire protection:

- Staff training on fire protection
- Training employees assigned to fire prevention patrols
- Training of fire preventionists
- Determining the scope and content of the staff training, fire-prevention patrols training and fire preventionists training

Staff training and preparation:

- elaboration of thematic plan and time schedule
- staff training in fire protection according to the thematic plan and time schedule for staff training
- Managers' training of in fire protection according to the thematic plan and time schedule for Management training
- Training of fire preventionists according to the thematic plan and time schedule for expert training
- Training of employees assigned to fire prevention patrols according to the thematic plan and time schedule for expert training

Types, content and management of Fire protection documents:

- Types of fire protection documentation
- Documentation for inclusion in the category of activities with an increased fire hazard, or high fire hazard
- Fire Risk Assessment
- Arranging the fire protection organisation
- Fire Regulations
- Fire Alarm Directives
- Fire Evacuation Plan
- Firefighting Documentation
- Rules of the fire registration office
- Documentation of staff training, training of fire-prevention patrols and fire preventionists
- Fire book
- Documents proving compliance with technical conditions and instructions relating to fire safety of products or activities
- Fire technical characteristics
- Method of fire protection record keeping

Ensuring fire repression:

- Fire patrols at workplaces, fire units
- Basic fire equipment (fire extinguishers, work and protective equipment of firefighters, connecting technology, signaling devices, fire detectors, life saving equipment, technical equipment of fire units)
- Use of hand-held fire extinguishers and hydrants, treatment of electrical equipment fires
- Reporting fire, emergency incident – procedure

Principles for the use and purpose of use of hand-held fire extinguishers:

- inspections of fire extinguishers shall be done at least 1 per year if the manufacturer, project documentation and or assessment of fire risk unless shorter periods
- Water extinguisher is suitable for extinguishing solids and it should not be used on energized electrical equipment and fires of substances of very high temperature. It poorly extinguish flammable liquid of petroleum origin.
- Foam extinguishers are mainly used for extinguishing of flammable liquids (gasoline, diesel, oil). Harder to extinguish flammable liquid diluted in water such as alcohol and acetone. Since the foam is made up of water, they are subject to similar restrictions as water extinguishers.
- Snow fire extinguisher can be used for extinguishing of dielectric filling under voltage electric current to 1 000 V. It is not suitable for fighting a loose bulk materials and dust (it may cause scattering substance or formation of explosive mixtures with air).
- Powder extinguishers have nearly universal use, but they are not suitable for extinguishing solids.

6.2. Fire protection in footwear industry

Footwear production has its own specifics that must be taken into account when determining the fire safety conditions in production facilities.

Principals of safety compliance and technological processes in footwear production in terms of fire safety are processed by the manufacturer, who is also required to familiarize their employees with them.

These are mainly:

- method of storage of raw materials, their preparation for production (the main fire procurement)
- scheme of technological processes for the main types of products
- production waste in terms of fire protection
- concomitants of the shoe industry implying major fire hazard

7. Safety of machinery, production equipment and maintenance equipment

7.1. Principles of work safety on machines and technical equipment

The employer is obliged to regularly check the level of HSW, in particular the state of production resources and workplace equipment and the level of working conditions risk factors and follow the methods of determining the evaluation of risk factors according to special legislation. The employer is obliged to ensure that machines, technical equipment, vehicles and tools are in the terms of HSW suitable for the job at which they are used.

Organizations must ensure the competence of both the company and its employees and keep records (archiving) of the needed permission of the company and individual employees in various fields, with a view to technical and other equipment, including selected machinery and equipment.

Machinery, technical equipment, vehicles and tools must be:

- Fitted with protective devices to protect the life and health of employees
- Equipped, or modified to meet the ergonomic requirements and the employees are not exposed to adverse factors in working conditions
- Regularly and properly maintained, inspected and reviewed

Principles of work safety on machines and technical equipment must comply with technical standards and must, among other things, include:

- Technological procedures
- Instructions from the manufacturer
- Plan of the technical condition revisions and inspections

Detailed requirements for safe operation and use of machines, technical equipment, vehicles, equipment and tools are provided in the relevant regulations and include:

- Special competence
- Risk factors of working conditions and controlled zones
- Prohibition of certain works
- Organisation of work and working procedures
- The rights and obligations of employees
- Participation of employees on solving HSW issues
- State expert supervision

Principles of work safety on machines and technical equipment are legally regulated for the following areas:

1. Production resources and equipment
2. Safety signs, markings and signals
3. Materials Handling
4. Operation of motor vehicle, drivers - employees
5. Warehouses and open-air storage
6. Shelves
7. Pallets and stacking
8. Maintenance Manual and mechanical tools
 - Metalworking
 - Molding
 - Welding, Cutting
 - Pressure vessels for gas transport
 - Woodworking - workshop production
 - Construction activities and related activities
 - Work with the danger of falling from heights or into depths
 - Maintenance of lawns - mowers, brush cutters
 - Hygiene requirements

See the EU 2009/104/EC Directive – use of work equipment, concerning the minimum safety and health requirements for the use of work equipment by workers at work. More information to legislation you can find HERE

<https://osha.europa.eu/en/legislation/directives/workplaces-equipment-signs-personal-protective-equipment>

8. Harmful substances in the workplace. Control of regulations(directives, regulations) on health hazardous substances in footwear production.

8.1. Handling of hazardous chemicals and products in the workplace

A part of the regular staff training is also presenting the results of measuring the work condition factors (e.g. noise, dust and chemical substances and mixtures used in the production). Following this, the employees are made aware of the category to which their activities are classified and the consequences.

The Regulation of the European Parliament and Council Regulation (EC) no.1907/2006: REACH and no. 1272/2008:

CLP deals with the handling of hazardous chemical substances and products.

