HSE

Manual for

Health, Safety and Environment; health protection, occupational safety and environment

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1 Introduction

For a good year now, we have been aware that LWT is poorly positioned in terms of health and safety at work. In order to fulfill our legal obligations, we have created this document.

The guidelines presented here are binding for LWT GmbH and for all companies and persons with whom we work on installations.

1.1 Legal basis

ArbSchG	Occupational Health and Safety Act	Legally binding
DGUV	German Social Accident Insurance Association	Issues non-binding rules and proposals - some of which are listed in the appendix
BGHW	Berufsgenossenschaft Handel und Warenlogistik	Accident insurance for LWT airwalls
ASR	Technical rules for workplaces	Specify the Ordinance on Workplaces (ArbStättV) Rather recommendable character
TBRS	Technical rules for operational safety	Concretize the Industrial Safety Ordinance (BetrSichV) Rather recommendable character
MuSchG	Maternity Act	
JuSchG	Youth Protection Act	

Figure 1: Legal basis

Regulations and state occupational health and safety regulations must be made available to employees in a suitable place.

You can find our laws that must be posted here: Organizational matters

1.2 Risk assessment

The BGHW: Berufsgenossenschaft für Handel und Warenwirtschaft provides an online tool for risk assessment. We have taken this as a basis and assessed the risk to LWT.

This resulted in a large number of recommendations for action, which we are following with this document, your instruction and the provision of safe work equipment. In addition, we appoint persons who support us in complying with the relevant regulations and have the authority to issue instructions.

We are thus following the so-called entrepreneur model, which allows companies with up to 50 employees to operate without external support for occupational safety.

1.3 Company doctor

company doctors (occupational physicians). Occupational safety specialists and company doctors support employers in fulfilling their health and safety obligations.

We have been entrusted with this:

BAD GmbH

B-A-D Health Center Mönchengladbach
Kloetersgasse 15, 41236 Mönchengladbach,
02166 / 13390451

Ms. Kronfeld: anna.kronfeld@bad-gmbh.de

Ms. Gutt: kira.gutt@bad-gmbh.de

They carry out medical check-ups, either at your request or on our instructions. Stefan Saretz must complete the cost coverage form before an appointment.

Possible examinations are, for example, G37Screen, G25Driving control, G41Crash or G42Biological substances. Examinations are also possible from a certain level of exposure to noise or vibrations.

1.4 Occupational health care

At their request, the employer must enable employees to undergo regular occupational medical examinations, depending on the risks to their safety and health at work, without prejudice to the obligations arising from other legal provisions, unless the assessment of the working conditions and the protective measures taken indicates that no damage to health is to be expected.

1.5 Named companies and persons

The following colleagues are helping to implement this manual.

First aid assistant	Heike Wiemann
Accident prevention officer	Stefan Saretz
Fire protection assistant	Maro Kalkreuth
Personal protective equipment and corporate identity	Kristina Koster
UVV inspection of the system and devices in the office	Will be outsourced
Testing of mechanical work equipment and hazardous substances	Will be named
Testing of electrical work equipment	Peter Hoursch
Project-related risk assessment and occupational safety	Project manager
Vehicle attendant	Suleiman Gegic
Drivers of industrial trucks	Are named

Figure 2: Named persons

These persons were assigned entrepreneurial duties with the template "Transfer of duties", taking into account the qualification according to § 7 ArbSchG.

1.6 Regular instructions

Under German law, an employer is obliged to monitor compliance with health protection, occupational safety and environmental management laws. We will therefore

instruct you regularly and ask you for confirmation (see "Instruction" template attached).

- §12.1 ArbSchG: The employer must provide employees with sufficient and appropriate instruction on health and safety at work during their working hours.
- §15 ArbSchG: Employees are obliged to take care of their safety and health at work to the best of their ability and in accordance with the employer's instructions and directions

2 HSE and GAU, basics

2.1 Goal

Everyone should return home as healthy as they were in the morning.

Not only for assembly, but also for the office, warehouse and production!

2.2 Take Charge: Take responsibility

Safety first" applies at LWT.

You know best when things are getting dangerous. Therefore, you may stop work if you consider it to be dangerous for good reason.

Raise your voice when you recognize potential dangers!

Please take responsibility and help us to make LWT and suppliers safe.

