

VALVEA s.r.c).	Internal directive:	Doc. No.:	VOS16
Oldřichovice	1044			
739 61 Třine	ec -	"Identification, assessment, and		2
Oldřichovice	!	elimination of risks,	Issue No.:	3
ID no.: 253 9	960 81			
Issue	from	in accordance with the Labor Code,	Revision	00
validity:	1.7.2020	<u>§102(3)"</u>	No.:	03
Revision	from		B	1/17
validity:	11.09.2025		Pages:	1/47

Authored	Checked	Approved
David Urbačka	Ing. Kateřina	p. Arnold Macura
	Uhlářová	
external OHS expert for risk	Development	CEO
prevention	Manager	/
DA.AL corp. s.r.o. Milíkov č.p. 387 739 81 Milíkov IČ: 01819763 DIČ: CZ01819763	VALVEA S.r.o.	VALVEA® 3/3 1044, CZ-739 61 Třinec valvea.eu, www.valvea.eu



Explanations of the rate of risk P, N, H, R

P - Probability of the origination and the existence of risk

- 1. Occasional
- 2. Improbable
- 3. Probable
- 4. Highly probable
- 5. Permanent

N - Probability of consequences - seriousness

- 1. Injury without working incapacity
- 2. Absence injury (with working incapacity)
- 3. Serious injury requiring hospitalization
- 4. Severe injury and injury with permanent consequences
- 5. Fatal injury

H - Opinion of evaluators

- 1. Insignificant effect on the level of risk and threats
- 2. Acceptable effect on the level of risk and threat
- 3. Slight effect on the level of risk and threat
- 4. Adverse effect on the level of risk and threat
- 5. Unacceptable effect on the level of risk and threat

R - Risk rate

- 0 3: Insignificant risk
- 4 10: Acceptable risk
- 11 50: Slight risk
- 51 100: Adverse risk
- 101 125: Non-acceptable risk



1. Purpose:

This document sets out the procedure for hazard identification, risk assessment, and risk management within the company VALVEA s.r.o.

2. Procedure development and description of activities:

Act No. 262/2006 Coll., as amended (hereinafter the "Labour Code"), in §102(1) obliges employers to create a safe and health-protecting working environment and working conditions through appropriate organization of occupational health and safety (OHS) and by implementing measures for risk prevention. According to §102(3), the employer is obliged to identify risks, determine their causes and sources, and take measures for their elimination. To this end, the employer must regularly monitor the level of OHS, in particular the status of technical prevention and the level of risk factors in working conditions, and must comply with methods and procedures for identifying and assessing risk factors as defined by special legal regulations.

A basic prerequisite for fulfilling this requirement is knowledge of the actual risks existing at individual workplaces of the company and a qualified estimate of their severity. The current special legal regulations, to which the Labour Code refers in subsequent provisions, do not define concepts such as "risk" or "probability of risk". Therefore, it is necessary to prepare a risk assessment using other professional sources.

The risk assessment was carried out with designated employees of VALVEA s.r.o. and with a qualified occupational safety specialist in accordance with Act No. 309/2006 Coll. Sources of information included, among others:

- Records of occupational injuries
- Evidence of occupational accidents under §105(2) of the Labour Code and Government Regulation No. 201/2010 Coll.
 - Operating manuals for individual machines, vehicles, and equipment
- Safety data sheets for hazardous chemical substances pursuant to Act No. 350/2011 Coll., as amended, on chemical substances and mixtures
 - Experience of long-term employees operating machines, equipment, and vehicles

The employer is obliged to create conditions for a safe, non-hazardous, and health-protecting working environment through appropriate OHS organization and by implementing risk prevention measures under §102 of Act No. 262/2006 Coll., the Labour Code, as amended. The employer is obliged to identify risks, determine their causes and sources, and take measures to eliminate them. If risks cannot be eliminated, the employer must assess them and adopt measures to limit their impact so that threats to employees' health and safety are minimized.

The essence of these legal requirements is a thorough and systematic review of what could cause harm in the workplace, considering whether existing measures are sufficient. This assessment must be carried out with regard to all circumstances related to the work, to ensure that workplaces, machines, equipment, tools, materials, work equipment, procedures, and organization of work do not endanger occupational health and safety.

Hazard identification, risk assessment, and risk management shall be carried out:

- in case of an occupational injury or incident;
- when legal or other requirements change;
- in case of changes in the workplace (technology, work organization, etc.);
- in case of establishing a new workplace;
- on the recommendation of a qualified OHS specialist.



For successful identification and risk assessment, all necessary information must be gathered in advance, for example:

- legal and other requirements (legislation, standards, etc.);
- information on incidents and adverse events (e.g., accident records);
- results of OHS inspections within the assessed system;
- results of medical examinations;
- materials and information from institutions dealing with OHS;
- time studies of employee workload;
- results of occupational hygiene measurements;
- analyses of work activities;
- information on medical devices, technical equipment, and work tools used, including operating manuals;
 - technological and work procedures, etc.

If risks cannot be eliminated, the employer is obliged to evaluate them and adopt measures to limit their impact so as to minimize risks to employees' health and safety.

There are two options for removing or reducing risk:

- reduce system risks;
- eliminate inappropriate human behavior.

The basic principles of prevention include:

- hazard elimination;
- hazard reduction;
- hazard separation;
- exclusion of people from exposure to hazards;
- reduction of probability of hazard occurrence;
- hazard warning;
- training and education;
- etc.

Preventive measures may be:

- **technical** (e.g., replacement of equipment or machines, installation of ventilation systems);
- technological (e.g., substitution of toxic substances with non-toxic ones);
- health-oriented (preventive medical examinations, environmental monitoring);
- organizational (changes in working hours, work/rest schedule, job rotation).

If it is not possible to eliminate risk by preventive measures, personal protective equipment (PPE) must be provided in accordance with the procedure set out in the PPE Directive. All involved and agreed parties undertake to conduct training and inform all employees about possible risks in the workplace and corresponding measures, especially where employees of two or more employers are present.



Subsystem	Identification of risk		ri	men sk		Safety precautions
		P	rio N	usne H	R	
Road vehicles, mobile equipment and machinery	* hitting the worker with material and objects when opening the sidewalls and rear end; * injury to a worker by material falling from the bed (loading area) of the vehicle;	3	2	2	1	* stand sideways when opening the sidewalls so that the worker is not hit by falling material; * correct position sideways from the load;
Road vehicles, mobile equipment and machinery	* leg injury, etc. when descending and when jumping off the loading area of the vehicle, from the cab * falling from the vehicle or machinery when carrying out cleaning or maintenance in elevated places;		3	2	18	* to ascend and descend to the vehicle, use a ladder or other equivalent device (footrests, foot footings, hold on to handrails, etc.); * the use of suitable and safe structures, means and aids for increasing workplaces;
Road vehicles, mobile equipment and machinery	* Collision of a vehicle or machine with an obstacle, overturning of a vehicle	2	3	2	12	* the correct way of driving, adapting the speed to the circumstances and conditions on the construction site; * ensuring free passage;
Road vehicles, mobile equipment and machinery	* contact of a vehicle with a person, with another vehicle or a fixed obstacle - traffic accidents: - collision of vehicles (frontal, side, rear), - collision of a vehicle with an obstacle - overturning of a vehicle, - driving a vehicle off the road, - ramming, running over, catching, hitting and hitting a person by a vehicle, - imprinting or pressing a person by a vehicle to a part of a building or other solid structure;	2	3	2	12	* authorization to drive a vehicle (driving license of the appropriate group), driver training; * compliance with traffic rules, safety breaks, attention, reasonable speed, etc.; * do not stay behind a reversing vehicle and in the reversing path, look around before entering the road; • securing the parked vehicle against unwanted run-off; * adherence to the work regime;
Operation on in- house roads	* various injuries and injuries and material damage occurring on operated vehicles - accidents on the company's premises	3	3	2	18	*familiarization of the driver with the internal regulations for in-house transport (if elaborated) and with the instructions for operating the vehicle; * respect the relevant traffic signs (one-way traffic, right of way, maximum speed, etc.); * get acquainted with less common dimensions of a vehicle, cargo or transport routes;
Operation on in- house roads	* impressing or pressing a person by a vehicle against a part of the building or other solid structure or obstacle when entering confined spaces, gates, reversing, etc.; * injury to a person by spontaneous movement of the gate wings; * hitting a vehicle on a solid structure - damage to the vehicle;	2	3	2	12	* secure the door leaves in the required position; * keep a safety distance of 500 mm to the left and right; * use vehicle width indicators; * safety markings - black and yellow hatching of tapered edges up to the level of the seated driver's eyes; * when reversing, ensure that the vehicle is unmissable, exclude the presence of people behind the vehicle; 600 mm
Loading and unloading	* bumping, nailing, pinching your fingers to the storage surface; * Pinching the limb to surrounding objects, structures, vehicle sidewalls when lifting and placing loads	2	2	2	8	* if heavy objects are not secured against unwanted movement, do not step under them and do not put your hands under them * preferably use vehicles equipped with lifting tails, hydraulic jacks (arms) and other suitable handling equipment,



Loading and unloading	* Fall of a load, object, material during unloading and loading on a worker/person	2	3	2	6	* a suitable method of storing and fastening loads during transport, unloading from means of transport and when removing material, ensuring its stability; • secure the piece material during loading, unloading and other handling, if necessary, with appropriate aids and means that will prevent the material from slipping or falling or overturning; * workers involved in loading and unloading must not stay in the immediate vicinity of the lifted load, walk under the lifted load and hold the load during the operation of the handling equipment, * if heavy objects are not secured against unwanted movement, do not step under them and do not put their hands under them; * do not handle loads with means of transport after removing the fastening or anchoring of the loads; * the skids must not have a slope greater than 30° from the horizontal plane; Fasten the skids to the vehicle using hooks or other reliable fastening device
Loading and unloading	* Collapse of loads and fall when removing objects from the loading areas of vehicles and their fall on a person	2	3	2	12	* when opening the sidewalls and the rear sidewall, the opening worker must ensure that no one can be hit by them or by the loose load; * Heavy objects should not rest on the sides or the rear front, tall objects must be secured against loss of stability; * use appropriate means for suspending and gripping loads in such a way as to exclude or limit the loss of materials as much as possible; * loading operations to be carried out on ramps if possible;
Raised floors, platforms and roads	* Falling and falling of material, objects from the floor, platform, footbridge, steel grates and other elevated roads, structures and their parts	2	3	2	12	* Measures the free edges of the floors with a protective (trench) strip, a stopper with a height of at least 100 mm; * Protection of materials and objects against falling; • protection of the area under the workplace against the threat of falling objects (fencing, exclusion of entry of persons, guarding, etc.;
Raised floors, platforms and roads	• work and movement of workers on the roof, stepping on a damaged, unbearable part of the roof, movement of people near the eaves or other free edge of the roof resulting in falling from the roof or falling through the roof - unbearable roofing (e.g. corrugated asbestos-cement, sheet metal boards, etc.);	2	4	2	16	* ensuring safe movement on the roof (sufficient load-bearing capacity of the roof, railings); * determination of suitable anchoring points for the use of personal restraints (safety harnesses) * fall protection when working on unbearable roofing.
Outdoor Communications and Outdoor Areas	* slipping and falling of a person when walking on snow-covered, especially icy roads and in outdoor walkable areas;	2	3	2	12	cleaning and maintenance of outdoor paths in winter, removal of frost, snow, anti-slip grit (provided by own means) * ensuring sufficient electricity. lighting at night and in low visibility;
Outdoor Communications and Outdoor Areas	 tripping, sprainting the leg, bumping, getting caught in various obstacles and protruding elements in the areas of the 	2	2	2	8	* removal of communication obstacles that can be tripped over and raised hatches above floor level, as well as hoses and electricity. Cables; * ensuring sufficient electricity.