Principals of handling of hazardous chemical substances and products are legally processed for the bellow areas:

1. Handling of hazardous chemical substances and products
 - Properties of substances and mixtures and hazard groups
 - Labeling of hazardous chemical mixtures
 - Safety Data Sheet
 - Warning symbols and written marking of characteristics
 - List of R phrases for specific risks
 - List of S phrases for safe handling
 - Identification of replacement packaging

2. Health and hygiene risks
 - Categorization of workplaces and measurement of pollutants
 - Risk assessment
 - Minimum measures (PPE, extraction, ventilation)
 - Measures other than technical
3. Risk of fire, explosion
 - Order of the explosion prevention principles
 - Assessment of the explosion risk
 - Related measures
4. The requirements for individual operations
 - Manufacturing facilities, warehouses of flammable liquids, emergency and leakage sumps
 - The design of industrial facilities
 - Emergency security and firefighting
5. The principles of fire safety for operating premises with presence of flammable liquids

More information to legislation you can find [HERE](https://osha.europa.eu/en/legislation/directives/exposure-to-chemical-agents-and-chemical-safety/).
<https://osha.europa.eu/en/legislation/directives/exposure-to-chemical-agents-and-chemical-safety/>

9. Process risks in the footwear industry: cutting machines, bottom parts warehouse, closing and preparation, lasting, scouring, soles and heels attaching (bonding), moulding, finishing, cleaning

Every employer must seek the risks, assess them and identify the measures to either eliminate or minimize them. Process risks and compliance with the principles of HSW in the footwear production are legislatively set out for the below areas:

1. Cutting and punching machines

- EN 12044:2005+A1:2009 - Footwear, leather and imitation leather goods manufacturing machines - Cutting and punching machines - Safety requirements

2. Shoe and leather presses

- EN 12203:2003+A1:2009 - Footwear, leather and imitation leather goods manufacturing machines – Shoe and leather presses - Safety requirements

3. Footwear moulding machines

- EN 1845:2007 - Footwear manufacturing machines - Footwear moulding machines - Safety requirements

4. Lasting machines

- EN 931:1997+A2:2009 - Footwear manufacturing machines - Lasting machines - Safety requirements

5. Nailing machines

- EN 12653:1999+A2:2009 - Footwear, leather and imitation leather manufacturing machines - Nailing machines - Safety requirements

6. Roughing, scouring, polishing and trimming machines

- EN 930:1997+A2:2009 - Footwear, leather and imitation leather goods manufacturing machines – Roughing, scouring, polishing and trimming machines - Safety requirements

7. Splitting, skiving, cutting, cementing and cement drying machines

- EN 13457:2004+A1:2010 - Footwear, leather and imitation leather goods manufacturing machines – Splitting, skiving, cutting, cementing and cement drying machines – Safety requirements

More information to legislation you can find [HERE](http://www.nlnorm.cz/en/normy/475/database-harmonizovanych-norem-480) <http://www.nlnorm.cz/en/normy/475/database-harmonizovanych-norem-480>

With regards to the level of risk, the moulding machines (cutting, punching, riveting, sole pressing) present the highest risk levels. Particularly in the footwear manufacturing, the technology and work practices are not always fully respecting the guidelines given either by machine design (due to their age) or the construction perhaps addresses the general principles to prevent access to dangerous parts of machinery, however their applicability due to the operation effectivity is highly questionable. Therefore, measures to ensure the health protection depends largely on the staff qualifications, their professionalism and in particular their experience. Therefore, the operator must have a thorough knowledge of the risk level, machine operating instructions and rules that must be followed, while working on these types of machines.

Special attention must also be paid to:

- A ban on putting the protective covers of machinery and equipment out of operation
- Blocking functions on protective covers of machinery and equipment
- Handling in hazardous workspace of machinery and equipment during operation, unless the machine or the device is turned off safely
- Prohibition to entry workplaces other than those where the employee works without the knowledge or instruction of senior personnel
- Prohibition of unauthorized persons entry in the workplace
- Leaving the workplace without securing it in a condition that ensures its safe operation
- Prohibition of carrying out the work and the activities for which the employee is not qualified, medically fit and not assigned for them
- The need for caution when moving on organizations roads, especially in winter

- Prohibition to move on the organization's premises outside designated paths and roads leading to the workplace or into catering and social facilities without senior personnel instruction
- Prohibition to bring hazardous substances (flammable, narcotic substances, poisons, explosives, etc.) to work
- Prohibition of inappropriate joking in the workplace, leading to the other persons exposure to risky situations
- Prohibition of all activities performed without the senior personnel order
- The need to respect the principles of safe behaviour in the workplace
- Prohibition to continue in work when feeling sick or in otherwise impaired health state.

Clicking presses (Picture 13)

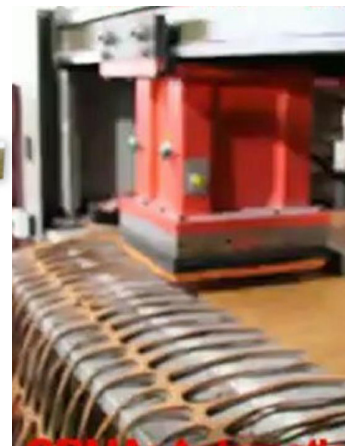
Two handed control devices should meet the following standard:

- The hand controls should be placed, separated and protected as to prevent spanning with one hand only; being operated with one hand and another part of the body, or being readily bridged.
- It should not be possible to set the dangerous parts in motion unless the controls are operated within approximately 0.5 seconds of each other. Having set the dangerous part in motion, it should not be possible to do so again until both controls have been returned to their off position. This effectively discourages two people operating the machine together by coordinating their actions, and also prevents the operator from locking one control in the start position which would allow him to operate the machine by means of the other control leaving one hand free.
- Movement of the dangerous parts should be arrested immediately or, where appropriate, arrested and reversed if one or both controls are released whilst there is still danger from the movements of these parts.

- The hand controls should be situated at such a distance from the danger point that, on releasing the controls, it is not possible for the operator to reach the danger point before motion of the dangerous parts has been arrested, or where appropriate, arrested and reversed.
- Detailed design specifications can be found in British Standard BS EN 574:1997 'Safety of machinery-Two-handed control devices-Functional aspects-Principles for design'.



F17. Clicking press



F18. Travelling head presses

Lasting (Fig. 15)

- All hot melt adhesives, once melted, will tend to carbonise/burn-up and the higher the temperature the faster this will happen.
- Follow manufacturer's temperature specifications.
- Ensure that all operatives, including maintenance staff, receive adequate training.
- Carbonisation on thermostats will reduce their accuracy and they should be cleaned and maintained on a regular basis.
- Do not rely on machine indicated temperatures. Use an accurate thermocouple device to actually measure the hot melt temperature rather than rely on the dial indicated temperature.

- Inaccuracies in temperature can be caused by a deteriorated heating element, which can be monitored by ampere checks.
- Run the machine at the speed recommended by the manufacturer rather than attempt to run faster by turning up the hot melt temperature.
- Do not leave the machines at full working temperature for extended periods.
- Cement in hot melt reservoirs must be regularly checked to maintain the correct level.
- Reservoirs must be regularly checked and cleaned to prevent build up of carbonised material.