2.3 Kaizen: Change for the better

Kaizen is both a Japanese philosophy of life and work and a methodical concept that focuses on the pursuit of continuous improvement.

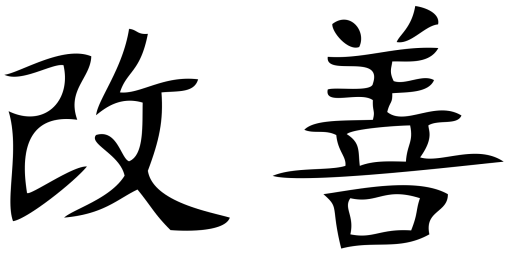

Figure 3: Kaizen

We constantly question our assumptions - in the interests of our customers and our safety! And we also appreciate small steps towards improvement. That's why we should also learn from near misses!

2.4 TOP principle: Avoid instead of protect

Any measures that serve occupational safety must always be taken in the following order:

- **T:** technical measures: Can work be made technically safer

- **O**: organizational measures: Can organizational measures increase security?
- **P:** personal measures: Protective equipment is the last resort for more safety!

2.5 Requirements and rules

2.5.1 Prerequisites

For the work for LWT are

- *Smoking* is prohibited on the premises of LWT and is only permitted in specially designated areas.
- *Alcohol and drugs* are also prohibited at work. If employees are taking medication that makes them unable to carry out their work without endangering themselves or others, they are not permitted to carry out dangerous work. The same applies to road traffic.
- We only work when visibility is good enough to work safely. In *poor visibility, fog or darkness, we* must ensure that we can see well enough by using lighting or postponing the work, for example.
- We try not to work in conditions of *vibration, noise, heat, cold, unsafe racking or scaffolding, odors, gases*, etc. If this is necessary, a safe job analysis must first be carried out and, in case of doubt, a designated person or the management must be consulted
- We do not work in explosive atmospheres (AtEx).

2.5.2 Our rules

Our rules are described in this document.

2.5.3 Rules from customers

For our rules and this entire document, stricter requirements override our rules.

This does not apply vice versa. If customers request work that contradicts our rules in whole or in part, a safe job analysis must first be carried out and, in case of doubt, a designated person or the management must be consulted.

2.6 Safe Job Analysis (SJA)

You can use the SJA method (see "Safe Job Analysis" template) to assess the risk of a work task or activity. UiB Bergen has developed a simple template for this purpose.

The SJA should be used before you carry out a risky work task or activity. It forces you to stop and think and therefore increases your safety.

Such preventive measures can include: training, information, protective equipment (PPE), barriers and much more.

2.7 PPE: Personal protective equipment

We provide the following personal protective equipment. This remains the property of the company and must be cleaned regularly.

The use corresponds to the "P" in the TOP principle. Protective clothing and equipment is used when technical and organizational measures are not sufficient.

2.7.1 S3 shoes

S3 shoes must always be worn in our workshop when we are assembling and servicing and whenever there is a risk of something falling on or running over your foot.

They must be tied and cared for correctly.

2.7.2 Helmet

You should always wear a helmet with a chin frame if head injuries are to be expected:

- when working under suspended loads,
- in areas where objects can swing, fall, topple or fly away,
- in areas where there is a risk of impact to the head or
- in areas where loose hanging hair can be captured.

The helmets we provide are also suitable for PPE activities, precisely because they have a self-opening chin strap.

2.7.3 High visibility vests

The LWT "High-Visibility" vest complies with all kinds of standards. For example, it is flame-retardant.

It should always be worn when traffic can be expected or visibility is poor.

2.7.4 Eye and face protection

Eye protection must always be worn if there is a risk of particles, hazardous substances or chips, for example, getting into the eye.

We also offer spectacles with attached or integrated side protection to take away from the warehouse.

In exceptional cases, protective shields may be required, for example for hot work.

2.7.5 Ear protection

We offer earplugs in the warehouse to take away.

These must be worn whenever the lower action values for noise exposure are exceeded. In simple terms, whenever it gets or could get loud.

2.7.6 Gloves

Gloves must be worn to protect against cuts, unhealthy liquids or electric shock.

We provide gloves for mechanical work, electrical work and work with liquids to take into the warehouse.