	paths;					lighting at night and in low visibility;
Outdoor Communications and Outdoor Areas	* fall of the handled load (handling unit) or its part * fall of the worker when removing material from the stack;	2	3	2	12	* do not reduce the stability of the stack, border; * secure the material against falling after removing fixing agents (wire, tape, foil, etc.) * do not lean material, objects, equipment, ladders, etc. on stacked handling units; * exclusion of the presence of persons in the zone of possible fall of loads handled by a crane, motor forklift, etc.; * use of a protective helmet in the premises of stacked handling units at a height of more than 2 m;
Manual handling	* a person falling while walking and carrying loads in storage areas, after tripping over an obstacle, slipping, stumbling, spraining a leg; * hand injuries after hitting the floor in a fall; • A worker hits and falls on a means of transport, on handling equipment, on stored objects;	2	2	2	8	* keep handling surfaces clean, flat (free of frost, mud, oil stains, holes, etc.), remove slippery surfaces in winter (removal of snow, frost, anti-slip grit); * maintain the floors of storage areas, aisles and roads in proper condition, repair damaged surfaces without delay; * flat, unbeaten and non-slippery surface of floors, roads, vehicle loading areas, handling areas, * Tidiness at the workplace, removal of protruding obstacles (e.g. protruding hatches, lids, mats, steps, thresholds, hoses, cables and movable electrical inlets, anchor bolts, etc.)
Manual handling	* a burden falling on a worker, hitting a worker by a falling load, a moving load; * Falling of stored and handled material on the worker, hitting the worker with material due to loss of stability of the stacked handling unit (stack, border) and piece material	2	2	2	8	* compliance with the prohibition to stay in the zone of possible undesirable movement of the load and under the load, in particular not to stay in the immediate vicinity of the lifted load; * compliance with the prohibition of disturbing the stability of stacks, e.g. pulling objects and elements from below or from the side of the stack; * compliance with the prohibition to climb and climb the borders, on piled material; * when moving loads by forklifts or other lifting handling equipment, exclude the presence of workers on the load and in the zone of its possible fall; not to move under a lifted load; * do not hold the load during handling work with a forklift; It is also necessary to respect international handling marks expressing the correct and safe way of handling, e.g.: "CENTER of GRAVITY"; "DO NOT USE HOOKS"; "PLACE OF SUSPENSION"; "WEIGHT STACKING LIMIT", "LIMIT ON THE NUMBER OF LAYERS IN A STACK"
Manual handling	* falling, overturning, sliding of piece material onto a person; * undesirable change in the position of the material (falling, collapse, displacement, tilting, rolling, etc. of piece material)	2	2	2	8	* ensuring a stable position of the material, placing it on a wider area; * securing the material with suitable aids that will prevent slipping or falling and overturning; * when manually storing piece material of regular shapes, store it only at shoulder or head height (max. height of 2 m), while ensuring its stability by intertwining; * securing piece material with washers, stops, supports, stands, wedges, intertwining, especially material stored upright, on narrower edges, pipes, pipes, bundles and discs, etc. The aids must be easy to grip, adjusted, adjusted



						according to the weight of the load, or according to its shape and size
Manual handling during storage	* tripping, spraining of the leg, hand injuries when slipping, stumbling; • A worker hits and falls on a means of transport, on handling equipment, on stored objects;	2	2	2	8	* Flat, unbeaten and non-slippery surfaces of floors, roads, vehicle loading areas, handling areas, • Tidiness in the workplace, removal of protruding obstacles (e.g. protruding hatches, lids, mats, steps, thresholds, hoses, cables and movable electrical connections, anchor bolts, etc.)
Forklift trucks	* A burden falls on the driver of the Ministry of the Interior	2	3	3	18	* Smooth trolley start-up; * No stopping by impact or sudden braking; * Height of handled loads up to 1.5 m; * Transported handling units must be stable, secured against collapse;
Forklift trucks	* A load (pallets and other handling units) falls from the forks and hits a person in the vicinity of the truck due to incorrect placement and arrangement of the handling unit and organisational deficiencies	3	3	3	27	* Require the driver to comply with the prohibition to leave the truck if the load is lifted; * Stack pallets evenly so that they evenly load both sides of the MV; * Observe the prohibition of stacking handling units with dirty (muddy, frost, etc.) support surface and with dirty contact points; * Observe the prohibition of staying under the load lifted on the forks of the trolley; * Vertical boundary of the stacked handling unit with min. deviation from the vertical (max. 2%);
Forklift trucks	* running over a person with a wheelchair, running over a moving wheelchair with their legs, endangering a person with movement and working activities of the wheelchair	2	3	2	12	*Driver concentration, monitoring of surrounding traffic, reasonable speed. *The loads carried must not obstruct the driver's view. *Exclusion of the presence of persons in the path of the truck, especially when reversing. *The trolley must be kept clean to secure loose or damaged parts.
Forklift trucks	Tipping over the truck (after loss of stability) injury to the driver or another person	2	4	2	16	*Inspection of the vehicle before it leaves, routine maintenance + reporting of any repair requirements to the supervisor, among other things, the truck must be provided with a label and load capacity diagram, *When handling the load, do not exceed the load capacity of the forklift, place the load correctly, evenly, *Proper technical condition must be maintained *When the truck is parked, the load scoop must be fully lowered, the controls must be put in neutral, the parking brake must be braked and the truck must be secured against any unauthorized use (the driver must not leave the truck without securing it against misuse by an unauthorized employee) *For the truck, the load must be placed in accordance with the load diagram. *The truck must be provided with legible labels with symbols corresponding to the operating functions and hazard symbols. The warning coatings of the trolley must be renewed in good time.



Forklift trucks	A load falls from a height and hits	2	4	2	16	*Correct adjustment of fork spacing according
	a person in the vicinity of the truck due to improper handling of loads					to the width of the pallet. *The fork does not hit any parts of the material when inserting. *When storing, loading and unloading materials, fork overhang over external dimensions is not allowed.
Forklift trucks	*Driver falls when getting off the wheelchair	1	2	2	4	*Using footpegs, holding on to the canopy frame. *Compliance with the ban on jumping off the wheelchair.
Trolley crash	Head-on collision with a vehicle or person Collision of the trolley with a stored object Overloading the MV Lack of concentration, looking back Excessive speed Inappropriately stored material. Incorrect estimation of the height or width of the trolley. Loss of stability – overturning of the MV Failure to give way when leaving the warehouse Failure to secure the truck against spontaneous starting.	2	4	3	24	*Regular technical inspections. *Keeping roads in working order. *Follow the manufacturer's instructions. *Compliance with load diagram values. *Correct load distribution. *Ensuring sufficient visibility. *Securing and securing the material. *Sufficient training for MV drivers. *Adaptation of operation to weather conditions or influences. *Securing the truck against spontaneous starting. *Slow starting and careful turning of the truck. *No smoking while driving.
Manual handling - transport by hand trucks	Falling and overturning of vehicles when hitting an unbearable hatch or bridges;	1	2	2	4	* manhole covers of canals, shafts and other depressions sufficiently load-bearing; * the load capacity of the levelling bridges corresponds to the load being operated, their upper surface is rough;
Hand trucks - horizontal transport	* overloading and straining of the worker when transporting material with a wheelbarrow	1	2	2	4	* the heaviest load should be placed on the truck bed as close as possible to the travel wheel; * the wheel must be lifted and placed in a squatting position with the strength of the lower limbs with a slightly inclined torso and a straight upright spine; The use of manual non-motorized trucks is considered to be part of manual load handling, with manual trucks including all trucks with manual travel, regardless of the fact that forklifts may also have motorized lift in this case. If the trolley will be moving on uneven terrain, it is recommended to use inflatable tires. For smooth, flat and sufficiently load-bearing floors, roads, hard hoops are preferable. The quality and appropriate technical condition of floors and roads is a prerequisite for the safe operation of all types of trucks.
Hand trucks - horizontal transport	* pushing a person with a trolley or drawbar to walls, columns, door frames and other fixed obstacles and objects that narrow the passage profile of the road; * nailing hands and other parts of the body to fixed obstacles;	1	2	2	4	* exclusion of spontaneous, unwanted movement of the wheelchair; * ensure free passage profiles, free roads and a good view of the road before the wheelchair starts driving; if necessary, arrange for an additional person to accompany them; * hold the wheelchair by the handle or handle or by the edge of the wheelchair so that your fingers do



						not exceed the width of the wheelchair; * use side hand protectors for truck-type trolleys in warehouses;
Hand trucks - horizontal transport	* slipping when setting the trolley in motion (the operator's feet get closer to the wheels of the trolley) * slipping and falling when pushing or pulling the trolley; (especially when transporting the trolley on a sloping floor, ramp), * running the leg over the wheels of the trolley;		2	2	8	* non-slippery roads, ramps; * unroofed operating areas must be drained; * belaying, braking the trolley when moving on an inclined surface by another worker; • the correct position of the worker to avoid running over the legs;
Hand trucks - horizontal transport	* Cargo fall (it is dangerous to transport a high load with the possibility of overturning and falling the load); * overturning of the trolley, including the load; * Collapse and fall of a load transported and lifted by a forklift hand truck; * collapse and fall of a load transported by a palletizing pallet truck ("pallet truck");	1	2	2	4	* when transporting unstable cargo (with a high centre of gravity), stabilize or fix the material or objects as necessary using wedges, fastening with ropes, chains, straps, or using a trolley with raised sidewalls so that the load does not collapse, shift or deform during transport; * correct distribution of the weight of the material on the trolley platform (loading part), to ensure good stability of the trolley, including the load, it is necessary to ensure that the common center of gravity is as low as possible (therefore, heavier objects must be placed lower and lighter objects on them); * do not exceed the load capacity of the trolley; * ensuring proper stability of the truck, including the load; * flat, solid and loadbearing running surface, removal of obstacles; * correctly and evenly inflated tires; * when the trolley is driving down the slope, the operator should be behind the trolley; • exclude the presence of persons in the immediate vicinity of the transported load, do not hold the load during its movement by the trolley; * do not handle a loaded trolley with loads after removing the load fastening; * do not use a palletizing trolley (the so-called pallet truck) for handling loads on an inclined plane, * do not carry out repairs and maintenance of the palletizing trolley of a loaded truck;
Storage racks	* Material falling from the rack cell and hitting the worker	1	2	2	4	* ensuring that the load is correctly placed on the rack floor (on a wider area, without overlapping over the front edge of the rack floor, etc.); * according to the need and type of material, fixation and securing of the material against falling; * ensuring the stability of each type of material placed in the rack;
Storage racks	* tripping, hitting a person with the rack structure and stored material	2	2	2	8	maintaining free access or access to racks so that the storage and removal of handling units and material is not obstructed; the width of the aisles between racks and stacks corresponds to the method of storing the material and is at least 0.8 m wide for manual operation; the width of the aisle for the passage of transport trolleys is at least 0,4



						m larger than the maximum width of the trolleys or loads;
Storage racks	* Rack collapse and fall	1	3	2	6	* Permanent stability of the rack (empty, partially filled and fully filled racks) is ensured; according to the design of the rack, its anchoring, winding, etc.; * not ensuring the stability of the rack by simply leaning against each other, or leaning against the structures; * after each relocation and repositioning of the rack at regular intervals, the racks are checked to ensure that they conform to the relevant documentation, joint stiffness, verticality and horizontality; * indication of the load capacity of the rack cells and the number of cells in the column (or the load capacity of the rack column); load capacity proven; * do not overload the racks; * load should be placed evenly in the rack cells, lighter in the higher cells, heavier in the lower ones, etc.); * it is forbidden to climb the shelf, enter and climb the shelf, (except in exceptional cases of repairs, etc.)
Hand tools	* cuts, stabs, lacerations, bruises, undesirable (general hazards for all types of tools);	3	1	2	6	* practice, skill, or training; use of the appropriate type, type, size of tools; * ensuring the possibility of choosing suitable tools; compliance with the prohibition of the use of damaged tools;
Hand tools	* eye injuries (!) flying off by shrapnel, small particle, fragment, burr, etc. (most often chisel + hammer);	3	4	1	12	* use of chisels, hammers, mallets, etc. tools without cracks and burrs; * use of PPE to protect eyesight;
Hand tools	* hitting the worker with a loose tool with a hammer, head, etc. from the handle;	2	2	2	8	* Do not use damaged tools (with a loose handle, deformed working part, etc.);
Hand tools	* cuts, stabbings, lacerations, especially of the hands, squeezing, bruising, bruises, bruises, bruises during blows, sliding the tool on the hand, when the tool slips, when breaking adjustable keys (wrenches);	3	2	2	12	* use of tools of suitable shape, type and size; * when working with cutting tools, guide (direct) the tool away from the worker's body; loosen the tightly tightened nut by turning the wrench towards you; * correct use of the tool (illegal use of the lever); * compliance with the ban on using a screwdriver as chisels, crowbars; compliance with the prohibition of using stretched and squeezed wrenches when loosening and tightening nuts;
Electrical equipment - electric shock. streaming	Electro hitting in the event of unintentional contact of workers with low and high voltage parts, including contact with the external electricity. Leadership	1	1	2	2	* comply with the prohibitions of activities in the protection zones of outdoor electricity. HV and HV lines; * work near electricity. the equipment should be carried out only in cooperation with an expert under specified conditions, including compliance with the minimum distances specified in the relevant regulations;
Mechanized tools - electric, pneumatic	* injuries caused by flying parts of processed materials when working with drills, chisels, etc. (electric and pneumatic); * injuries to the eyes and face by flying parts during the processing	2	2	2	8	* use goggles or face shields when working tasks where there is a risk of endangering the eyes (e.g. hammer drills when drilling in bricks or concrete); * use of glasses, or even the face. labels to protect the eyes or face from flying fragments, chips, small particles of