F19. Lasting machine

Roughing (Fig. 16)

Training for working at roughing machines should include consideration of the following.

- To avoid entanglement, loose fitting clothing and jewellery should not be worn and long hair should be protected.
- Correct plate selection is important, as plates that are too small will allow the wire brush to mushroom increasing the risk of finger injury. Plates that are too large will stop the brush from reaching the upper and cause the shoe to be snatched out of the operative's hand.

- Plates should be securely fitted to prevent them from becoming loose and increasing the risk of injury. Machines should be properly isolated before changing brushes and bands.



F20. Roughing machine

Sole and heel attaching



F21. Sole and heel attaching

Molding (Picture 18)

All injection moulding compounds will burn-up/carbonise and give off toxic fumes if overheated:

- Material left in the barrel for longer than the manufacturers recommended times may lead to burn-ups. This can be prevented by regular checks to ensure that element, barrel and nozzle temperatures are set and working correctly and that production screw speeds are set according to manufacturer specifications.
- Contamination of material in the barrel can lead to nozzle blockage resulting in burn-ups. This can be prevented by regular purges of the system.
- Manufacturers recommendations on the use of reground materials should be strictly followed
- Ensure that the machine barrel is emptied when the machine is not in use.



F22. Plastic sole injection molding

Finishing and cleaning

Where solvents are used the following should be considered:

- Adequate assessments should be carried out. All assessments should be reviewed with sufficient frequency to ensure they are valid.
- A competent management team should plan assessments, and assessment reviews.
- The assessment should consider substitution and any health risks associated with the use of substitutes, and should also cover high exposure maintenance work.
- Local exhaust ventilations should be provided at all appropriate processes and this should be adequately maintained to ensure it is working correctly.
- Personal protective equipment such as gloves should be properly selected, its correct use and maintenance must be ensured by supervisory staff.
- There needs to be recognition within the industry that absorption through the skin is a real risk, fingering-in should not take place or washing of hands in solvents.
- Benches should not be cleaned by wiping with solvents.
- Plunger cans should be used to prevent evaporation.

10. Test of knowledge

Choose the correct option:

Q1. What do you need to focus in dealing with HSW?

- compliance with the working time
- prevention of risks, technical area of prevention, education and training area, the area of preventive healthcare, the area of personal protective equipment (PPE), monitoring activities
- equipping the workplaces with modern technology and ergonomically appropriate tools

Q2. System of European Union legislation

- is superior to the laws of individual member countries and they are required to fully and unchanged implement transposition of EU directives into national law.
- is superior to the laws of individual member countries, but the method of implementation of Community law is let on the will and practices of member countries. Member States may, in the interest of protecting workers accept the implementation of EU directives into national law stricter rules. So legislative requirements in the area of occupational safety and health may be different in individual EU Member States.
- it is for the Member States only indicative, the way of the introduction (implementation) Community law is let on the will and practices of member countries. Member States when implementing EU directives into national law, can adopt their own rules. So legislative requirements in the area of occupational safety and health may be different in individual EU Member States.

Q3. EU Framework Directive - 89/391/EEC is

- Framework Directive, which states the main duties of employers and employees in health and safety and determines HSW. For it will be issued specialized sub Directives.
- Framework Directive on the approximation of the laws of the Member States relating to personal protective equipment
- Framework Directive concerning the minimum safety and health requirements for the workplace

Q4. EU Partial Directive - 89/654/EEC concerning

- the minimum safety and health requirements for the use of work equipment by workers at work
- on the minimum health and safety requirements for the manual handling of loads where there is a risk particularly of back injury to workers
- the minimum safety and health requirements for the workplace«

Q5. EU Partial Directive - 89/37/EC (replaced by Council Directive 2006/42/EC) concerning

- the approximation of the laws of the Member States relating to machinery
- the minimum health and safety requirements regarding the exposure of workers to risks arising from physical agents
- the protection of the health and safety of workers from the risks related to chemical agents at work

Q6. Director of the company has to appoint employee with special responsibility for HSW

- only for companies with more than 25 employees
- this obligation does not apply
- always

Q7. Each EU country must provide organizations with the corporate manual with instructions for the introduction of HSW management system

- that creates according to its currently applicable laws
- based on a national handbook prepared in accordance with the methodical instructions specified in the ILO manual (International Labour Organisation)
- this obligation does not apply

Q8. The employer is obliged to ensure the safety and health of workers at work

- with respect to possible risk their lives and health that relate to work and all those who are residing at his workplace with his knowledge
- with respect to possible risk to their lives and health that relate to work and all those who are residing at his workplace with his knowledge. But this obligation does not apply to employees of another employer.
- with respect to possible risk to their lives and health that relate to work

Q9. To duties of the employee in relation to HSW does not belong

- participate in creating a safety and healthy working environment through its participation in HSW matters, ensure by its possibilities for his own safety and the safety and health of individuals who are directly affected by his actions, participate on the trainings, undergo to preventive examinations, observe workflows when working, use established working equipment, transport equipment, personal protective equipment and safety devices, immediately notify his work injury, undergo (on the instruction of the employer) to determine whether he is not under the influence of alcohol or other addictive substances
- to comply the safety breaks at work
- keep drinking mode

Q10. Which answer is correct?

- the employer shall ensure that workplace was properly lit, that it had established climatic conditions, particularly as regards the volume of air, ventilation, humidity, temperature, water supply, then that the regular maintenance and cleaning is done, including the provision of toilet and sanitation needs
- the employer shall ensure that workplace was properly lit, that it had established climatic conditions, particularly as regards the volume of air, ventilation, humidity, temperature, water supply, then that the regular maintenance and cleaning is done
- the employer shall ensure that workplace was properly lit, that it had established climatic conditions, particularly as regards the volume of air, ventilation, humidity, temperature, water and soft drinks supply

Q11. Machines, technical equipment, transport equipment, instruments and tools must be

- equipped with protective devices to protect the life and health of employees, regularly and properly maintained, inspected and reviewed, fitted or designed so that employees are not exposed to undesirable effects of noise and vibration, while working in an uncomfortable job is admissible
- equipped with protective devices to protect the life and health of employees, regularly and properly maintained, inspected and reviewed, fitted or designed so that employees are not exposed to particularly uncomfortable working position and undesirable effects of noise and vibration
- always in line with the latest knowledge of development

Q12. Those are not risk factors of the working conditions

- color composition of the workplace
- lighting
- monotonous work

Q13. When the employer is obliged to provide employees with training on legal and other regulations ensuring HSW what complement their professional qualifications and requirements for the job?