2.7.7 Overalls

We offer disposable coveralls in the warehouse to take away. They should always be worn if you are likely to come into contact with a lot of dirt or liquids (oils).

They protect you and the PPE.

2.7.8 Breathing masks

Normally we have no exposure to substances that would require a breathing mask.

Nevertheless, we provide masks that help to keep out particles in the disposal, for example.

2.7.9 Helmet lamps, flashlights

If it is too dark to work properly, then we need lamps.

We provide helmet lamps and flashlights for this purpose,

2.7.10 Radios

When we created our first giga airwalls, we learned that good radios are indispensable when

- the distance between two colleagues exceeds ten meters
- there is a certain level of noise

These devices are not (yet) personalized. If you want to use radios, please make a reservation.

2.7.11 PSAgA: PPE against falls from a height

We are not as strict as ASR A2.1, but adhere to the TOP principle for preventing accidents. This means that personal protective equipment is always the last resort. If other measures (see e.g. lifting platform below) ensure sufficient safety, then you do not necessarily have to wear PPE.

PSAgA includes:

- Complete belt
- Lanyard and shock absorber.
- Helmet
- Travelling fall arresters
- Ropes if necessary

We recommend you to

- Scissor lifts and work platforms. Here, however, the latching point is often not stable enough
- Working on a cantilever platform. There is a risk of the operator and other persons being thrown out of the platform ("whip effect")

The belay should not be longer than 1.8 meters without the webbing sling.

2.7.12 PSAgE: PPE against drowning

Personal protective equipment (PPE) against drowning includes life jackets or buoyancy aids.

We do not yet have these on offer.

2.8 Discard maturity

Discard maturity is defined differently, so there is no uniform definition.

- The relevant equipment must be taken out of service immediately once it is ready for discarding.
- In the case of load securing, readiness for discarding means that specified wear characteristics have been achieved. Indicators are
    - Side incisions on the webbing
    - Cuts or yarn breaks of more than 10 percent of the belt cross-section

- Damaged seams or damage to the other connecting elements
- Heat-related deformation of the webbing
- A widening of the hook mouth of more than 5 percent

- Damage caused by aggressive substances such as chemicals
- Non-existent / illegible license plate label
- Breaks or cracks
- Severe, function-impairing corrosion
- Other gross deformations

The following picture can help:

Figure 4: Maturity

If it is unclear whether an item can still be used, consult the operating instructions or contact the manufacturer. If this does not clarify the situation, the item must be disposed of.

2.9 Learning from accidents

Please report accidents to the accident officer. You must report the following accidents:

- Fatal accidents and mass casualties immediately
- Accidents with more than 3 days of incapacity to work immediately

Please write an e-mail to Stefan Saretz with "Accident:" in the subject line. If you are unable to do this, the obligation to report the accident lies with the colleague who first learns of it.

To be reported:

- Names of the accident victim
- Date/time of the accident or damage to health
- Location
- Course of events
- Nature and extent of the injury/illness

This data is documented.

We will investigate the causes of all accidents and near misses and adapt occupational health and safety measures where necessary.

3 Health, health protection

3.1 Maternity protection

Certain working time regulations must be observed when employing pregnant or breastfeeding women.

The state authorities and supervisory authorities (trade supervisory authorities, occupational health and safety offices) provide information and advice on the Maternity Protection Act.

In order for the protection of the pregnant woman and her child to be effective, the woman should inform her employer or her employer's equivalent that she is pregnant as soon as she becomes aware of it. A woman who is breastfeeding should inform her employer as soon as possible that she is breastfeeding.

As soon as a woman has informed us that she is pregnant or breastfeeding, a risk assessment is carried out[1] and a meeting is offered to discuss the working conditions.

3.2 Protection of minors

We comply with the Youth Employment Protection Act. This contains, for example, provisions on employment restrictions for young people in hazardous work.

Young people may not be employed in a number of cases. If it is necessary for training, the rules are less restrictive. Ask the management if the legal situation is unclear.

3.3 Preventing mental illness

3.3.1 New colleagues

New colleagues and temporary workers should be well integrated into everyday working life. This reduces the risk of accidents.

3.3.2 Get organized

You should know what needs to be done when you start work.

[1] Danger according to § 5 of the Occupational Health and Safety Act when the pregnancy becomes known (§ 10 MuSchG).