		_				
	of various materials with pneumatic and electric grinders, drills, chisels, etc.; (the most serious is the threat to the eyes by flying fragments, chips, small particles of ground and cut material and especially the grinding or cutting disc in grinders)					ground (cut) material and grinding or cutting wheels, especially in the case of grinders and circular saws for other tools, depending on the degree of danger;
Mechanized tools - electric, pneumatic	* dislocation and breaking of fingers, cut of the hand, etc. in case of "biting" (jamming) or cracking of the drill, when holding the workpiece in the hands;	3	2	2	12	* the operator must be prepared for the drill bit to jam during drilling, whether the drill is equipped with a safety clutch or not, and let go of the tool immediately; * the switch of the tool is perfectly fine so that it turns off immediately after removing the operator's hand from its button; * concentration when drilling, letting go of the drill when rotating it; * use an additional handle for some drills (pay attention to the reaction torque of the drill when the drills are blocked);
Mechanized tools - electric, pneumatic	* slipping out, machinery falling out. hand-held tools, slipping and slipping of the tool and injuries to the tool operator, especially the hands and front of the body (cuts, cuts and lacerations), breakage of the tool (drill), falling out of the tool;	3	2	2	12	* use the tool only for the work and purposes for which it is intended, and work with the tool with sensitivity and do not overload it, do not work with excessive force; * keep the handles dry and clean (protect from oil and grease); * reliably fasten the drill bit to the jaw chuck with a handle by tightening it properly in all three positions;
Mechanized tools - electric, pneumatic	* winding of clothing or its loose parts, hair, glove on a rotating tool (most often a drill in drills and rotating clamping parts of grinding, polishing, smoothing discs, etc. tools with rotating tools); * winding, winding the glove in contact with the rotating stirring propeller mounted on the el. Drill;	2	2	2		* suitable worker equipment without free-flowing parts; * do not work with gloves; * compliance with the ban on wearing loose clothing, wristwatches, etc., (it is dangerous to hold tools, especially drills, while working with gloves); • Making adjustments, cleaning, lubricating and repairs of the tool only when the tool is at rest; * compliance with the prohibition of carrying tools connected to the mains with a finger on the switch; * Observe the prohibition to stop the rotating spindle or drill by hand and remove chips and debris by hand;
Mechanized tools - electric, pneumatic	* Endangering the respiratory tract by fine dust, dusty airways, lung diseases. When working with tools for longer periods of time	2	2	2	8	* use a respirator when working with tools for processing material for a longer period of time; * use of protective devices, wet grinding according to the type of tool;
Mechanized tools - electric, pneumatic	* hitting various parts of the body with parts of a torn grinding or cutting wheel	2	3	2		* Correct fitting and fastening of the grinding tool; * use of a suitable grinding tool, do not use a damaged or excessively worn grinding wheel; * grinding wheel with a permissible speed greater than the maximum permissible speed indicated on the grinder label, * use the grinder in accordance with the purpose of use according to the instructions, do not overload the tool, do not stress the cutting disc for bending; * functional protective device of the grinding wheel; * protection of the grinding wheel from mechanical damage;



Crane runway	* insufficient bearing capacity of the soil for the foundations - slippage of the foundations, formation of deformations, cracks, cracks in the crane runway, crane fall, THU, SO	3	3	1	9	* thorough analysis of soil conditions; * geological survey;
Overhead cranes - construction	* material fatigue of the crane runway structure, fractures, cracking, damage to fasteners, change in span, crane falling off the track, rolling off the tracks	3	3	2	18	* regular inspections, revisions; * Compliance with steel repair deadlines. structures and coatings;
Overhead cranes - construction	* failure to mark sources of danger in access areas - catching the worker by moving parts (levers, handwheels, switches, rods, etc.) - winding, bumping, bruising the worker	3	3	2	18	* safety markings of moving components in accessible areas; * Setting up signaling, etc.
Overhead cranes - construction	* Electric shock current when a worker (moving on a crane runway) touches the electric conductor. Overhead contact line	3	3	2	18	* functional and marked main switches; * warning warnings, their observance; * functional and marked main switches; * warning warnings, their observance; * training of competent persons;
Overhead cranes - construction	* Lack of safety. Running wheel stools - breaking of the travel wheel, driving out, falling out of the crane runway, deformation of the runway, aggravation, blocking of traffic on the crane runway of the crane	3	4	1	12	* installation of safe stools of appropriate parameters; * regular inspection, removal of defects;
Overhead cranes - construction	* crane overload, emergency situation, rope breakage, load fall	3	4	1	12	* legible marking of the crane with load capacity,
Handling Lifting Accessory Loads	* damaged steel bindings, protruding binding rope wires, stabbing, lacerations of binders	3	3	2	18	* use of harmless bindings; * use of PPE to protect hands (gloves); * regular inspection of bindings; * discarding defective lashing devices;
Handling Lifting Accessory Loads	* defective, damaged, unmarked lashing devices - falling loads	3	3	2	18	* correct suspension or tying of the load; * the use of suitable bindings and other means to grip loads with an appropriate load capacity according to the type, properties and shape of the load; * use of harmless bindings, inspection by a binder before use; * regular inspection of bindings, their regular inspections by competent persons according to ČSN ISO 8792 (steel bindings), ČSN 27 0147 (straps), ČSN 27 0150 (textile binding ropes); * discarding defective lashing devices;
Handling Lifting Accessory Loads	* unknown, unmarked weight of loads and lifting accessories, overloading of cranes, crane runways, foundations, etc. damage to cranes, deformation of crane runways, deviation from the runways and fall of the crane, endangerment and impact of persons	3	3	2	18	* compliance with prohibited manipulations; * when lifting loads, add the weight of the loads and the weight of the accessories;
Crane operation	*Carrying out work on cranes, moving incompetent persons on the crane runway, endangering	3	3	2	18	* a verbal agreement on the decommissioning of the crane, if only this one crane is operated on the crane runway, if there is sufficient view



	workers by crane movements, catching, crushing, impacts and falls of people from a height					of the moving parts; • written permits for work on complex cranes, in the case of multiple cranes on a crane runway; * Crane safe operation system processing
Crane operation	* abandonment of the crane by the crane operator without securing, leaving the crane unattended, misuse of the crane by incompetent persons; occurrence of adverse events;	3	3	2	18	* Do not leave the crane with the crane switch switched on and the load suspended from the hook; * securing the crane according to the operating instructions; * switching off and locking the main switch in the switched off state;
Crane operation	* crane overload, load swinging; oblique pull; wrong conversion; disruption, damage to the structure; breaking the support ropes, hitting, squeezing the binder; the fall of the load;	3	3	2		• professional and medical competence of competent workers (crane operator, binder); * correct suspension or tying of a load of permissible weight; * the use of suitable bindings and other means to grip loads with an appropriate load capacity according to the type, properties and shape of the load; * have the lifting rope in an upright position before lifting the load; * correct performance of load reversal; * knowledge of the weight of the binding elements, knowledge of the weight of the load, its center of gravity; * exclusion of prohibited manipulations according to ČSN ISO 12 480-1; • observe the prohibition to delay suspended and settled loads and their parts in the area of possible fall (exclusion of the presence of persons in the zone of danger by kinetic or potential energy, i.e. under the load and in the places where the crane travels); • carrying out inspections;
Parking and parking areas	* various injuries and injuries and material damage occurring on operated vehicles – accidents;	2	2	3	12	* securing will transport units against spontaneous movement; • maintain right-hand traffic on the access and exit roads on the company premises; * increased caution and ensuring passability, especially in winter; • familiarizing the driver with the internal regulations for transport in the area (places for parking vehicles, securing them against spontaneous movement, etc.);
Ascents and descents	* Fall of the worker when ascending and descending to elevated places of work	2	3	1	6	* ensure safe access to work areas at height (ladders, staircases, ramps, etc.)



Two-wheel extension ladder ZD 12	* ladder falling, ladder falling to the side (after losing stability) with the resulting fall of the worker located on the ladder;	2	3	2	* modification, levelling or compaction of the terrain; * in the case of using the ladder on soft terrain, use pads under supports withplates, etc.; * the levelling of the side chassis (into the perpendicular position) by the balancer, checking by spirit level; securing the ladder with supports for the levelling of slight roughness of the base and excluding pealing of the ladder on tyres; * do not overload the ladder (see loading diagram); * on the ladder do not take actions that would develop side pressure on the top of the ladder, do not excessively tilt the centre of gravity outside the axis of the ladder; * do not move the ejected ladder and do not lift people or material, do not lift the ladder above persons; * do not use the ladder in a free space in the case of wind speed higher than 38km/hour(5 degree Bf); Prohibited handling: * lifting the ladder while extending; * continue extending or inserting, if the operator finds an irregularity in the function of the movable mechanisms so that the rope released the loop, node, was removed from the drum or pulleys, etc.; * lifting the ladder at a dangerous distance (in the protective zone) of outdoor electricity lines * lifting the ladder above people; * overloading the ladder above the permitted load-bearing capacity (see maneuvering diagram based on the ladder).
Two-wheel extension ladder ZD 12	* fall of a person from the ladder;	2	3	2	* correct procedure when moving up and down; in the case of tilting, hold with atleast one hand; * do not tilt to the sides; * if necessary, secure the end of the ladder with personal securing units;



Two-wheel extension ladder ZD 12	* hitting a limb between the rungs of the load-bearing and extensible part of the ladder in the event of rolling off the sliding part; * a person falling from the ladder during a failure of the stop units and undesired movement of the extendible part;	2	2	2	8	* before and after ejection of the extendible part, check the correct function of both arresters of the lifting equipment (especially in winter when hardened grease on the pin can cause the blocking of the arresters); * extend the ladder into the required position using the extension part so that the self-operated arresters fit on the cross parts of the load-bearing unit; * correct activity of the self-operated brake inside the lifting and extendible equipment (the brake is activated by the respective arresters in red); * correct tilting procedure (de-arresting of the arrester) according to themanual; * do not slip on the ladder in the case of failure of movable mechanisms, when creating a knot on the rope, removing from the drum or the pulley, etc.; * 1 x half-year, test the function of the self-operated arresters during the slipping out and stopping on each rung, including the opening of the affection of the brake, checking ropes; * 1 x per year test of the strength of the ladder; * undertake repairs professionally;
Single and double ladders	* fall from the ladder by a worker after the loss of stability when using ladders at work;	3	3	2	18	* undertake repairs professionally; * use ladders only for short time, physically undemanding work when using simpletools; * when moving up and down and working on the ladder, the worker must face the ladder and at all times must have the availability of safe catching and reliable support; * loads with the weight up to 15 kg can be carried on the ladder, unless statedotherwise by special regulations; * ladders used for moving up and downmust exceed at the end the fit or enter a platform by a minimum of 1.4 m and this excess can be replaced by solid handles or another solid part of the construction at which the moving person may reliably hold on to; * the declination of the ladder must not be lower than 2.5: 1, behind the rungs there must be a minimum space of 0.18 m and at the foot of the ladder for access there must be a free space of at least 0.6m; * the ladder must be positioned so it is stable during the whole period of use; * a portable ladder must be positioned on a stable, firm, sufficiently large, unmovable base so that the rungs are horizontal. The suspended ladder must be fixed and safely secured against movement and swinging unless it is a rope ladder. A rope ladder may only be used for moving up and down;



Directive VOS16_OHS risks
* a worker may only work on a ladder at a safe distance from the upper end; for a supporting ladder, the distance is considered to be a minimum of 0.8 m, for double
ladders a minimum of 0.5 m from its upper end:
* when working on the ladder, in the case where a worker stands on feet at a height of
more than 5 m, the worker must be secured by personal working equipment;
* the employee ensures that the ladders are inspected in accordance with the user manual;
* working from a wooden double ladder (painting work) must only be done by
trained employees, if positioned on the platform and there is no risk to the stability of the ladder;
* a visual inspection must be conducted before each use of the ladder, (by the employee responsible for maintaining
ladders); * regular inspections, no overloading of
ladders, correct storage of wooden and metal ladders;
* the upper end must be reliably supported by the upper side parts or by fixing the
ladder to the stable construction; * when working on the ladder, in cases
where a worker stands on the rungs at a height greater than 5 m, the worker must be
secured against falls by personal protective working equipment;
* the suspending ladder must be safely secured and with the exception of rope
ladders, must be secured against movement or swinging;
* rope ladders may only be used for moving up and down;
* in the case of portable ladders, sliding must be prevented by securing the sides at
the upper and lower ends with anti-sliding units or other measures with therespective
efficiency * folding and ejecting ladders must be used so that individual parts are secured against
movement; * before starting work, portable ladders must
be secured against movement; * portable wooden ladders with a length
greater than 12 m must not be used; Prohibited handling when working on the
ladder: * use of hazardous or other tools, e.g.
portable chainsaws, manual pneumatic tools; * use of damaged ladders;
* it is not permitted to move up and down on the ladder or to work on it with more than one person:

one person;