- when an employee starts his employment in the company, as well as when he is changing employment status or type of work, as well as when the new technology is loaded or when changing technology or workflows
- When an employee starts his employment in the company. Participation of the employee on the further training is voluntary
- this obligation does not apply to employers

Q14. Which answer is correct?

- it important to take into account the requirements of all employees when planning HSW
- it is important to assess the risks in the workplace and to prepare a list of high-risk workplaces when planning HSW, while follow common sense
- it is important to assess the risks in the workplace and to prepare a list of high-risk workplaces, while follow technical standards

Q15. Which answer is correct?

- The principles of safety work on machines and technical equipment includes compliance with technological procedures, instructions from the manufacturer and the technical state control plan
- The principles of safety work on machines and technical equipment includes compliance with technological procedures and technical state control plan. Instructions from the manufacturer are not standards for the safety work.
- The principles of safety work on machines and technical equipment includes compliance with the instructions from the manufacturer. It is not necessary to plan controls of the technical conditions of machines and technical equipment, they are solve operatively.

Q16. Which answer is correct?

- PPE (Personal Protective Equipment) is allocated to employees pursuant to employee demands
- PPE (Personal Protective Equipment) is allocated to employees based on the identification of risks and risk factors in the workplace and on the post-processing list for the allocation of PPE and hygiene supplies
- each employee takes PPE (personal protective equipment) itself at its own discretion

Q17. Staff training to ensure HSW excludes

- the principles of working with visual display units
- principles of first aid
- principles of healthy food

Q18. Book of injuries in the workplace is used for keeping following records

- only accidents with injury or death of the employee or in the event of employee injuries with following incapacity of employee
- all work injuries and also minor injuries
- accidents in the workplace occurred in the performance of work tasks as instructed by the employer (does not apply to activities done on the own initiative of employee)

Q19. Notification obligation of the work injuries pays for employers

- in any case
- in case of hospitalization longer than 5 calendar days
- only when a staff member dies

Q20. The duties of the employer in connection with the first aid providing are not

- employ the doctor who, if necessary, is able to provide first aid immediately
- provide the workplace with necessary number of first-aid kits, determine the content of the first aid kits for the each workplace and ensure regular inspection of the first aid kits together with controlling the usability of medicaments and materials and make records during dispensing
- determine the number of employees who organize first aid and ensure their training by the contracted doctor

Q21. The duties of the person responsible for first-aid kit are not

- to check equipment of first-aid kit at least ones every three months and in case of need to supplement the shortfall, if necessary replace the expired medicines
- keep records of dispensing medication and medical supplies
- ensure that the first aid plan (traumatology plan) was part of the first-aid kit

Q22. What is not integral content of reporting incidents in the workplace to superior authority

- the date, time and place of the incident, as well as the type of emergency event, as well as the number of injured, dead or missing children and staff
- evidence of the damage and the costs of repairing the damage
- up to now identified consequences of the incident and the taken actions

Q23. The employer (director of the company) is obliged

- to inform employee about the conclusions of investigation of reported incidents and taken steps in scale which he considers appropriate
- to inform employee about the conclusions of investigation of reported incidents and taken steps in full
- don't inform employee about the conclusions of investigation of reported incidents and taken steps in any case

Q24. What may not be included in the documentation of the fire protection

- fire alarm instructions
- thematic and time schedules of the staff training in the fire protection
- a list of employees

Q25. How often are made inspections of fire extinguishers?

- at least ones for 2 years
- at least ones per 3 years
- at least ones per 1 year, if the manufacturer, project documentation or assessment of fire risk not determine shorter periods

Q26. Which statement is incorrect?

- powder extinguisher is appropriate to extinguish blazing oil or fuel
- foam extinguisher is appropriate to extinguish live electrical equipment
- water extinguisher is appropriate to extinguish paper or furniture

Q27. In terms of HSW pays

- machinery, technical equipment, vehicles and tools must be equipped with protective devices to protect the life and health of employees, as well as equipped or modified to meet the ergonomic requirements and must be regularly and properly maintained, inspected and reviewed
- machinery, technical equipment, vehicles and tools must be equipped with protective devices to protect the life and health of employees, but does not have to match the ergonomic requirements
- machinery, technical equipment, vehicles and tools must be equipped with protective devices to protect the life and health of employees, as well as equipped or modified to meet the ergonomic requirements and does not need to be regularly reviewed and revised

- Q28. Principles of safety work on machines and technical equipment are not legislatively regulated by Directive 89/655 / EEC (replaced by EU 2009/104 / EC) for the following areas**
- operation of motor vehicles, drivers - employees
 - work with the danger of falling from height or to depth
 - use of stationery
- Q29. The results of measurement of working condition factors (f.e. noise, dust and chemical substances and mixtures used in the process of production) are introduced to**
- employees at regular training sessions - in response to that they are informed to which category their working activities are put
 - only members of company management
 - members of the company management. It is at their discretion, whether and in what extent they will inform the other employees
- Q30. When handling hazardous chemical substances and preparations in the workplace it is not necessary to focus on**
- using the warning symbols and written designation of properties, assessing the risk of explosion, the categorization of workplaces and measurement of pollutants
 - health and hygiene risks, principles of fire safety
 - principles of using the gas masks in space of toilets
- Q31. Process risks and principles of observance of HSW in the footwear production are not legally constituted by European Union standards for the following areas**
- cutting and punching machines
 - stitching machines
 - lasting machines
- Q32. Which statement is invalid for working at shoemaking machines?**
- a ban on discarding machinery guards of activity
 - a ban on unseemly banter in the workplace, leading to the exposure of other persons in risky situations
 - overtime ban
- Q33. While working at shoemaking machinery is necessary to observe the following principles**
- use personal protective equipment designated by the employer for work on the given machines
 - to wear earplugs and eye protector preventively in all workplaces
 - carry out all work only with work gloves

Q34. Which statement is invalid for working on clicking presses?

- check that two-handed controls are working correctly
- check if knives are stored and carried safely
- employees can distract operators when they are working at the clicking presses

Q35. What are adequate control measures to eliminate the risk of injury from burns in place where hot melt adhesives are used?