Avoids interruptions when carrying out activities. Especially in activities that require complex thought processes, frequent interruptions can have negative consequences, e.g. premature fatigue.

If you want to complete your task with as little disruption as possible, indicate this - e.g. by wearing headphones.

3.3.3 Difficult customers

Dealing with difficult customers can be a particular challenge. That's why we are happy to provide support.

3.3.4 e-mail

These are our rules for e-mails:

1. Business e-mails do not have to be read outside working hours
2. Short is good, because we are all drowning in information
3. More attention for the subject line, so that it immediately catches the eye what it is about
4. Always use a (correct) form of address in your e-mails
5. Use CC carefully and do not use BCC unless the customer works this way (like Tesla)
6. Only use high priority if this is the case
7. Avoid ambiguity or irony, as this can lead to misunderstandings

3.3.5 Working hours

We endeavor to adhere to the normal LWT working hours. In exceptional cases, we may have to work longer, at weekends or at night. We will remunerate this appropriately - see the Organization Manual.

3.3.6 Differences of opinion

Conflicts between employees usually arise due to conflicting interests, positional struggles, role conflicts or differences in status. Conflicts can be minimized through a prudent personnel policy and a well thought-out work organization. For example, by allocating tasks, structuring processes, defining responsibilities and competencies as well as rules for cooperation.

3.4 Assessment by managers

3.4.1 Assessment criteria

Criteria for employee appraisal should be known. These three criteria are the most important for LWT:

- Customer satisfaction
- Your satisfaction (and therefore your health)
- Cash flow (not money)

Your will also counts

- to learn
- to have a positive influence on society
- get the work done

This would also allow you to check the quality of your work yourself.

3.4.2 Prompt feedback

We will endeavor to provide you with prompt feedback on the results of your activities.

Employees should receive regular feedback on the results of their activities. Positive feedback in the form of praise and recognition is particularly important for cooperation between employees and managers.

3.4.3 Clear instructions

Instructions should be clear and not contradictory.

3.4.4 Regular exchange between managers and you

A regular exchange between managers and employees helps to prevent conflicts and improve the working atmosphere.

We will seek regular discussions. You could signal a need for a conversation at any time and we will try to facilitate this immediately.

3.5 Screen work

3.5.1 Working with screens

In order to avoid hazards caused by bottlenecks, obstructed traffic routes, unusable escape routes and non-ergonomically arranged workstations, eight square meters are provided for VDU and office workstations.

Please note the following when *using screens:*

- Daylight should come from the side:

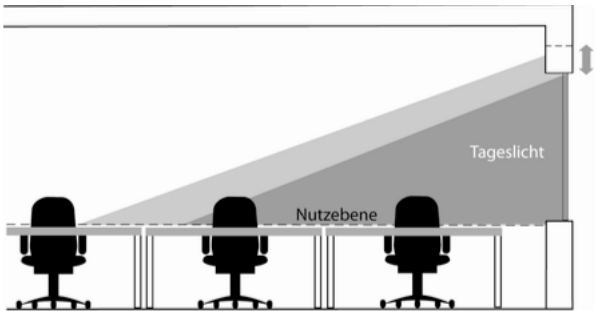

Figure 5: Light and screen

- If this is not possible, then reflections from the walls and ceiling must provide sufficient brightness
- Screen must be free and easy to rotate and tilt
- Picture must be stable and flicker-free, without distortion
- Brightness and contrast between characters and screen background must be easily adjustable
- Ideally, you should look downwards by approx. 30 to 35 degrees from the horizontal to view the screen
- Screen should be tilted backwards so that it can be viewed perpendicular to the surface
- Screen should be anti-glare (matt screen display) to avoid annoying reflections and glare
- Display luminance should be at least 100 cd/sqm
- Characters must be sharp and clear, sufficiently large (with a minimum viewing distance of 500 mm, character height should be at least 3.2 mm)
- Character representation as positive representation (i.e. dark characters on a light background)

3.5.2 Examination of the eyesight

We offer an appropriate eye and vision examination for every employee working at a VDU.

If this results in the need for special visual aids for VDU work, then we offer these.