* the ladder must not be used as a passable



						bridge with the exception of cases where it is designated by the manufacturer for such use. * to tilt on the ladder (i.e. deviate the centre of gravity of the body) outside the axis of the ladder, * to carry up and down any load with a weight above 15 kg; * to work on a single ladder with the distance of feet lower than 0.8 m from the end and on a double ladder lower than 0.5 m from the end; * to climb a ladder with damaged and incorrect shoes, with long shoelaces, etc.; * to not dangerously tilt the ladder to the sides and to work near the upper end of the ladder; * not to use portable ladders with a length greater than 12 m;
Simple and double ladders	* fall of a person from the ladder when moving up and down; * fall of an employee from the ladder due to excessive deviation from the ladder, or positioning of the ladder on an uneven base and support, during overloading and non-proportional loading of the ladder;	3	3	2	18	* use ladders only for short periods and for physically undemanding work when using simple tools; * when moving up and down and working on the ladder, the worker must face the ladder and must be able to hold it safely with reliable support; * it is possible to carry on the ladder, loads with the weight up to 15 kg, unless special regulations do not stateotherwise; * ladders used for moving up and downmust exceed by the end and fit or enter the platform by a minimum of 1.4 m and this excess can be replaced by solid handles or another solid part of the construction at which the person moving can reliably hold; * the declination of the ladder must not be lower than 2.5: 1, behind the rungs there must be a minimum space of 0.18 m and at the foot of the ladder for access there must be a free space or at least 0.6 m; * the ladder must be positioned so it is stable throughout the whole period of its use; * a portable ladder must be located on a stable, firm, sufficiently large, unmovable base so that the rungs are horizontal. A suspended ladder must be safely secured against movement and swinging with the exception of rope ladders. A rope ladder must only be used for moving up anddown; * a worker may only work on a ladder at a safe distance from the upper end; for the supporting ladder, the distance is considered to be a minimum of 0.8 m; for double ladders a minimum of 0.5 m from the upper end; * when working on the ladder, in the case where a worker stands on the rungs at a height greater than 5 m, the worker must be secured by personal working equipment;



	* the employee must inspect the ladders in
	accordance with the user manual;
	* only trained employees may work on a
	wooden double ladder (painting work) if any
	movement on the platform and the risk of
	loss of stability of the ladder is excluded;
	* the ladder must be inspected before each
	use of the ladders (conducted by the
	employee responsible for maintaining
	ladders);
	* regular inspections, not overloading of
	ladders, correct storage of wooden and metal
	ladders;
	* the upper end must be reliably supported
	by the upper side parts or the ladder must be
	secured to a stable construction;
	* when working on a ladder, in cases where
	a worker stands on the rungs at a height
	greater than 5 m, the worker must be secured
	against falling by personal protective
	working equipment;
	* the suspending ladder must be safe secured
	and with the exception of rope ladders must
	be secured against movement orswinging;
	* a rope ladder must only be used for
	moving up and down;
	* in the case of portable ladders, sliding
	must be prevented by securing the sides at
	the upper and lower end using anti-sliding
	units or other measures with therespective
	efficiency
	* folding and ejecting ladders must be used
	so that individual parts are secured against
	movement;
	* before starting work, portable ladders must
	be secured against movement;
	* portable wooden ladders longer than 12m
	may not be used;
	Prohibited handling when working on the
	ladder:
	* use of hazardous tools or other tools, e.g.
	portable chainsaws, manual pneumatic tools;
	* use of damaged ladders;
	* it is not permitted to move up and down on
	the ladder or to work on it by more than one
	person;
	* the ladder must not be used as passable
	bridge with the exception of cases when it is
	designated by the manufacturer for suchuse.
	* to tilt on the ladder (i.e. deviate the centre
	of gravity of the body) outside the axis of the
	ladder,
	* to carry up and down any load with a
	weight above 15 kg;
	* to work on a single ladder with the
	distance of the rungs less than 0.8 m from
	the end and on a double ladder less than 0.5
	m from its end;
	* to climb on a ladder with damaged and
	incorrect shoes, with long shoelaces, etc.;



						* to keep the prohibition of dangerous tilting from the ladder to the sides and to work near the upper end of the ladder where there is reduced stability of the ladder; * not to use portable ladders longer than 12 m;
Single and double ladders	* greater demands for securing the stability of aluminium ladders with low weight (greater demands for safe use than wooden ladders);	4	3	2	24	* use ladders only for short time, and for physically undemanding work when using simple tools; * when moving up and down and working on a ladder, the worker must face the ladder and must always be able to safely hold with reliable support; * loads weighing up to 15 kg can be carried on the ladder unless special regulations do not state otherwise; * ladders used for moving up and down must exceed at the end, or when entering a platform, a minimum of 1.4m and this excess can be replaced by solid handles or another solid part of the construction that the moving person may reliably hold; * the declination of the ladder must not be lower than 2.5: 1, behind the rungs there must be a minimum space of 0.18 m and at the foot of the ladder for access there must be a free space or at least 0.6m; * the ladder must be located so it is stable throughout the whole period of its use; * a portable ladder must be positioned on a stable, solid sufficiently large, unmovable base so that the rungs are horizontal. The suspended ladder must be securely fixed and secured against movement and swinging with the exception of rope ladders. A rope ladder must only be used for moving up and down; * a worker may only work on a ladder at a safe distance from the upper end; for a supporting ladder, the distance is considered to be a minimum of 0.8 m, for double ladders a minimum of 0.5 m from its upper end; * when working on the ladder, when the worker stands on a rung at a heightgreater than 5 m, the worker must be secured by personal working equipment; * the employee must conduct inspections of ladders in accordance with the user manual; * working on a wooden double ladder (painting work) must only be done by trained employees and if moving on the platform, the risk of loss of stability of the ladder is excluded; * before each use of a ladder, it must be visually inspected (conduct by the employee maintaining ladders); * regular inspections, not overloading of ladders, correct storage of wooden and metal ladders;



						* the upper end must be reliably supported by the upper side parts or the ladder secured to a stable construction; * when working on a ladder, in cases where a worker stands on a rung higher than 5 m, the worker must be secured against falling by personal protective working equipment; * the suspending ladder must be safely secured and with the exception of rope ladders must be secured against movement or swinging; * the rope ladder must only be used for moving up and down; * in the case of portable ladders, sliding must be prevented by securing the sides at the upper and lower end by the use of antisliding units or other measures with the respective efficiency * folding and ejecting ladders must be used so that individual parts are secured against movement; * before starting work, portable ladders must be secured against movement; * portable wooden ladders longer than 12 m must not be used; Prohibited manipulations when working on a ladder: * use of hazardous tools or other tools, e.g. portable chainsaws, manual pneumatic tools; * use of damaged ladders; * it is not permitted to move up and down on a ladder or work on it by more than one person; * the ladder must not be used as a passable bridge with the exception of cases where it is designated by the manufacturer for suchuse. * to tilt on the ladder (i.e. deviate the centre of the gravity of the body) outside the axisof the ladder, * to carry up and down the load with the weight above 15 kg; * to work on a single ladder with the distance of the feet less than 0.8 m from its end and on a double ladder lower than 0.5 m from its end; * to climb on a ladder with damaged or improper shoes, with long shoelaces, etc.; * to keep the prohibition of dangerous tilting from the ladder to the sides and to work near the upper end of the ladder; * to climb on a ladder where there is reduced the stability of the ladder; * to to use portable ladders longer than 12 m;
_	* overturning of the ladder by another person, impact on the ladder by a passing vehicle, etc.;	2	3	2	12	* ensure fencing of the area around the foot of the ladder; * safety marking of the ladder (with redwhite colour, targets, etc.);
ladders	* cracking, breaking the rungs of wooden ladders by the subsequent fall of a worker;	3	3	2	18	* keep ladders in the correct technical condition; * remove damaged ladders from the



						workplace; * do not use damaged ladders; * do not work one above the other and do not move up or down on the ladder with more than one person at the sametime; * do not carry on the ladder any loads with a weight above 15 kg, * before using the ladder, visually inspect the ladder (by the employee using the ladder); * regularly check that there is no overloading of the ladder, correctly store wooden ladders;
Double ladders	* moving off the sideboards and falling off a double ladder;	1	1	2	2	* measure for double ladders concerning securing chains, with draw bars, etc. against opening; * use ladders only for short-term, physically undemanding work when using simpletools; * when moving up and down and working on the ladder, the employee must face the ladder and must always have the possibility to firmly hold the ladder and have reliable support; * it is permitted to carry up and down the ladder only loads weighing up to 15 kg, if special legal regulations do not state otherwise; * ladders used for moving up and down must exceed at the end the exit (entrance) platform by at least 1.1 m, and this excess can be replaced by solid handles or another solid part of the construction that the worker can reliably hold when moving upward or downward; * the declination of the ladder must not be less than 2.5: 1, behind the rungs theremust be a minimum space of 0.18 m and at the foot of the ladder for access there must be a free space of at least 0.6 m; * the ladder must be positioned so it is stable during the whole period of itsuse; * portable ladders must be positioned on a stable, solid, sufficiently large, unmovable base so that the rungs are horizontal. The suspended ladder must be safely secured against movement and swinging with the exception of rope ladders. A rope ladder must only be used for moving up anddown; * on a ladder, a worker may only work at a safe distance from the upper end, for the supporting ladder the distance is considered to be a minimum of 0.8 m, for double ladders a minimum of 0.8 m, for double ladders a minimum of 0.5 m from the upper end; * when working on a ladder, when a worker stands on a rung higher than 5 m, theworker must be secured by personal working equipment; * the employee ensures the inspections of



		the ladders in accordance with the user
		manual;
		* only trained employees may climb on a
		wooden double ladder (for painting work)
		provided the ladders are moved on to a
		platform and the ladder is stable;
		* before each use of the ladder, it must be
		visually inspected (conducted by the
		employee maintaining ladders);
		* regular inspections, no overloading of
		ladders, correct storage of wooden and metal
		ladders;
		* the upper end must be reliably supported
		by the upper side parts or the ladder secured
		to a stable construction;
		* when working on a ladder, in cases where
		the worker stands on a rung higher than 5 m,
		the worker must be secured against falling
		by personal protective working equipment;
		* the suspended ladder must be safely
		secured against movement orswinging;
		* rope ladders may only be used for moving
		up and down;
		* in the case of portable ladders, sliding
		must be prevented by securing the sides at
		the upper and lower end by the use of anti-
		sliding units or other measures with the
		respective efficiency
		* folding and ejecting ladders must be used
		so that individual parts are secured against
		movement;
		* before starting work, portable ladders must
		be secured against movement;
		* portable wooden ladders longer than 12 m
		must not be used;
		Prohibited handling when working on a
		ladder:
		* use of hazardous tools or other tools, e.g.
		portable chainsaws, manual pneumatictools;
		* use of damaged ladders;
		* it is not permitted to move up and down on
		the ladder or for more than one person to
		work on it;
		* the ladder must not be used as a passable
		bridge except when it is designated by the
		manufacturer for such use.
		* to tilt on the ladder (i.e. deviate the centre
		of gravity of the body) outside the axis of the
		ladder,
		* to carry up and down any load weighing
		over 15 kg;
		* to work on a single ladder with the
		distance of the feet less than 0.8 m from the
		end and on the double ladder less than 0.5 m
		from the end;
		* to climb on the ladder with damaged and
		improper shoes, with long shoelaces, etc.;
		* to keep the prohibition of dangerous tilting
		from the ladder to the sides and to work near
		the upper end of the ladder where there is
		apper one of the ladder where there is
		II.