- all workers, including maintenance workers must be properly trained, the machines must be running at the speed recommended by the manufacturer and can't work at full working temperature for a longer period, the glue melting tanks should be checked regularly to maintain the correct level of glue, workers must use the recommended protective equipment
- don't clean and maintain the thermostats at regular intervals
- be cooling with cold water when working

Q36. Which statement is not valid for scouring?

- it must be complied with safety precautions during scouring and sharpening the brush to prevent the ignition of dust
- worker has to be dressed in loose clothing during working
- it is important to select the correct board, because too small board increases the risk of injury to a finger with a wire brush and oversized board stops the brush in reaching the top level and cause a trance of the shoe from the hand of the worker

Q37. When is the risk of overheating the mixture and releasing the toxic fumes during injection technology?

- when the material remains in the barrel for longer than recommended by the manufacturer and then it can eventually ignite
- when the system is regularly cleaned to avoid blockage of the nozzle by material contamination
- in any case) when the barrel with material is emptied unless the machine is in operation

Q38. Which statement is not valid? Where solvents are used, you should follow these arrangement

- using of local exhaust ventilation, which should be adequately maintained to ensure its proper function
- using of personal protective equipment such as gloves, which must be choose correctly
- washing hands in solvents, cleaning the workbenches by using solvent

Q39. Which shoemaking machines have the highest risk level

- packing machines
- adhesive machines (direct coating)
- moulding machines (cutting, punching, riveting, sole pressing)

Q40. Special attention must also be paid to

- sufficient light, warmth and comfort
- protective coating machines
- Blocking functions, Handling in hazardous workspace, A ban on putting the protective covers

Answer Key:

Q1.	prevention of risks, technical area of prevention, education and training area, the area of preventive healthcare, the area of personal protective equipment (PPE), monitoring activities
Q2.	is superior to the laws of individual member countries, but the method of implementation of Community law is let on the will and practices of member countries. Member States may, in the interest of protecting workers accept the implementation of EU directives into national law stricter rules. So legislative requirements in the area of occupational safety and health may be different in individual EU Member States.
Q3.	Framework Directive, which states the main duties of employers and employees in health and safety and determines HSW. For it will be issued specialized sub Directives.
Q4.	the minimum safety and health requirements for the workplace
Q5.	the approximation of the laws of the Member States relating to machinery
Q6.	always
Q7.	based on a national handbook prepared in accordance with the methodical instructions specified in the ILO manual (International Labour Organisation)
Q8.	with respect to possible risk their lives and health that relate to work and all those who are residing at his workplace with his knowledge
Q9.	keep drinking mode
Q10.	the employer shall ensure that workplace was properly lit, that it had established climatic conditions, particularly as regards the volume of air, ventilation, humidity, temperature, water supply, then that the regular maintenance and cleaning is done
Q11.	equipped with protective devices to protect the life and health of employees, regularly and properly maintained, inspected and reviewed, fitted or designed so that employees are not exposed to particularly uncomfortable working position and undesirable effects of noise and vibration
Q12.	color composition of the workplace
Q13.	when an employee starts his employment in the company, as well as when he is changing employment status or type of work, as well as when the new technology is loaded or when changing technology or workflows
Q14.	it is important to assess the risks in the workplace and to prepare a list of high-risk workplaces, while follow technical standards
Q15.	The principles of safety work on machines and technical equipment includes compliance with technological procedures, instructions from the manufacturer and the technical state control plan
Q16.	PPE (Personal Protective Equipment) is allocated to employees based on the identification of risks and risk factors in the workplace and on the post-processing list for the allocation of PPE and hygiene supplies
Q17.	principles of healthy food
Q18.	all work injuries and also minor injuries
Q19.	in case of hospitalization longer than 5 calendar days
Q20.	employ the doctor who, if necessary, is able to provide first aid immediately
Q21.	ensure that the first aid plan (traumatology plan) was part of the first-aid kit
Q22.	evidence of the damage and the costs of repairing the damage
Q23.	to inform employee about the conclusions of investigation of reported incidents and taken steps in scale which he considers appropriate
Q24.	a list of employees

Answer Key:

Q25.	at least ones per 1 year, if the manufacturer, project documentation or assessment of fire risk not determine shorter periods
Q26.	foam extinguisher is appropriate to extinguish live electrical equipment
Q27.	machinery, technical equipment, vehicles and tools must be equipped with protective devices to protect the life and health of employees, as well as equipped or modified to meet the ergonomic requirements and must be regularly and properly maintained, inspected and reviewed
Q28.	use of stationery
Q29.	employees at regular training sessions - in response to that they are informed to which category their working activities are put
Q30.	principles of using the gas masks in space of toilets
Q31.	stitching machines
Q32.	overtime ban
Q33.	use personal protective equipment designated by the employer for work on the given machines
Q34.	employees can distract operators when they are working at the clicking presses
Q35.	all workers, including maintenance workers must be properly trained, the machines must be running at the speed recommended by the manufacturer and can't work at full working temperature for a longer period, the glue melting tanks should be checked regularly to maintain the correct level of glue, workers must use the recommended protective equipment
Q36.	worker has to be dressed in loose clothing during working
Q37.	when the material remains in the barrel for longer than recommended by the manufacturer and then it can eventually ignite
Q38.	washing hands in solvents, cleaning the workbenches by using solvent
Q39.	moulding machines (cutting, punching, riveting, sole pressing)
Q40.	Blocking functions, Handling in hazardous workspace, A ban on putting the protective covers