3.6 Exercise regularly

It is generally advisable for employees at VDU workstations to not just sit at the screen, but to take every opportunity to get up and move around to compensate for the deficits caused by a lack of movement. At least once an hour, 12 times a day, you should stand and / or walk for a few minutes.

Several shorter recovery periods have a greater recovery effect than a few longer recovery periods of the same total duration. It is beneficial if movement exercises can be carried out during the recovery times. Combining or saving up recovery times to reduce the total daily working time has no recovery effect and is therefore unsuitable.

3.7 Maintain minimum temperatures

-with predominantly sedentary activity +19 °C

with predominantly non-sedentary activity +17 °C

-for heavy physical work +12 °C

3.8 Clean workstations

Workplaces are cleaned once a week in accordance with hygiene requirements. In addition, your

- Clean screens, keyboards and mice once a month. The cleaning agent for this can be found at Heike Wiemann
- Wash hands thoroughly after each visit to the toilet. Soap and hand cream are provided
- Immediately remove any contamination and deposits that could lead to hazards. If this is not possible, you must inform one of the designated persons immediately
- apply these standards also and above all to customers and leave workplaces at least as clean as you found them. And at least swept clean.

3.9 Note the lighting

The aim is to achieve balanced shadows with soft edges. As with natural light, the majority of the light should fall from above. A small proportion should be generated indirectly as light through wall or ceiling reflection.

In workplaces, lamps must meet certain criteria[2] . For example

- at least one specific color rendering index must be used
- Intensity and color of the light meet criteria. We strive to use[3] lamps that produce daylight everywhere.

We try to comply with these regulations. But that is impossible, because

- We work for many different customers
- these regulations are too complex and overburden companies of our size

That is why we are dependent on you: Take Charge!

3.10 Avoid noise

We want to avoid hearing loss. That's why we always keep the sound pressure as low as possible.

3.10.1 Preventive check-up

Anyone who is exposed to noise with a daily noise exposure level of 85 dB(A) or more at their workplace must regularly take part in an occupational health check-up. However, employees with a daily noise exposure level of 80 dB(A) or more at the workplace have the right to take part in an occupational health check-up.

3.10.2 Noise reduction

From a lower trigger value: LEX,8h= 80 dB(A) we check measures.

[2] ASR A2.3
[3] The light color of light is determined by the color temperature [K]. White light occurs in the range from approx. 3300 K to approx. 5300 K and is divided into the light colors warm white, neutral white and daylight white.

3.10.3 Wear hearing protection

We therefore provide hearing protection (earplugs in the warehouse). If the daily noise exposure level[4] reaches or exceeds the value of 85 dB(A), hearing protection must be used.

3.10.4 Labeling

We designate work areas in which one of the upper action values for noise (L EX,8h = 85 dB(A) or LpC,peak= 137 dB(C) can be exceeded as noise zones [5]

3.11 Protect skin

We hardly use any substances that are harmful to the skin. In future, we will test the skin compatibility of all materials. Replace substances that are harmful to the skin with substances that are not.

We provide gloves in the warehouse: For mechanical work, electrical work and work with liquid substances.

We provide skin cleansing and skin care products. Hands should be thoroughly cleaned after using the toilet and several times a day. The right time for skin care is after work and before long breaks. When selecting skin care products, the condition of the skin plays a key role. As a rule of thumb, the drier the skin, the richer the skin care product should be[6] .

3.12 Avoid vibrations

Vibrations can occur during various activities. If too much of this occurs throughout the day, it can be harmful to health.

In our case, the most frequent stresses are likely to occur with hand-held tools. This can lead to hand-arm vibrations. You should protect yourself from this by

- works wherever possible with machines that are not held by hand

[4] The daily noise exposure level (LEX,8h) is the noise exposure level averaged over time in relation to an eight-hour shift. It includes all noise events occurring at the workplace. Even if higher noise levels occur only briefly but regularly, there is still a risk. For example, the hearing hazard at 95 dB(A) over approx. 45 minutes corresponds to that at 85 dB(A) over an entire work shift. This means that foremen, supervisors and supervisors who are "only briefly" exposed to noise are also at risk.
[5] Mandatory sign "Wear hearing protection" (M 003) in accordance with ASR A1.3 "Safety and health protection labeling"
[6] Source: BGN

- reduce the time per day you spend on such activities and, if necessary, spread the work over several days

The calculation of exposure to vibrations according to the DGUV information Hand-Arm Vibration is complex. We therefore offer general occupational health advice directly if you have the feeling that vibrations could affect your health.