						reduced stability of the ladder; * not to use portable ladders longer than 12 m;
Double ladders	under-running double ladder, fall by worker	1	1	2	2	* do not support a double ladder, do not use this ladder as a supporting ladder;
Work and movement of workers at heights and above free depth	* fall of a worker from height - from free unsecured edges of constructions, etc.; * during inspection of equipment; * work and movement of persons on scaffolding; * when taking loads transported by electric winch, crane on unsecured floors; * during the work and movement near freely unsecured holes in peripheral walls (balcony doors, loggia), at stair landings and shoulders, elevator shafts, holes and penetrations in the floors with the size of 25 cm (e.g. for vertical pipes, gaps between floor components) * when climbing and exiting the construction elements of the structure, in the construction of scaffolding;	3	4	2	24	* creation of conditions for ensuring occupational safety on roofs within the supplier documentation - especially preparation or determination of technological or the working procedure; * equipping the construction for working at heights and increasing the workplace (scaffolding, ladders, material, inventory parts) and their sufficient load-bearing capacity, strength and stability; * regular securing of all free edges of the construction where the difference in heights is greater than 1.5 m by one of the following alternatives: a) collective securing - i.e. protective or catching constructions, railings with arresters or another equivalent alternative, free edges of floors, unsecured walls of at least 60 cm high, holes in peripheral walls, lift shafts, free edges of stair arms and platforms, terraces, galleries, balconies, loggias, etc.) or b) personal security (mainly in the case of short-term work) or c) a combination of collective and personal securing; * prevention of access to places on roofs where there is no work designated and where the edges are not secured against falls; * production of technological procedure, including occupational health and safety when performing more demanding work at heights; if there is no personal securing it is necessary to create the conditions for the use of personal security equipment including specifying in advance the place of binding; (if a technological procedure is not produced, the places of binding /anchoring/ by personal securing is done by the responsible employee); * use of protective and catching constructions (e.g. scaffolding or another equivalent alternative), only when they were terminated, equipped (according to the respective documentation) and after putting into use; * prevention of access to places where there work is not designated and where the free edges are not secured against falls; * securing of workers at heights, where it is not possible to use collective personal securing equipment e.g. when taking loads transported by electric winch, crane on u



Work and movement of workers at heights and above free depth	* fall of employee when moving up and down on the floor and workplaces at heights;	3	4	2	24	* ensuring security equipment for exits to higher places in the construction (ladders, stairs, platforms); * requirement to use ladders for moving up and down on floors of scaffolding; * keeping the prohibition to jump from scaffolding and moving down on constructions;
Work and movement of workers at heights and above free depth	* fall from unstable constructions and fall of items not designated for work at height or exits at higher workplaces;	4	3	2	24	* equipping of the workplace with suitable items and equipment to increase the height of the work; * prohibition to use unstable and improper items for work and to increase the height of the work (boxes, packages, pallets, barrels, buckets, etc.);
Work and movement of workers at heights and above free depth	* falling through hazardous holes (shafts, gaps and passages in floors with the width above 25 cm);	3	3	2	18	* hazardous holes in floors must be secured by rails or caps with sufficient load-bearing capacity, the gap between the inside edge of the floors of the scaffolding and the adjacent object must not be greater than 25 cm; * holes must be gradually covered using the work procedure at heights; * covers must be secured with stringers or other protective elements against horizontal displacement; * caps must have a sufficient load-bearing capacity with respect to the expected loading;
Work and movement of workers at heights and above free depth	* falling of a person after the breaking, release, destruction of constructions, especially wooden constructions as a result of a defective status, overloading, etc.; * falling of a person after the breaking of wooden elements of auxiliary temporary floors and scaffolding, planks and supporting load-bearing prisms, etc.; * breaking of wooden load-bearing supporting elements of scaffolding or other auxiliary constructions due to the effects of the use of low-quality timber, especially excessive defects, when the scope (most frequently dimensions of visible knots, location and the status) exceeds the permitted tolerance and influences the mechanical property of the wood and reduces the strength of the wooden element when stressing for bending, etc.; * falling of a person during the movement or expending effort during a shift or turning the element of the auxiliary working floor, floor parts, caps, etc.;	2	4	2	16	* selection of appropriate and high-quality materials for load-bearing elements of auxiliary floors, excluding the use of excessively gnarled, rotten and otherwise defective wood (beams, planks); * all load-bearing wooden parts of auxiliary and permanent structures required must be professionally inspected before installation; * reliable securing of individual elements of floors and other temporary auxiliary structures against unwanted movement (fixation, etc.) and the proper and continuous casting of floor boards and individual elements of the scaffolding floor to the stop; * not overloading the floors or other constructions by material, concentration of more persons, etc. (weight of material, equipment, aids, tools, including the number of persons, must not exceed the permitted normative loading of the construction);



	LVEA					Directive VOS16_OHS risk
Work and movement of workers at heights and above free depth	* falling of items and material from height onto an employee with the risk of a head injury (brick, piece of material transported by crane); * falling of individual items from height; * accidental falling of material from the free edge of the scaffold floor, from the floor of the construction object;		3		12	* safe placement of material on the floor outside the edge; * material, tools and aids must be placed or stored at heights so they are secured against fall, sliding and blown by wind during the whole period of the placement, and also after termination; * keep the prohibition to suspend tools on parts of clothing, if it is not specially modified for this purpose or if theemployee does not use special equipment (belt with clamps, wallets, pickpockets, casesetc.) * securing free edges of floors against the fall of materials and items from freeedges; * establishment of catching roofs abovethe entrance into objects; * specification and fencing of the protective zone under the place of the work at heights excluding the work of persons positioned one above the other under the place of work at heights; * protection of areas under places of work on the roof against the threat from falling items, i.e.: a) specification and fencing of areas atrisk (railing minimum height 1.1 m with bars fixed on load-bearing columns with sufficient stability) b) excluding access of persons under workplaces on the roof, or; c) guarding of the areas atrisk; The protective zone specified by the area at risk with fencing must have the width from the edge of the workplace or the working floor a minimum of 1.5 metres for the work at heights from 3 m to 10 m inclusive, 2 m for the work at heights of 10 m to 20 m inclusive, 2.5 m for work at heights above 20 m to 30 m inclusive 1/10 of the height of the object for work above 30 m; * for vertical transport of the demolished debris, establish closed chutes;
		II	II .	II	II	



Steam and hot a construction pressure higher than 0.15 MPa and with the temperature of water exceeding the point of boiling at this pressure

- * damage to the boiler and water boilers with equipment, escape of steam, hot water, affection of pressure, threat from pressurised water and mechanical parts during destruction;
 - * affection of burnt gases (temperature, toxic admixtures); escape of gas (leaks from inlet) potential explosion with admixture with the air in the area of the boiler room);
- * ensuring proper maintenance of boilers, monitoring the activity of revision technicians;
 - * ensuring professionally qualified operators;
 - designation of an employee responsible for the operation of boilers;
 - * keeping regulations, instructions and removing defects;
 - * equipping employees with OOPP;
 - * introduction into operation of only boilers that were fully tested, have documentation and equipment, and the auxiliary devices and accessories correspond to the respective ČSN;
 - * monitoring of the status of the water in the boiler, its maximum permitted temperature;
 - * disconnection of boilers from operation in
 - loss of water in water marks also persisting after blowing the watermark and closing the steam supply;
 - if there is failure of both direct watermarks or all direct watermarks for steam boilers or steam boilers with multi-level evaporation;
 - in the case of the occurrence of cracks or leaks in the walls of the pressure unit, which even in the case of an increased supply, it is not possible to keep the lowest level of water in the boiler, or that could directly threaten the safety of people and the surroundings;
 - in the case of serious failure or unpermitted heating of the load-bearing construction of the boiler:
 - in the case of an explosion of unburnt gases in a fireplace, during which the pressure unit of the boiler could be damaged or need to be replaced;
 - during the occurrence of hazardous deformations on the walls of the pressure unit of the boiler:
 - in all cases where the status of the boiler equipment threatens the safety of people or the surroundings;
 - in cases when it is not possible to ensure the reliable operation of boilers;
 - in the case of exceeding the maximum permitted parameters (construction pressure, nominal temperature of the overheated steam) for a longer period than stated in the operating regulations;
 - if there are unusual statutes where the reasons cannot be identified and removed:
 - in cases stated by the manufacturer of the boiler (see ČSN 07 0710);
 - *conduct preventive and operating maintenance (operating revisions, internal revisions, leak tests, pressure rests);
 - * verify operation of the boilers only by professionally qualified stokers (stoker card issued by ITI);



Pressure tank	* damage to the tank (pressure bottle) and equipment, escape of flammable medium LPG from the bottle, risk of burning vapours LPG, potential explosion, contamination of soil and water; * explosion, fire, burning;	1	4	2	8	* protect underground tanks and underground parts of semi-flushing tanks against corrosion on the basis of asphalt substances or epoxy coating substances; cathodic protection is not necessary incases where tanks are insulated on the basis of epoxy and coating substances with a protective PE shell; * regular testing of security equipment; * regular testing, inspections, revisions according to the time schedule; * transport of tanks with gas only if: - the tank does not contain air and is hermetically sealed, - the flushed LPG must not contain explosive concentration, * the remainder of the liquid phase is less than 1.5 % of the tank volume; * operation of tanks by professionally qualified employees (instructed, examined,
Stable pressure bottles (maximum working overpressure higher than 0.07 MPa, containing gas, steam or corrosive poisonous and explosive liquids at any temperature or a liquid at a temperature exceeding boiling point at overpressure 0.07 MPa)	* damage to the bottle and equipment, escape of substance, risk of burning, potential explosion, burns; * destruction of the bottle, pressure wave, threat from mechanical parts - ejection, thrown into the air; * contamination of soil and water;	1	4	2	8	repeatedly after 4 years) according to operating rules; * use OOPP during the work; * commission into operation only bottles whose condition does not threaten the safety of people and property for which the stated construction and first pressure tests were conducted, initial revisions and the assessment of conformity and have stated operating documentation, have stated and complete equipment and accessories, including testing that the bottles are correctly placed; * conduct regular revisions and tests, cleaning and maintenance; * fulfilment of the obligations of the operator, i.e. - preparation of operating instructions, - appointment of responsible employee for operation of the bottles, - ensure necessary service andmaintenance, - ensure keeping of all regulations, instructions and orders, - equip employees with OOPP, - keep of exact records of bottles, any changes, - keep documentation, records on removing ascertained defects; * the operator of bottles must be older than 18, capable for the execution of the operation, familiarized and trained in the work of the operator;



Pressure tank (TNS) compressor air tank (air)	* destruction of the pressure unit TNS with the threatening of persons by dynamic effects of metal parts of the TNS by the affection of pressure;	1	4	2	8	* protect TNS during the operation against damage, not to intervene into the construction of the bottle or supports and feet; * do not place TNS directly on the shell, ensure the correct position and the stability TNS; * correct function of TNS equipment by suitable, correctly selected and placed fittings (pressure meter, safety valve) with the correct setting (according to the passport), permanent maintenance in the correct functional status, regular inspections of the safety valve and resetting of the pressure meter, regular sludge draining; * ensuring the accessibility for operators of safety valve closures, pressure meters; * not overloading the safety valve; * not replacing safety valves with pressure switches in cases where the pressure source is higher than the maximum, working TNS overpressure; * ensure preventive maintenance, regular TNS inspections and the functions of the equipment, regular revisions, maintenance of the documentation – TNS passport; * professional TNS repairs;
Pressure tank (TNS) compressor air tank (air)	injury by electric current;	3	3	2	18	* safe operation of electrical equipment, especially grounding by current or voltage protection, correct connection, coverage, status of conductors, etc.; (also see library "Electrical equipment - injury by electric current")



	1	II .			1	
Storage of bottles for the transport of gases	* risks arising from gas properties; * escape of flammable gas, explosion of mixture with air, fire, burns to people;	3	3	2	18	* if more than 4 bottles are in the closed warehouse(recalculated to bottles with the inside volume 50 l) to gases, which together represent explosive or hazardous mixture, store bottles separately with the sufficient ventilation; * to create separate sections in an open warehouse for the storage of these bottles that are as a minimum separated by partition walls from wire mesh, etc. for the storage of
						each type of gas bottle separately; * the floors of warehouses must be produced from fireproof and non-sparking materials; * on the doors of the warehouse a sign must be attached indicating the type of gas, the prohibition to smoke and enter with a naked flame, and the entrance of unauthorized persons; * in the warehouses where full and empty bottles are stored together, the bottles must be stored separately, places for the storage of
						bottles must be indicated: FULL BOTTLES and EMPTY BOTTLES; * near the warehouse there must not be any shafts, windows and entrances into cellars or other underground areas where gases heavier than air could penetrate, therefore making ventilation difficult; * in a warehouse with flammable and burning supporting gases, there must be suitable fire extinguishers at the entrance
						* in the warehouse and up to a minimum distance of 5 m from the storage of bottles do not place any flammable substances and do not work with a naked flame without a permit; * secure bottles in the warehouse in a suitable manner against falling over; * do not store bottles together with corrosives; * store empty bottles under the same
						conditions as full bottles, do not exceed the maximum number of bottles; * in the surroundings of the warehouses there must be special space (room or box) for OOPP, which depending on the character of gas, is first aid equipment, virulence liquidating substances, neutralizing equipment, and spare parts;