11. Annexes

11.1. Annex no. 1B) National legislation of the Czech Republic in HSW

Legislations - * as amended

Find the national act by filling in the number / year of the appropriate act on <https://portal.gov.cz>

legislation · number and year of edition · title

1. Constitutional law 1/1993 *Constitution
2. Act 174/1968 * Governmental Expert Supervision on Work Safety
3. Act 133/1985 *Fire Protection
4. Act 37/1989 * Protection against Alcoholism and other Addictions
5. Act 2/1991 *Collective Negotiations
6. Act 111/1994 *Road Transport
7. Act 12/1997 *Road Safety and Traffic Flow
8. Act 13/1997 *Roads
9. Act 48/1997 *Public Health Insurance
10. Act 167/1998 *Addictive Substances
11. Act 247/2000 *Acquiring and Improving the Professional Competence to Drive Vehicles
12. Act 258/2000 *Public Health Protection
13. Act 361/2000 *Roads Traffic
14. Act 102/2001 *Common Safety of Products
15. Act 56/2001 *Conditions of Vehicles Operations on Roads
16. Act 435/2004 *Employment
17. Act 251/2005 *Work Inspection
18. Act 379/2005 *Measures to Protect against Damage Caused by Tobacco, Alcohol and other Addictive Substances
19. Act 183/2006 *Regional Land Planning and Construction Law
20. Act 262/2006 *Labour Code
21. Act 266/2006 *Employees Health Insurance
22. Act 309/2006 *HSW in Employment Relationships and their Assurance or Providing Service
23. Act 350/2011 *Chemical Substances and Chemical Products
24. Act 373/2011 *Specific Health Service
25. Czech National Board Resolution 2/1993 *Declaring the Charter of Fundamental Rights and Freedoms a Part of Czech Republic Constitution
26. Government regulation 290/1995 stating a list of occupational diseases
27. Government regulation 173/1997 stating selected products for compliance assessment
28. Government regulation 378/2001 stating more specific requirement for operating machines, devices and tools
29. Government regulation 9/2002 stating technical requirements on products concerning noise emission
30. Government regulation 11/2002 stating the appearance and placing of safety signs and introducing signals
31. Government regulation 28/2002 stating organisation of work and workflow obligatory to employers for work in forest and in similar workplaces
32. Government regulation 168/2002 stating organisation of work and workflow obligatory to employers operating transport by transport means
33. Government regulation 21/2003 stating technical requirement on personal protective wear
34. Government regulation 101/2005 Workplace and Work Environment Requirements
35. Government regulation 362/2005 Specific Requirements on Health and Safety at workplaces with danger of falling from heights or in depths
36. Government regulation 567/2006 *Defining Difficult Work Conditions and Bonus Amount for Working under Difficult Work Conditions
37. Government regulation 590/2006 stating the range and scope of other significant personal hindrance for work
38. Government regulation 591/2006 *More Specific Minimal Requirements on Health and Safety at Work on Building Sites

39. Government regulation 361/2007 *stating the conditions of health protection at work
40. Government regulation 176/2008 Technical requirements for machine equipment
41. Government regulation 91/2010 Chimneys, Smokestacks and Fuel Appliances Fire Safety Conditions
42. Government regulation 201/2010 Injuries Evidence, Reporting and Sending of Injury Report
43. Government regulation 272/2011 Health Protection against Adverse Effects of Noise and Vibrations
44. Public notice 50/1978 *Electrical Engineering Qualification
45. Public notice 85/1978 *Gas Devices Controls, Reviews and Tests
46. Public notice 18/1978 determining certain press devices and some conditions to secure their safety
47. Public notice 19/1978 *determining certain lift devices and some conditions to secure their safety
48. Public notice 21/1978 *determining certain gas devices and some conditions to secure their safety
49. Public notice 48/1982 *Basic Requirements for Work Safety and Technical Devices
50. Public notice 145/1988 Work Health Care Convention
51. Public notice 20/1989 Safety and Health of Employees and Work Conditions Convention
52. Public notice 125/1993 *stating conditions and rates of employer liability insurance for work injury damage or occupational disease
53. Public notice 104/1997 *exercising the Roads Act
54. Public notice 87/2000 Fire Safety Conditions for Welding and Melting
55. Public notice 478/2000 *exercising the Road Transport Act
56. Public notice 30/2001 *exercising the road traffic rules and management of road traffic
57. Public notice 38/2001 *Hygienic Requirement for Contact with Food and Meals
58. Public notice 246/2001 Fire Prevention
59. Public notice 440/2001 *Pain and Disadvantaged Social Status Compensations
60. Public notice 288/2003 stating jobs and workplaces forbidden to pregnant women, breastfeeding women, mothers up to nine months after birth and teenagers and conditions under which teenagers can perform these jobs because of occupational preparations
61. Public notice 137/2004 *Hygienic Requirements for Food Service and Personal and Operational Hygiene Guidelines during Epidemiologically Serious Activities
62. Public notice 277/2004 *Assessing Health Fitness to Drive Vehicles, Health Fitness to Drive Vehicles with Condition and Medical Examination Requirements Proving Reasons Preventing the Use of Safety Belts
63. Public notice 518/2004 *exercising the Employment Act no. 435/2004
64. Public notice 73/2010 Electrical Technical Devices, their Classification into Classes and Groups and more Specific Safety Conditions
65. Public notice 402/2011 Evaluation of Chemical Substances and Chemical Mixtures Dangerous Properties and Packing and Labelling of Dangers Chemical Mixtures
66. Public notice 70/2012 Preventive Examinations
67. Public notice 104/2012 Defining more Specific Requirements for Assessment and Recognition of Occupational Diseases and Range of Persons to Convey the Medical Report about Occupational Diseases, Conditions under which the Disease Can No Longer Be Called Occupational Disease and Medical Report Requirements
68. Public notice 79/2013 Exercising Some Provisions of the Specific Health Care Act no. 373/2011 (Medical Care and Some Types of Medical Reports)
69. Public notice 341/2014 Approving of Technical Capability and Technical Conditions of Operating Vehicles on Roads
70. Directive 7/1997 Poison Antidotes
71. EP and ES regulation 852/2004 Food Hygiene
72. EP and ES regulation 1907/2006 Registration, Evaluation, Approving and Limiting of Chemical Substances,

73. EU directive 1907/2006 Chemical Substances
74. Council directive 89/391/EHS Introducing Safety and Health Protection Measures at Work
75. Council directive 89/654/EHS Minimal Requirements for Safety and Health Protection at Work
76. Council directive 90/269/EHS Minimal Requirements for Safety and Health Protection of Employees when Manipulating with Heavy Loads Connected with Risks mainly the Risk of Spinal Damage
77. Council directive 90/270/EHS Minimal Requirements for Safety and Health Protection at Work with Display Units