3.13 Use hazardous substances correctly

Hazardous substances are substances, mixtures or products with hazardous properties. They can cause acute or chronic damage to human health, be flammable, explosive or hazardous to the environment.

Hazardous substances include not only chemicals, but also wood dust, gasoline, diesel engine emissions, welding fumes, ozone, anesthetic gases, acids and alkalis for accumulators, etc.

3.13.1 Reduce the number of hazardous substances

We should use as few hazardous substances as possible.

Hazardous substances that we no longer need should be disposed of properly.

3.13.2 Labeling, storage and transport

Hazardous substances must be labeled with the corresponding GHS symbol (see appendix and notice).

They should be stored in a suitable cabinet and, if possible, in the open air, not inadmissibly heated by sunlight or other heat sources and protected from access by untrained persons.

For transportation, we also provide unbreakable, non-flammable and sealable containers that can be used for hazardous substances.

Cabinets and containers must be labeled accordingly.

3.13.3 Cleaning mandatory

Any leaked or spilled liquids must be taken up immediately, removed from the work areas and collected in a suitable place until proper disposal.

Cleaning work must not be carried out with flammable liquids with a flash point below 21 °C or liquids that are toxic or harmful to health.

3.13.4 Safety data sheet not required

We are not a manufacturer, formulator or importer of a substance or mixture to a downstream user where at least one of the following criteria applies:

- the substance or mixture is hazardous (CLP),
- the substance is persistent, bioaccumulative and toxic (PBT, vPvB),
- the substance is subject to authorization (Art. 31 (1) REACH)

If we do, we will prepare a safety data sheet.

4 Safety, occupational safety

4.1 Working correctly

Manual work such as lifting and carrying or pulling and pushing can lead to back and joint problems.

4.1.1 Avoid high loads

Therefore, with heavy loads, it is important to check how overloading of the back and joints can be avoided or reduced:

- Shorten transport routes
- Relief aids (carrying handles and straps, plate lifters, vacuum lifters, sack trucks, pallet trucks),
- Structural and technical workplace conditions (adjustment of working heights, technical equipment),
- Workplace health promotion and occupational health advice.

For work with loads, it is recommended that the "Physical loads" template in the appendix be completed and improvements documented.

4.1.2 Work manually

The following methods should be used for manual work

- Never lift loads abruptly
- Always carry heavy loads in pairs
- Lifting with your legs