Handling bottles	* fall of bottle, impact and contusions on limbs while handling bottles;	3	3	2		* when handling bottles, proceedcarefully so as to prevent any falling and damage; * protect bottles against shock, falls, do not throw them; * use two men to carry bottles with the total weight greater than 50 kg (inclusive), it is recommended to use suitable aids and equipment modified for this purpose (holders, hand bonds, suspension trucks, etc.); * secure operating, reservoir and empty bottles in a suitable manner against falling, use chains, drifts, sleeves, stands, etc.;
Emptying of bottles, handling bottles	* undesired escape of gas from a bottle, valves when emptying bottles, handling bottles;	3	3	2	18	* check the status of the bottle before use within the scope of instructions for operation, in the case of a defect, return the bottle back to the filling unit with the indication of the type of defect; * handle the bottles with the utmost care; do not open the bottle valve by force (e.g. with a wrench); * do not speed up the emptying of bottles by heating with a naked flame; * do not connect to pressure valves units with damaged threads and nuts withother threads; * rooms and premises where reserve bottles are located must be ventilated according to fire and hygiene regulations in relation to the types of located gases; * do not place operating and reserve bottles in difficult to access premises; * start taking acetylene from the bottle only after at least one hour after transport to the workplace (this condition is not valid in the case that bottles are transported in the vertical position and are not positioned before use; * position the bottle when taking acetylene either in the vertical position or tilt with the valve upward at an angle of at least 30° from the horizontal area so that gas does not reach the acetone. Bottles with acetylene contain a dusan porous substance. In this mass is saturated acetone (one bottle contains approximately 6 kg C2H2) and therein under pressure dissolved acetylene as a complicated construction of the bottle so the gas properties require careful handling of the bottles. * after the use of the bottle, close the valve;



Emptying vessels, handling vessels	* undesired intervention by unauthorized persons, damage to vessel;	3	3	2	18	* attach the removable cap to the reserve bottles; * prepare local operating rules for the operation of pressure stations; * when handling bottles with toxic and corrosive gases, at least two medically fit workers must be present; * the pressure station must only beserviced by professionally qualifiedemployees; * do not repair and carry out maintenance of the bottles (this must only be done by an authorized company); * after termination of the work activity in temporary workplaces, place the vessels ina safe place protected against intervention by unauthorized persons; * do not place operating and reserve vessels in publicly accessible places; * do not leave vessels transported invehicles unsupervised in publicly accessible places;
Emptying vessels, handling vessels	* an explosion of the vessel or in the area for technical equipment into which the gas was supplied under pressure from the vessel (material - the shell faces stressing exceeding the strength yield of the sheet);	3	3	2	18	* check the status of the vessel before use by following the operating instructions. If a defect is identified, return the vessel back to the filling unit with the indication of the type of defect; * only connect equipment to the vesselthat has been tested and designated for this purpose; * discharge from the vessel into piping or stable vessels and equipment designed for lower overpressure only through a reduction valve designated and marked for the stated type of gas and set for the respective output over-pressure (the reduction valve is not required in cases when it is reliably and safely ensured that there will not be increased pressure in the piping, equipment or stable vessels, above the acceptable limit); * a low-pressure chamber in the reduction valve fitted with a functional pressure meter and safety equipment (a pressure meter for a reduction valve is not required in the case where a reduction valve is part of the pressure station and the pressure meter is installed on the piping in the pressure station), in the pressure station the high-pressure part must be fitted with a pressure meter (the safety equipment for the reduction valve is not required when the piping or the stable vessel into which the gas is discharged are fitted with safety equipment); * locate vessels into the heating bodies and radiant areas so that the surface temperature of the vessels does not exceed 50 °C; from sources of naked flame a minimum of 3 m; * inspection the temperature of the vessels



						according to the specific conditions; * in the case of fire in the vessel, immediately remove the vessels fromthe workplace, first the full vessels with flammable gases and cool them if heated above 50 °C; * mark the area where the vessels are located and do not place in one operating room a greater number of vessels than permitted by the ČSN standard;
Transport of bottles by vehicles	* risk resulting from the properties of the gas (gas escapes) and potential destruction of the bottle during transport;	3	3	2	18	* do not transport bottles together with caustics placed in broken packages (e.g. glass balloons), do not transportoxygen together with fatty substances (e.g. lubricants, fats, etc.); * do not transport bottles together with flammable liquids; * secure bottles on the vehicle against movement in all directions and against damage; * do not use for transport any unlabelled, unsprung or tilting vehicles andpassenger cars; * during transport, place the bottles so that the valves of all the bottles are on one side and are accessible; * only transport full and empty bottles with closed valves and screwed on protective caps (does not apply to transport of medical gases for medical devices in rescue and ambulances and for other special cases when, as a rule, it is necessary to take gas from the bottle); * before transporting bottles with toxic, corrosive and flammable gases except acetylene and hydrogen, each bottle valve connection must be by threaded locking nut; * during the transport of bottles with hazardous gases (including gases supporting burning) the load must be accompanied by a person with proven knowledge of the properties of the transported gas and who can handle bottles; * during the transport, they must have a sufficient number of blanks, respective sealing, necessary tools and personal protective working equipment in the case of an accident;
Metal mounted and operated piping	* rapid escape of working substance (liquid or gas) due to leaks in the piping and fittings; * burns according to the type of	1	4	2	8	* maintenance of safety equipment to prevent exceeding of the maximum working overpressure of the piping system or the failure of the safety equipment;



	work flowing substances endangering eyesight; * rapid escape of the working substance from piping or fittings exceeding the maximum working overpressure of the piping system; * accident to the piping due to destruction and deformation of supports, damage and corrosion of hinges, including sleeves on tubes and beams, fixation units, stands, bars, belts, chains and other equipment;					* preventive maintenance, timely removing of defects and failures on pipes and fittings (breaking of the piping as a consequence of freezing of the condensate, excessive corrosion, self release of piping from supports), removing of releases; * professional welds or joints, correct location and termination of fittings, valves, etc.; * correct placement of piping, removing deformations in the piping and in fittings or in the connected equipment (e.g. pumps) and prevention of undesirable influences of excessive cross forces and movements in the piping; * removing of excessive bending of the piping in systems that require drainage declination; * correct use of fittings and parts of pipes, in particular if the piping is loaded by impact loading from pulsations orvibrations; * maintenance of supports and prevention of deformations, damages, replacement of corrosive hinges, including sleeves on tubes and beams, fixation units, stands, bars, belts and other elements; * maintenance of fittings, cleaning, etc.; * specification of the area at risk while conducting tests and prevention of access by unauthorized persons into this area; * use of OOPP for the protection of the eyes and face;
Metal mounted and operated piping	* risk to employees mounting and repairing piping due to undesirable effects of escapes of water, steam and other working substances; * scalding, burning depending on the type of working substance, risk to the eyes;	1	4	2	8	* maintenance of safety equipment to prevent exceeding of the maximum working overpressure of the piping system or the failure of the safety equipment; * preventive maintenance, timely removing of defects and failures on the piping and fittings (piping breaking as a consequenceof freezing condensate, excessive corrosion, self-release of the piping from supports), removal of leaks; * professional welds or joints, correct location and termination of fittings, valves, etc.; * reliable closing of the respective fitting that closes the repaired section of thepiping before commencement of thework; * correct working procedures; * maintenance of fittings, regular cleaning, etc. * conducting priority pressure tests with liquid; * removing liquid before the use of gases at least before welding and handling in order to contain the minimum volume of gas; * specification of the area at risk when conducting tests and preventing access by unauthorized persons to this area; * use of OOPP for protection of the eyes and face



Metal mounted and operated piping	* injury to limbs during repairs to piping and fittings in narrow premises, improper positions and shafts; * fall from height or into depth s	1	4	2	8	* correct placement of piping, preventive maintenance; * correct working procedures; * use of correct tools, aids, assembly products; * ensuring safe access; * use of OOPP; * correct work procedures;
and operated piping	when handling control elements, fittings for the piping system;					* use of the correct tools, aids, assembly products; * for the above-mentioned control elements, to ensure safe access by ladders, platforms, stairs with platforms; * use of equipment for safe control of elements located at heights of more than 1.8 m - 2 m; * maintenance of fittings, regular turning, etc.;
Metal mounted and operated piping	* threat to persons by burning, burning by escaped substances (hot water, steam) due to incorrect termination of safety valves;	1	4	2	8	* maintenance of safe equipment toprevent the maximum working overpressure of the piping system or the failure of the safety equipment; * preventive maintenance; * correct termination of safety valves;
Hazardous substances	* hazardous contact with corrosives (acids and alkalis) irrespective of the type, temperature, concentration and the length of affection on the skin, eyes and mucous membrane (especially dangerous is contact with the eyes), affection by alkalis is more risky (necrosis - tissue is slushy) than acids (coagulation necrosis - variously colored eschar); * during explosion of steam, aerosols and gas - low concentrations in the air: burning in the nose, cold, burning in the throat, hoarseness, cough, choking, burning, conjunctivitis, tearing, redness of the skin - high concentrations in the air: laryngeal edema, shortness of breath, coughing, chest tightness and pain behind the breastbone, pulmonary edema with expectoration of blood to pink frothy sputum, danger of death,		1	2	2	General first aid principles First aid is a set of simple and effective measures designed to provide immediate help in the case of the sudden impairment of health. First aid also includes technical measures (disconnection of the electricity current, extrication, stopping the machine etc.). For effective first aid, the necessary resources and utilities must be present in the site - water, which is the most important means of interrupting exposure, and should be available in a sufficient volume. Furthermore, blankets or other textile materials to protect the affected person from cold and adjust the position of the affected person. Other aids are included in the first aid kit that must be in the site with hazardous chemicals and products and the content of which are governed by the type of material used in the work. There are the following principles for first aid principals in regard to poisoning: 1. CHECK THE VICTIM'S CONDITION It is necessary to take into account the importance of maintaining the vital functions of the affected person (respiration,



corneal damage, the skin is also blistered;

* In case of contact with the eves,

burns the tissues around the eyes, severe damage to the cornea (ulcers, perforations), can lead to blindness;

- * by affecting the skin depending on the concentration and length of action, there can be I to III degree burns, and with a slight disability there is a burning sensation and pain, the skin is red, slightly swollen and at higher concentrations there can be blisters on the reddened skin. High concentrations cause deep necrosis, extensive burns and can kill:
- * If swallowed burns the lips, mouth, pharynx, with congestion and swelling, the person vomits and has diarrhea, including blood, pain in the esophagus and stomach with the subsequent development of shock (overall slump forces, dyspnea, cyanosis - bluish skin discoloration clearly visible on the lips, earlobes and the fingertips, cold sweat condensation) that can result in death if the person survives the shock stage, a hazardous perforation of the digestive tract and subsequent inflammation of the pericardium or peritoneum, and especially scar narrowing of the esophagus and pylorus (part of the stomach)
- * inhalation of vapours solvents, hardeners, accelerators, initiators and other auxiliary chemicals, which during hardening of resins are evaporated, inhalation of corrosives:
- * inhalation of dust mixed with fillers arising from mixing, when handling loose substances - weighing, dosing, spreading;
- * damage to the skin when working with epoxy resins (affection of hardeners produced on the basis of ammonia);
- * contact with vapours on the hands, armpits, and face (e.g. as a result of noncontiguous

circulation, consciousness) due to the fact that during respiration and blood circulation, brain cells die within three to five minutes. If the victim does not have vital functions, it is necessary to proceed with an emergency revival:

- a) Unconsciousness when the victim does not respond to external stimuli, such as speech, firm touch, communication. Check that the person is breathing and that the heart is functioning. Check for breathing by observing chest movements, listening or attaching a mask to the nose and mouth (exhalation is evident on the mask from the exhaled air). The pulse is best checked on the large arteries, specifically the carotid artery. If the victim is unconscious but breathing and has a cardiac function, they should be placed in the recovery position: the lateral decubitus position, the head of the victim in a half-upright position, supported by hands under their head. This position enables to maintain a clear airway and prevents any aspiration of vomit into the lungs. The victim is to also be protected against hypothermia by covering and observing that there is no vomiting or shortness of breath.
- b) Not breathing a condition where there is no breathing or breathing is insufficient and there may also be cardiac arrest. For the victim who is not breathing, but has a preserved heart function artificial respiration is applied from the lungs into the lungs of the victim laying on their back on a hard surface, the rescuer bends the victims head backward to open the airways and sometimes this maneuver can lead to breathing being restored. The tilting of the head is performed so that the savior places his hand under the neck, puts the second hand on the forehead and slightly presses the head in backward direction and lifts the suffered person by hand which is under the

If this action is insufficient, open the lower jaw. After cleaning the mouth, remove vomit, dentures (handkerchief, finger), followed by the breathing into the lungs from the lungs, while maintaining the backward bend of the head with the fingers compressing the affected nostril. The rescuer takes a deep breath and exhales air into the mouth of the victim. Observe the chest, the lifting points for the entry of air into the lungs of the patient. The process is repeated 12 to 16 times per minute. Artificial respiration can be administered through



OOPP), reflected by the redness; these toxic fumes also cause secondary diseases which are generally slow to heal; * inhalation of vapours solvents or hardeners into the bronchi leads to damage of the respiratory system, and in the final phase permanent damage; in not so serious cases there is bronchial disease (smokers are less tolerant than nonsmokers); * allergic reactions due to the explosion of various substances:

* burns or explosions during the use of solvents, flammable liquids, reactive synthetic resins (flammable, similar to most solvents); * the most variable symptoms such as redness, rashes, as well as rhinitis, lacrimation, respiratory difficulties, according to specific substances resuscitation mask.