Technical Standards

Find the required standard on: <http://www.unmz.cz>

Specification • effectivity • changes • classificatory sign • title

1. ČSN OHSAS 18001:2008 3/08 01 0801 System of Safety Management and Health Protection at Work – Requirements
2. ČSN 01 2725 6/60 a,b 01 2725 Colours at Work Environment Directive
3. ČSN 01 6910 12/02 - 01 6910 Editing of Documents written on Text Editors or Typewriters
4. ČSN ISO 3864 11/95 - 01 8010 Safety Colours and Safety Signs
5. ČSN ISO 3864 -1 12/03 – 018011 Safety Colours and Safety Signs – Part 1: Guidelines for Design of Safety Signs at Work and Public Places
6. ČSN 05 0600, 01,10,30,50 2/93 1,2 05 0600, 01,10,30,50 Welding (Project, Operation, Flame, Arc, Resistance)
7. ČSN 05 0705 9/02 1 05 0705 Occupational Training and Basic Welding Courses
8. ČSN EN 287-1,2 11/04 A2 05 0711 a 12 Welders Tests – Fusion Welding, Steels and Aluminium and its Alloys
9. ČSN EN 9606-3-5 08/00 1 05 0713-15 Welders Tests – Fusion Welding, Copper, Nickel and Titanium and Alloys
10. ČSN 07 0703 01/05 1 07 0703 Gas Boiler-rooms
11. ČSN 07 0710 1975 abc 07 0710 Operation, Service and Maintenance of Steam and Hot-water Boilers
12. ČSN 07 8304 3/08 - 07 8304 Pressure Containers for Gas Transport – Operation Rules
13. ČSN 07 8509 2/89 Z4 07 8509 Colour Labelling of Metal Pressure Containers for Gas Transport for Technical Purpose
14. ČSN 13 0072 6/91 - 13 0072 Pipelines. Labelling of Pipelines according to the Transported Fluid
15. ČSN EN 12717+A1 9/09 20 0708 Tool Machines and Forming Machines Safety – Drills
16. ČSN EN 13128 4/02 A1 20 0711 Safety Requirements for Milling Machines
17. ČSN EN 13218 1/03 - 20 0717 Safety Requirements for Sanders
18. ČSN 692 9/09 - 21 0711 Mechanical Press Machines – Safety
19. ČSN ISO 5053 4/01 - 26 8801 Forklift Trucks. Terminology
20. ČSN EN 1459+A3 5/12 - 26 8804 Forklifts Trucks Safety. Self-Powered Forklifts with variable loading
21. Self-Powered Forklifts. Operation, Maintenance, Repair and Technical Control
22. ČSN ISO 3691+Amd1 01/96 26 8812 Motor Trucks. Terminology
23. ČSN EN ISO 3691-1 2/13 opr1 26 8812 Forklift Trucks – Safety Requirements and Attestation – Part 1: Self-Powered Forklifts Trucks, other than without a driver, Forklifts with variable loading and Motor Trucks for Load Transport
24. ČSN 26 9010 10/93 - 26 9010 Material Handling. Widths and Heights of Paths and Aisles
25. ČSN 26 9015 7/82 - 26 9015 Storage. Basic Terminology
26. ČSN 26 9016 04/86 a 26 9016 Storage. Warehouses Terminology
27. ČSN 26 9017 09/87 - 26 9017 Storage. Terminology of Places and Spaces
28. ČSN 26 9030 08/98 Z1 26 9030 Handling Units – Guidelines for Forming Units, Safe Handling and Storage

29. ČSN 26 9107 12/92 - 26 9107 Repairs of Simple and Box Palettes
30. ČSN 33 1500 03/91 Z4 33 1500 Electric Equipment Reviews
31. ČSN 33 1600 ed. 2 9/09 33 1600 Electric Appliances Reviews and Controls during their Use
32. ČSN 33 2000-4-41 02/00 Z3 33 2000 Electric Equipment. Part 4. Chapter 41 Protection against Electric Current Injury
33. ČSN 33 2000-5-51 ed. 3 5/10 33 2000 Electric Equipment. Part 5: Selection and Construction of Electric Devices. Chapter 51: General Rules
34. ČSN 33 2000-5-52 03/98 Z1 33 2000 Electric Equipment. Part 5: Selection and Construction of Electric Devices. Chapter 52: Electric Wiring Construction
35. ČSN 33 2000-6-61 ed. 2 04/04 Z1 33 2000 Electric Installations in Buildings. Reviews – Initial Review
36. ČSN EN 60204-1 ed. 2 6/07 - 33 2200 Safety of Machine Equipment – Electric machine equipment – Part 1: General Requirements
37. ČSN 34 0350 1/65 Z2 34 0350 Regulations for Mobile and Cable Lines (Extension Leads)
38. ČSN EN 62305-1 11/06 opr1 34 1390 Lightning Protection – General Rules
39. ČSN EN 50110-1 ed. 2 11/03 opr1 34 3100 Work with Electric Devices
40. ČSN EN 12464-1 2/12 - 36 0450 Light and lighting – Work Areas Lighting. Part 1: Inner Work Spaces
41. ČSN EN 1837 3/00 - 36 0453 Safety of Machine Equipment – Build-in Lights
42. ČSN EN 1838 4/00 - 36 0453 Lights and Lighting – Emergency Lighting
43. ČSN 36 1559 – 1 3/00 - 36 1559 Electric Hand Tools – Part 1 (General Specifications)
44. ČSN EN 50144-1 7/99 A1 36 1570 Electric Hand Tools Safety (General Requirements)
45. ČSN 38 6405 12/88 Z1 38 6405 Gas Devices – Operation Rules
46. ČSN EN 836+A1 12/98 A3 47 0617 Garden Machines – Motor Mowing Machines – Safety
47. ČSN EN ISO 11806 5/09 - 47 0620 – Agriculture and Forest Machines – Mobile Brush Cutters and Trimmers with Combustion Engine – Safety
48. ČSN EN 131-1+A1 12/11 - 49 3830 Ladders. Terminology, Types, Function Parameters
49. ČSN EN 131-2 +A1 12/12 - 49 3830 Ladders. Requirements, Trials, Marking
50. ČSN EN 131-3 12/07 - 49 3830 Ladders. Instructions for Use.
51. ČSN 49 6100 7/88 Z2 49 6100 Woodworking Machines. Requirements for Machines and Devices Construction. Common Provisions
52. ČSN 49 6105 3/88 Z7 49 6105 Woodworking Machines. Safety Requirements for Saws and Roller Mills
53. ČSN EN 847-1+A1 4/08 - 49 6122 Tools for Machinery Woodworking. Safety Requirements. Milling Tools and Saw Discs.
54. ČSN 69 0012 01/86 Z3 69 0012 Pressure Vessels. Operation Requirements.
55. ČSN 73 0580-1 11/99 - 73 0580 Daylight Lighting of Buildings. Basic Requirements
56. ČSN 73 0580-4 10/94 Z2 73 0580 Daylight Lighting of Industrial Buildings
57. ČSN EN 1090-2+A1 1/12 - 73 2601 Steel and Aluminium Constructions – Technical Requirements for Steel Constructions
58. ČSN 73 2604 4/12 - 73 2604 Steel Constructions – Inspection and Maintenance of Building Constructions and Civil Engineering Works
59. ČSN 73 4108 2/13 - 73 4108 sanitary facilities and changing rooms
60. CSN 73 4130 3.10 - 73 4130 Stairs and Ramps
61. CSN 73 5105 03/93 1 73 5105 Industrial Production Buildings
62. CSN 73 5305 04/05 - 73 5305 Office Buildings
63. CSN 74 3282 02/13 - 74 3282 Steel Ladders
64. CSN 74 3305 06/89 74 3305 Guard Rails