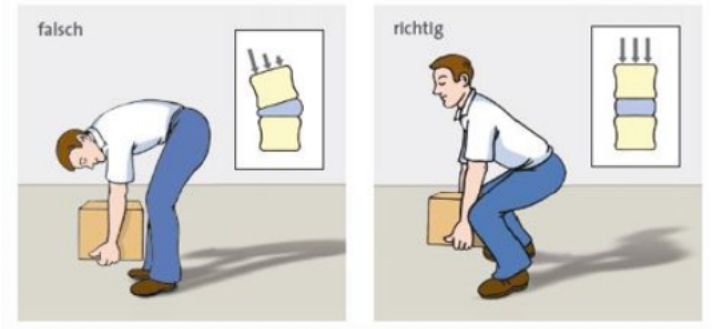

Figure 6: Use legs

- Push, don't pull

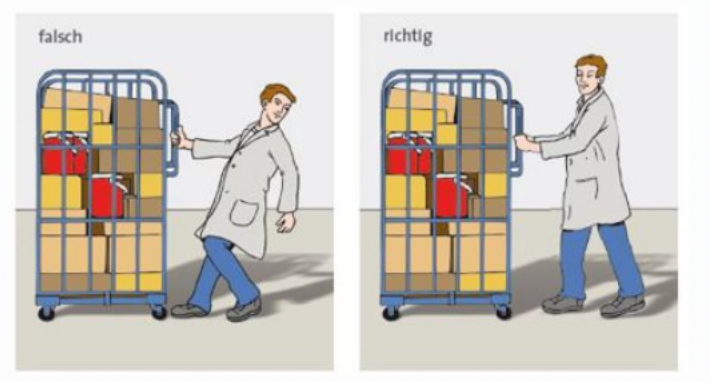

Figure 7: Sliding

- Avoid forced postures

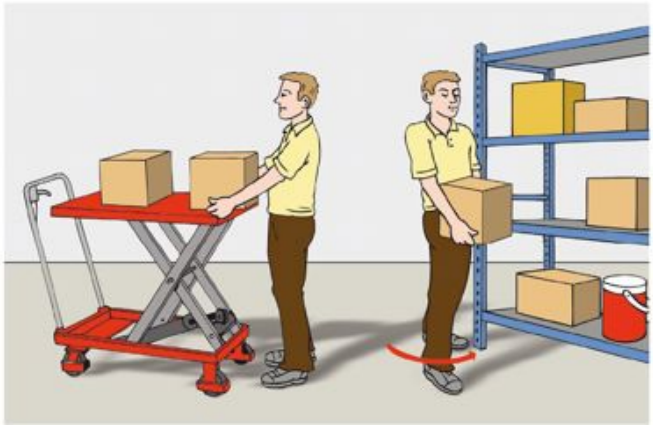

Figure 8: Forced postures

- Avoid increased exertion

Figure 9: Use of force

- Avoid constant repetition

Figure 10: Repetitions

4.2 Tests and defects

4.2.1 Regular inspections of all work equipment

All work equipment must be inspected once a year. Work equipment includes all items that we use regularly (e.g. doors and gates).

The designated persons or companies are responsible for checking the following items:

- Workstations and electrical devices in the office
- Protective equipment (PPE)
- Doors and gates
- Vehicles[7]
- Ladders, steps, platforms, stages, shelves
- Lifting equipment, forklift trucks, ...
- Electrical[8] and mechanical work equipment
- Machines (e.g. fans)
- Fire extinguisher
- First aid kits

In addition, these devices must be checked after accidents or repairs.

We only appoint persons as inspectors who are qualified to do so by training .[9]

[7] All vehicles and their attachments must comply with the Machinery Directive 2006/42/EC
[8] DGUV 203-071 - Rule "Periodic inspections of electrical systems and stationary equipment"
[9] TRBS 1203 "Qualified persons"

4.2.2 Checking driving licenses

We check driving licenses and their classes every six months. Company trips may only be carried out if a valid driver's license in the correct class is available.

We also check driving licenses for lifting vehicles:

- On public roads, the forklift truck can be driven with driving license category L up to a maximum design speed (bbH) of 25 km/h, regardless of its gross vehicle weight (GVW).
- If it has a maximum speed of more than 25 km/h, it can be driven up to a maximum permissible weight of 3.5 t with a category B car driver's license.
- For higher gross vehicle weights, truck classes C1 (up to 7.5 t) or C (> 7.5 t) are required.

Forklift license is required for the commercial sector: The forklift license is related to the accident prevention regulations (UVV) for the commercial sector and has nothing in common with the driving license.

The theoretical and practical training generally relates to the operation of a front loader.

Additional training is therefore required for straddle carriers, container stackers, high-rack stackers, shelf trucks, transverse forklift trucks, telescopic forklift trucks and other forklift trucks that differ significantly from front loaders.

4.2.3 Check before commissioning

Work equipment whose safety depends on the assembly conditions must be tested before assembly and before initial commissioning and after each assembly on a new construction site or at a new location.

A departure check is also mandatory in road traffic according to the StVO.

The driver must check the effectiveness of the operating and safety devices before the start of each work shift and observe the condition of the vehicle for obvious defects during the work shift.

Work equipment that does not pass this test must not be used until it can be used again.

4.2.4 Extraordinary events, accident

The work equipment must be subjected to an extraordinary inspection by competent persons without delay if extraordinary events have occurred that could have harmful effects on the safety of the work equipment.

Extraordinary events may include, in particular, accidents, changes to work equipment, longer periods of non-use of work equipment or natural disasters.

4.2.5 Documentation in examination books

The results of examinations must be documented in "examination books". These can be kept electronically and must document the following:

- What was checked when, how and by whom
- Result of the audit
- Dealing with defects

This examination book must be kept at least until the next examination.

4.2.6 Dealing with defects

Defects include broken ladders, defective safety harnesses or other safety-related issues.