- c) During cardiac arrest, including blood circulation, provide indirect heart massage. The principle is the indirect compression of the myocardium thereby expelling the blood from the heart so that it presses on the sternum against the hard spine. The victim must lie on their back on a hard surface. The resuscitator crosses their arms outstretched and the elbows to apply pressure to the body through the wrist to the lower third of the sternum. The sternum must be compressed about 4-5 cm, for the desired effect and indirect heart massage should be carried out with a frequency of 60 to 80 compressions per minute.
- d) In the case of not breathing and also cardiac arrest as artificial breathing into the lungs is administered, and indirect heart massage methods described above. Withtwo rescuers / one performs an indirect cardiac massage and the second performs artificial respiration / ratio compressions / heart massage / for artificial respiration 5: 1, i.e. after the fifth chest compression one breath is made. When the rescuer makes only one, this ratio is 15: 3.

2. OBTAIN INFORMATION

In particular, it must be determined if there is poisoning or another life-threatening condition (epilepsy, diabetes with hyper or hypo-glycemic shock, high blood pressure, etc.).

In the case of poisoning, find out where the poisoning has occurred (home - alcohol, drugs, detergents), employment (what work was being done), whether it is ingestion, inhalation or skin contact, how large was the exposure, how much time has elapsed since exposure.

In any case, treatment must be administered. Regardless of the situation, calmly but firmly, do not to succumb to panic, avoid withholding any medicine, and also a large number of high doses of medication. Ensure material for analysis (vomit), note and inform a doctor of the interventions (drugs administered, etc.). If it is not possible to provide a doctor it is immediately necessary to transport the victim to a hospital with an escort capable of providing all necessary information.

3. INTERRUPT EXPOSURE

It is necessary to proceed according to the how the poisoning occurred and the condition of the victim:

a) affection of skin:

During the decontamination of corrosive



substances and easy skin absorption, protective gloves must be worn.

Quickly rinse the affected area, if possible with warm water (about 30 to 35°C) for 10 to 15 minutes, with strong alkalis for at least 1 hour!

Remove soaked clothing, watches, ornaments - in the case of corrosive substances, do this directly under a stream of water, do not extend contaminated clothing across the face, and make sure that no dirty water has affected those body parts that were uncontaminated.

In the case of contact with the lower limbs, take off shoes and socks and rinse the skin with water spray. After a thorough rinsing, wash with soap and shampoo for oily substances and substances soluble in fat (organic solvents) and again with water thoroughly. Only use a brush on the nails. Where appropriate, cut contaminated nails, hair (with corrosive and toxic substances), and thoroughly wash the toes, behind the ears and in the folds of the skin.

Mechanically remove solid particles (white

Mechanically remove solid particles (white phosphorus).

In the case of burns, overlap the affected area with a sterile dressing without using ointments.

Beware of hypothermia. Neutralization is not necessary or appropriate and may lead to skin damage through heat generation by chemical neutralization! Inactivate only in special cases.

b / contact with the eye:

The cornea is particularly sensitive to corrosive substances and organic solvents that can rapidly damage the surface and lead to opaque scars. It is necessary to act quickly to avoid serious damage.

Rinsing is done using plenty of water or saline, and in the direction from the inner corner to the outer corner of the eye (the water must not run into the second unaffected eye or to the mouth and nose). Perform eye irrigation for 10 to 15 minutes, never use any neutralizing solutions. For people with contact lenses, first remove the lens. If an affected person has squeezed tight eyelids, it is necessary to use a degree of force to open. Do not use neutralizer solutions that may damage the eye. Always send the victim to an ophthalmologist c / inhalation:

Help the victim to move from exposure into fresh air, pay attention to your own safety (artificial respiration). It is advisable to remove vapor soaked clothing, cut hair and nails if they could be a source for further absorption of the poison. For irritants, there



is a risk of pulmonary edema, and the victim must have complete rest; to protect them from the cold, sit half up so they can inhale oxygen. For persons significantly exposed to substances that are poorly soluble in water (nitrogen oxides, phosgene, ozone) and aliphatic hydrocarbons and oil products – observe for at least 24 hours. d / ingestion: In the case of an unconscious person do not give anything by mouth, do not induce vomiting, put the person into the recovery position and call a doctor. For corrosive substances, do not give anything by mouth. rinse the mouth with water or milk. If the affected person experiences relief and after drinking water or milk can consume a maximum of 1-2 dl these fluids, do not induce vomiting and immediately transport to a hospital. In most cases, serve charcoal ten times the amount to be eliminated, powder or crushed tablets mixed with 1-2 deciliters of water. Do not give activated charcoal after ingestion of caustic substances without the general toxic effect of substances that only bind a little - iron, cyanides, glycols, alcohols. Milk served during poisoning: divalent mercury salts, fluorides, oxalic acid and oxalates, iodine, copper sulphate. Never give milk: organic solvents, naphthalene, lipid-soluble substances (accelerates the absorption of toxic substances!) Induce vomiting in poison usually within two hours after ingestion, adding up to 10 crushed tablets of activated charcoal in apint of lukewarm water, or 5 teaspoons of salt. If necessary, irritate the soft palate with a finger or a soft object. For caustic poisoning, do not induce vomiting. Do not induce vomiting in the case of ingestion of small harmful substances, caustic ingestion of substances causing foam (detergents, surfactants), ingestion of substances with a risk of aspiration (petrol, diesel, kerosene), with a somnolent state (drowsiness to somnolence) - risk of

4. PROVISION OF URGENT TREATMENT

aspiration.

Administer to the victim the appropriate antidotes or substances to reduce the effects of the ingested substances; with organophosphates it is atropine, with cyanides it is amyl nitrate, with iodine it is starch - potato and such like, with hydrofluoric acid it is magnesium sulfate, with potassium permanganate it is



Pressure Test	* failure on the hydraulic and	3	3	2	18	manganese dioxide, Vitamin C with copper sulfate - creamed egg white, on barium and its compounds it is magnesium sulfate, for bromide it is sodium chloride, in ethylene glycol it is ethanol, in organic solvent it is paraffin oil and such like. Precautions: * Selection of personnel, medical examinations; * Competence, employees on the effectsand properties of substances; * Prevent direct skin contact withhazardous substances; * Allocation and use of OOPP for normal use in contact with corrosive chemicals such as rubber gloves, rubber apron, rubber boots, safety goggles, face shield, acid-resistant clothing, a mask with a filter against acid vapors and gases; * OOPP for use in emergency cases- corrosives chloroprene rubber gloves, rubber apron with neck guard, complete protective clothing, heavy breathing apparatus; * Use specific OOPP, special gloves and shoe covers, aprons, boots, etc., for example that are resistant to corrosive (acids, alkalis), thinners, solvents, petrochemical products; * eye protection if necessary, the whole face with OOPP (glasses, face shield), protection of breathing; * ensure ventilation, freshair; * in the case of allergic reactions, consult a doctor; according to experience it is the better over time to change the job position of the employee; * keep the principles of personal hygiene (do not eat, drink, smoke); * respect the signs and manufacturers' instructions on packaging and thepackaging of these substances, for example. "Do not inhale fumes", "Poisonous when inhaled," "Beware of skin contact," "Caution, flammable liquid" and other information (including safety data sheets, etc.); * clean escaped, poured, spilled substances; * train employees on the effects of the substances used; * supervision at work, proper control by managers; * control activities;
Center	pneumatic circuit; * damaged blood pressure monitor; * uncontrollable movement of the pressure plate, piston; * sagging of the ram, creation of a dangerous area;* poor information of the operator about the correct pressurization of the medium;	3	3	_		* preventive maintenance;* correct operation of the hydraulic and pneumatic circuit pressure gauge; * use of PPE; * timely replacement of sealing elements, hydraulic and pneumatic circuit sleeves;



	* leakage of the pressure medium;					
Pressure Test Center	* exceeding the specified pressures	3	3	2	18	* control activities; * proper functioning of safety valves;
Pressure Test Center	* exceeding the permissible position of the piston during stroke; * damage to the piston; lead screw;	3	3	2	18	* installation and proper functioning of bumpers, limit switches and similar safety features;
Pressure Test Center	* spontaneous movement of the horizontal piston (drive controlled from the central pressure station);	3	3	2	18	* installation of a mechanical stopper - pull- out pin, strut, etc. with a movable protective cover;
Pressure Test Center	* uncoordinated work procedure, injuries to the upper limbs - fingers; * injuries resulting from splashing of the pressure medium and the departure of small particles;	3	3	2	18	* operator training; • compliance with the Safety Instructions for Performing Pressure Tests;
Pressure Test Center	* fall of the test object	3	3	2	18	* the use of PPE, in particular helmets and protective footwear;
Pressure Test Center	* poorly clamped test object					* visual inspection of the fit of the sealing rings to the object;
Pressure Test Center	* Poor fastening of high- pressure hose quick couplings					* Checking the quick couplings before starting testing;
Pressure Test Center	* Electric shock by direct or indirect contact; * exposure of live parts, reduction of insulating properties, short circuit caused by a conductive object;	1	3	2	6	* preventive maintenance of electricity. equipment, inspection, debugging; * timely professional repairs of damaged electrical equipment (sockets, plugs, movable inlets, etc.); * do not operate the el. devices and equipment with wet hands; * Not using damaged movable inlets; prohibition of their routing over sharp edges, strain stress, etc.;
Engraving laser	Some lasers work at frequencies that are very well perceived by the eye. Since the laser is coherent and therefore the scattering is very small, the laser light can be focused on a very small area of the retina, causing the point to overheat and causing permanent damage to vision.	2	2	2	8	Use of PPE, special protective glasses that do not transmit laser wavelengths (broad spectrum)
Engraving laser	 Ignition of flammable materials Release of toxic gases Burns 	2	3	2	12	Work and follow the manufacturer's instructions. Use of PPE, protective clothing and footwear. Preventing exothermic reactions, heat generation and the possibility of burns and the release of toxic gases
Engraving laser Electrical Equipment	* Electric shock by direct or indirect contact; * exposing live parts, reducing insulating properties, short circuit caused by a conductive object;	1	3	2	6	* preventive maintenance of electricity. equipment, inspection, debugging; * timely professional repairs of damaged electrical equipment (sockets, plugs, movable inlets, etc.); * routing of movable feeders outside passages and roads; * gentle handling of



						cables and power cords; * do not operate the el. devices and equipment with wet hands; * familiarize yourself with the instructions for use; * visual inspection of the condition of the equipment before each use; * Do not leave the electricity on. devices and equipment after leaving the workplace and the end of the work shift; * operation and maintenance of electricity. appliances according to the instructions; * Not using damaged movable inlets; prohibition of their routing over sharp edges, strain stress, etc.; * inspections and inspections of electrical appliances
Refilling of operating fluids	* Affecting the eyes and other parts of the body; * ingestion of liquids;	2	2	2	8	* first aid in case of splashes and ingestion is indicated on the packaging of the products used; • labelling of hazardous substances in accordance with Act No. 157/98 Coll.; * do not eat, drink, smoke at work; * pay close attention to handling, especially when placing plastic canisters on a solid surface; * compliance with the data specified in the safety data sheets of hazardous substances; * use of appropriate PPE;
Refuelling	* flare-up of flammable liquid vapours; * inhalation of vapours;	2	2	2	8	* do not eat, drink or smoke when refuelling; * do not use a mobile phone; * do not inhale fumes; * Do not wear clothing that generates static electricity; * turn off the ignition and, if there is a parking heater in the vehicle, also the parking heater;
Gas station	Diesel fire Burns to persons, burning of property	2	2	2		No smoking and the use of open flames in the gas station area. Upon arrival at the filling point, switch off the engine and ignition of the motor vehicle. Secure the vehicle against movement. Obey the call of the gas station attendant. Follow the fire regulations of the gas station. Follow fire alarm guidelines Comply with MPBP Gas Stations
Washing ramp	* driving off the ramp of a vehicle braked by skidding	2	3	2	12	* adherence to the maximum slope of the ramp, * anti-slip modification of the ramp inclined part of the ramp, guide rail; * increased attention in winter (snow, frost);
Vehicle cleaning and washing services	* eye injuries, personal injuries when struck by a violent, strong stream of liquid	2	2	2		* spraying away from the area of presence of other people; * pay attention to the safe distance (distance) of persons - co-workers; * assume the reflection of the liquid stream from the surface of the cleaned vehicle and the correct position of the worker;
Vehicle cleaning and washing services	* endangering the skin, mucous membranes, respiratory tract by the action of concentrated cleaning agents;	2	2	3	12	* use of PPE; *respecting instructions for the use of hazardous substances;