- 65. ČSN EN 930 10/98 - 79 8000 Machines for Footwear Production and Production of Goods from Natural Leather and Imitations of Leather. Roughing, Grinding, Polishing and Cutting Machines. Safety Requirements
- 66. ČSN EN 931 10/98 - 79 8001 Machines for Footwear Production. Shoe Lasting Machines. Safety Requirements
- 67. ČSN EN 1845 7/99 - 79 8002 Machines for - Footwear Production – Footwear Moulding Machines. Safety Requirements
- 68. ČSN EN 12653 8/00 - 79 8004 Machines for Footwear Production from Leathers and Imitations of Leather – Nailing Machines – Safety Requirements
- 69. ČSN EN ISO 10821 1/06 - 81 0703 Industrial Sewing Machines – Safety Requirements for Sewing Machines, Units and Systems
- 70. ČSN EN ISO 12100 06/11 83 3001 Safety of Machinery. General principles for Design - Risk Assessment and Risk Reduction
- 71. EN 349 11/94 - 83 3211 Safety of Machinery - Minimum Gaps to Avoid Crushing of Human Body Parts
- 72. EN ISO 13857 9/08 - 83 3212 Safety of machinery - Safety distances to prevent hazard zones being reached by upper and lower limbs
- 73. ČSN EN 811 02/98 - 83 3213 Safety of machinery - Safety distances to prevent hazard zones being reached by lower limbs
- 74. ČSN EN 953+A1 8/09 83 3302 Safety of machinery. General requirements for the design and construction of fixed and movable covers
- 75. 75. CSN 547-2 9/5 - 83 3502 Safety of machinery. Principles for determining the dimensions required for access openings
- 76. 76. ISO 7250 83 3506 Basic human body measurements for technological design
- 77. ISO 6385 12/00 83 3510 Ergonomic principles for the design of work systems
- 78. ISO 9241-5,6 10/99 - 83 3582 Ergonomic requirements for office work with visual display terminals. Requirements for the arrangement of work place, surface and environment

12. Glossary

HSW – Health and Safety at Work

OHSAS – standard specifying requirements for risk management for OHS (Occupational Health and Safety)

ST – Safety technician

JD – job description

HCH – hazardous chemicals

MS HSW – management system of health and safety at work

PQP OSH – professionally qualified person to perform the tasks of risk prevention

LC – Labour Code

PH – preventive healthcare

PPE – personal protective equipment

Organization – business, company, office, institutions, ...

Employer – a legal or natural person who employs an individual in a work relationship

Workplace – space where work is performed for the employer's needs

Hazard – source, situation or activity with the potential to cause injury or damage to human health or a combination of both

Risk – a combination of the probability of a hazardous event

Acceptable risk – a risk that has been reduced to a level which the organization can tolerate

Risk assessment – the process of evaluation of risks arising from hazards, whether the risk is acceptable or not

Incident – an event associated with work, which caused or may have caused an accident, injury or fatality

Fire – undesirable combustion in which mortality or injury, or jeopardy to persons or animals, damage to property values or to the environment happened

Record – a document giving evidence of activities performed

Document – can take several forms - paper, photographs, magnetic, electronic or optical disk

Controlled document – must be easily accessible and regularly reviewed, revised and approved for adequacy by an authorized employee

Controlled recording – must be legible, identifiable and attributable to the relevant activities, easily accessible, protected against damage, deterioration or loss

13. Bibliography

- 5/OIM/PD ČOA – kožedělná výroba: Oborová příručka pro podnikatele v oboru zpracování kůží a kožešin, 2004
- Bc. Zdeněk Šenk: Bezpečnost a ochrana zdraví při práci podle normy OHSAS, Nakladatelství ANAG, 2012
- ČSN OHSAS 18001:2008 Systémy managementu BOZP – Požadavky, Praha: Úřad pro technickou normalizaci, metrologii a státní zkušebnictví, 2008
- Bezpečnost práce v Evropě. Legislativa Evropské unie. Technik č. 4 (2002), s. 13.
- <https://portal.gov.cz>
- <http://www.unmz.cz>
- <https://osha.europa.eu>
- https://osha.europa.eu/fop/czech-republic/en/legislation/smernice.php?set_language=en
- <https://osha.europa.eu/en/safety-and-health-legislation/european-directives>
- <http://eur-lex.europa.eu/homepage.html>
- <http://www.ilo.org>
- http://www.ilo.org/wcmsp5/groups/public/---ed_protect/---protrav/---safework/documents/normativeinstrument/wcms_107727.pdf
- <http://www.healthyworkinglives.com/advice/Legislation-and-policy/Workplace-Health-and-Safety/recording-reporting-accidents>
- <http://www.eurocert.cz/certifikace/en/ohsas-18001>
- <http://www.hse.gov.uk/leather/process-risks-footwear-industry.htm>
- <http://www.nlnorm.cz/en/normy/475/database-harmonizovanych-norem-480>



Lifelong
Learning
Programme

Project Number:
539823-LLP-1-PT-LEONARDO-LMP

Project Duration:
30 months
October 2013 - March 2016

How to implement Sustainable Manufacturing in Footwear - New Occupational Profile and Training Opportunities -

The project ***STEP to SUSTAINABILITY*** aims at:

Developing a new qualification profile
and correspondent training in the field
of sustainable manufacturing.

Training technicians with knowledge and
skills to implement manufacturing
strategies envisaging the sustainability in
Footwear and Leather goods.

www.step2sustainability.eu