Snow, icicles	* snow falls (slides) during melting from roof surfaces, mainly in winter * the fall of an icicle on employees during melting or tremors, etc.	3	3	2	18	* ensure continuous snow shedding * use PPE head (protective helmet)
Cleaning work in general	Risk - Eye Ingress, Splashing * Disinfectant, Other Chemical or Preparation, * Eye Injury When PPE Is Not Used, * Incorrect Dilution Procedure	1	2	2	4	* when diluting, always pour the chemical substance or product into a container with water - not the other way around * consistently use PPE (goggles, shield), * see further General part
Cleaning work in general	stairs, steps - falling on and off them * washed surface - space insufficient drying of the place, * improper organization of work	2	2	1	4	* wiping the surfaces of stair treads dry, * increased caution when entering a damp surface, * do not place buckets and other aids in the communication area to avoid tripping or falling over, * PPE - shoes with non-slip soles
Cleaning work in general	Risk - Strain on the muscles of the upper limb * Wringing rags when washing, * Wringing rags in workplaces where a mopping mop cannot be used	1	2	2	4	* use aids to facilitate work when cleaning, use e.g. mopping mops as much as possible,
Cleaning work in general	risk - neglect of the use of PPE, * non-use of assigned PPE, * use of inappropriate and ineffective PPE	1	2	2		* provide PPE on the basis of a list prepared in accordance with the identified risks, * familiarize all employees with the use of PPE, * PPE must be effective against the risks that occur (e.g. handling of a corrosive chemical substance, disinfectants, etc.), * PPE must correspond to the conditions at the workplace, physical prerequisites and respect the ergonomic requirements and health condition of employees, * systematic control of the use of PPE by managerial employees, * maintaining PPE in a usable state, * allocating the necessary PPE in the event of a change in work procedures and working conditions, * workplaces with additional biological agents: - prohibition of entry into PPE outside the defined workplaces, - store PPE in a designated place, separate from other clothing
Cleaning work in general	impact, tripping, falling * tripping over objects being carried, e.g. a bag of waste * carelessness, inattention, * rushing when there are no employees or tense situations	2	2	2	8	* Work organization, * Safe procedure when carrying objects (bags with waste, etc.), * Plastic packaging with waste should be dragged behind you,
Cleaning work in general	risk - windows, doors - cut on glass * cut on glass broken glass panel,	1	2	1	2	* transparent or translucent walls, partitions in rooms or near transport routes, doors and gates clearly marked at eye level, * especially visible markings of all-glass entrance door leaves in exposed places, * suitable type of glass with appropriate properties, especially strength, in exposed places, * timely glazing of broken and partially cracked glass panels, * windows, etc., if necessary in the open state, can be secured against spontaneous



						closing
Office work	* bumping into sharp edges of furniture corners, tables, cabinets, drawers, and equipment in office and storage rooms;	2	1	1	2	* the correct placement of office furniture and equipment; (min. passages 550 to 600 mm); * maintaining order; * Consistent closing of cabinet doors, inserting drawers of tables and cabinets,
Office work	* the fall of office equipment after losing its stability;	1	2	1	2	* Correct stable position of higher cabinets and offices. Furniture; * do not sit on the edges of tables and chairs; * do not get on chairs, especially on wheeled chairs;
Office work	* Injuries to the hand, fingers, punctures, cuts when working with office utensils (stapler, knife)	1	1	2	2	* proper handling of office supplies; * when stapling forms, do not insert your fingers into the jaws of the stapler; * when using razor blades for retouching, use razors in a covered holder,
Devices with display units	* eye fatigue - visual strain, visual impairment	2	2	1	4	* correct ergonomic placement and placement of furniture and computer; * use height-adjustable chairs with a folding backrest; * suitable placement of the monitor (distance between the screen and the eyes approx. 60 cm depending on its size); the height of the center of the monitor relative to the visual axis; * exclude light sources in the field of view (unwanted glare on the screen); * breaks at work after approx. 1 hour of continuous work with the computer (safety breaks at work to compensate for the forced working position and strain on the eyesight and during uninterrupted work with high repeatability of finger and hand movements);
Devices with display units	* resting the wrist and forearm on the edge of the table or keyboard for a long time (nerve compression)	2	2	1	4	* appropriate size, or adjustment of the desk, allowing suitable hand positions, breaks at work; ergonomic requirements for office work with display terminals
Skinning Packaging Machine TB-390	Professional incompetence of employees	2	2	3	122	* The machines may only be operated in writing by authorized employees, over 18 years of age, professionally competent. * Ensure quality training of employee before they start working independently with the machine. * Do not allow the equipment to be operated, repaired, inspected or revised by an employee without appropriate qualifications. * Familiarize employees with the instructions of the manufacturers of individual machines.
Skinning Packaging Machine TB-390	Failure to respect issued prohibitions, orders Burns	2	3	3	18	* Do not use the machine for any purpose other than that for which it is intended. * Do not overload the device beyond the values specified by the manufacturer. * Follow the manufacturer's instructions for operating the device. * Stay away from the danger zone (burns) the safe zone is reserved for the machinery
Skinning Packaging Machine TB-390	Using a damaged device	2	1	3	6	* If the smooth operation of the device i disturbed, the machine immediately shu



						down its operation. * If the machine malfunctions, the operator must stop the machine immediately. * Ensure timely inspections of electrical installations and equipment.
Skinning Packaging Machine TB-390	Machine Hazardous Area Employees operating the packaging machine and persons working and moving in the machine's hazardous area.	2	3	3	18	* Orient the machine in such a way that no personal injury can occur during its operation. * Before starting the machine, make sure that there is no other person in the danger area. * Display warning and safety signs.
Skinning Packaging Machine TB-390	Injuries during machine cleaning, maintenance, adjustment and repair Employees performing machine cleaning, maintenance, adjustment and repair	2	3	3	18	* Cleaning the machine must only be carried out at rest. * Adjustment and maintenance of the machine must be carried out according to the manufacturer's operating instructions * When repairing the machine, place the "DO NOT TURN ON – WORK ON THE DEVICE" table in a visible place (on the starting device). * Any work on electrical equipment may only be carried out by personnel with appropriate electrical qualifications.
Skinning Packaging Machine TB-390	Slip, trip, fall Employees operating the packaging machine and persons nearby are at risk of injury due to 1. leakage of fluid to roads or workplaces (e.g. lubricant, packaged product); 2. leakage of solid matter from machinery to communications or workplaces (e.g. packaging material, packaged product); - protruding parts of the machine, cables, pipes,	2	3	3	18	* Remove spilled liquids, spills immediately. * Use sump trays, keep these clean. * Protect dangerous places with a barrier, railing, warning paint indicating an obstacle, *Connect cables and pipes to the machine to avoid obstructions, or use protective strips.
Skinning Packaging Machine TB-390	Electric shock Employees operating the packaging machine are at risk of injury if liquids, e.g. spilled product or detergents (water), come into contact with electrical wires	2	3	3	18	* Disconnect the machine from the power source and dry the liquid. * Protection level for el. Equipment must be selected on the basis of the environment in which the machine will be used and the intended cleaning methods of the machine in its surroundings (e.g. cleaning without water).
Skinning Packaging Machine TB-390	Electrostatic discharge Employees operating a packaging machine are at risk of injury due to electrostatic discharge if machine parts or materials are electrostatically charged, e.g plastic guides that rub as the product passes through, plastic film unrolled from the roll.		2	3	12	*According to the manufacturer's instructions, sufficiently grounding the machine or provide a static removal device so that the electrostatic discharge does not lead to any injury.



Skinning Packaging Machine TB-390	Hot surfaces – burns Employees operating a packaging machine are at risk of injury due to contact with parts of the machine that have a high surface temperature.	2	2	3	12	* Minimise the risk of accidental contact, e.g. by isolating or securing against unintentional contact, and affix warning signs to warn of the risk of burns (outside the machine or near hot parts). * Stay away from the danger zone (burns), the safe zone is reserved for the machinery * If the risk of burns persists after all measures have been taken (residual risk), it is necessary to wear protective gloves or other suitable PPE against burns.
Skinning Packaging Machine TB-390	Fire, explosion Employees operating the packaging machine are at risk of injury due to fire or explosion, the danger is posed by, for example: - El. systems – ignition source in the presence of flammable substances or products; - electrostatic discharge in the presence of flammable substances or in an explosive atmosphere, - Wrapped hazardous material, e.g. flammable substances, explosives, dusty products, - Overheating of flammable packaging materials, e.g. plastic films and paper,		2	3	12	* Determine the method and place of storage and measures for the storage and handling of flammable substances. * According to the manufacturer's instructions, sufficiently ground the machine or provide a device for the removal of static electricity, so that the electrostatic discharge does not lead to the ignition of potentially explosive environments or flammable substances.
Skinning Packaging Machine TB-390	Neglect of ergonomic principles – fatigue, mental tension, injury from exertion Employees operating the packaging machine are at risk of injury or damage to health during operation, cleaning, maintenance, loading of packaging material, loading or unloading of products, moving the machine, as a result of –inappropriate working positions, – unnatural movements of the hands or arms, – the use of excessive effort, fatigue, poor lighting.		2	3	12	* Risks must be eliminated by the design of the machine. * Operate the machine according to the operating instructions, manufacturer's instructions. * Provide sufficient lighting at the workplace or supplement local lighting at the machine. * To ensure that all maintenance points are safely accessible, it must not be necessary to stand on parts of the machine that are not considered for access.
Heat gun	The nozzle reaches very high temperatures (often over 500 °C), there is a risk of skin burns and fire. The heated material may sizzle, releasing hot drops or pieces.	2	2	3	12	 Always use it in a well-ventilated area. Keep the work surface free of flammable materials (paper, rags, sawdust, thinners, paints) Have a fire extinguisher on hand (ideally a powder fire extinguisher)
Heat gun	- Flammable substances in the	2	2	3	12	- Wear heat-resistant safety goggles and



	environment (paper, textiles, sawdust, plastics) can easily ignite Inappropriate use near flammable gases or vapours may result in an explosion.					-	work gloves. Always use it in a well-ventilated area. Use a respirator if you are heating materials that can release harmful fumes (paints, plastics). Ensure appropriate clothing (no loose parts that could come into contact with the nozzle).
Heat gun	 When plastics, paints, varnishes or adhesives are heated, toxic fumes are produced, which can irritate the respiratory tract or be harmful to health in the long term. Prolonged exposure to heat can cause fatigue or overheating of the body. 	2	2	3	12		Always direct the flow of hot air away from the body and from other people. Do not place the hot gun on flammable surfaces – use a stand or storage pad. Never interfere with the nozzle until it has cooled down. Use a respirator
Heat gun	 Holding it in your hand for a long time can cause wrist fatigue. Improper handling may lead to the hot air stream slipping into an unwanted location. 	2	2	3	12	- - -	Do not overload the gun with longer continuous operation than recommended by the manufacturer. Never clog the air inlet or outlet. Allow the gun to cool down in a safe place after use.