Employees must report any defects that have not been identified by the regular inspection. Reports must be made to the respective designated person.

Defects that pose an urgent danger must be rectified immediately.

Work with defective work equipment or objects must be stopped until the defect has been rectified.

4.3 Fire protection

4.3.1 Flammable materials

Open fires and embers (including cigarettes) are prohibited in the rooms of the LWT.

Contaminated cleaning material that may pose a fire hazard must be stored in sealable collection containers made of non-combustible material with a self-closing and tight-fitting lid.

Empty ashes only into sealable, non-combustible containers

Technical rooms must be kept free of combustible materials and additional fire loads. It is best to remove these. Find a suitable storage location.

4.3.2 Electrical systems

Electrical appliances that are not required should be switched off when not in use for a longer period of time and ideally disconnected from the power supply to minimize the risk of fire.

In addition, appliances such as coffee machines or water heaters must be operated on non-flammable surfaces.

4.3.3 Fire extinguisher

Places where fire extinguishing equipment is provided are marked accordingly

Access to fire extinguishing equipment must not be obstructed

4.3.4 Escape routes[10]

Escape routes must be kept clear.

We keep to the maximum length of escape routes if we can. These are for

- Rooms with no or normal fire risk: 35 m
- Rooms with increased fire risk with automatic fire extinguishing equipment: 35 m
- Rooms with increased fire risk without automatic fire extinguishing equipment: 25 m
- Toxic and potentially explosive rooms: 20 m
- Explosive rooms: 10 m

The escape routes are adequately lit and wide enough.

4.4 Correct behavior in case of fire

4.4.1 Report fire

The first step is to report the fire as an emergency call. In the EU countries, the European emergency number 112 applies:

- Where did something happen?
- Who reports?
- What happened?
- How many are affected/injured?

[10] Maximum length of escape routes in accordance with ASR A2.3

- Waiting for queries!

4.4.2 Bring to safety

The second step is to get yourself and other people to safety. Please note:

- take endangered persons with you,
- help people in need,
- Close doors and windows,
- follow the marked escape routes,
- do not use elevators,
- Follow the instructions of the fire safety assistants.

4.4.3 Attempt to delete

The third step is to check whether an attempt can be made to extinguish the fire. Please note:

- keep enough distance from the fire,
- with short, targeted strokes,
- Spray extinguishing agent on burning objects,
- If there are several fire extinguishers, use them at the same time if possible,
- Never extinguish electrical systems and grease fires with water!

4.4.4 Fire watch

After a fire, the fire department will carry out a fire watch. This prevents a fire from reigniting.

If we generate heat that could lead to a fire, then we must deploy a fire watch.

4.5 Electrics

4.5.1 Qualified persons

Persons authorized to work on the electrical system are

- Qualified electrician: is a person who is able to assess the work assigned to them and recognize potential hazards based on their technical training, knowledge and experience as well as knowledge of the relevant regulations (DGUV regulations 3 and 4; VDE 0105-100).
- Electrotechnically instructed person (EuP): is a person who has been instructed by a qualified electrician about the tasks assigned to them and the possible

dangers of improper behavior and, if necessary, trained and instructed about the necessary protective devices, personal protective equipment and protective measures (DGUV regulations 3 and 4; VDE 0105-100).

Only these persons may test or repair electrical systems.

4.5.2 Satisfy environmental influences

Electrical systems and equipment may only be used if they meet the operational and local safety requirements with regard to the type of operation and environmental influences (e.g. dust, moisture, heat, mechanical stress):

- Degree of protection, protection class, insulation class
- Creepage and air gaps

4.5.3 Five safety rules

We apply the five safety rules:

1. Unlock
2. Secure against restarting (lock-out)
3. Determine absence of voltage
4. Earthing and short-circuiting
5. Cover or cordon off neighboring live parts

We also mark work on electrical systems (tag-out)

It should also be noted

- De-energize or unplug electrical appliances
- Do not continue to operate electrical appliances unattended
- Check operating equipment regularly, do not continue to use defective operating equipment

4.6 Suitable work equipment

4.6.1 General and communication

Use suitable personal protective equipment!

Observe the manufacturer's operating instructions and use the manufacturer's protective devices.

If there are several people, clear communication must be established before work begins. For example, the radios provided can be used for this purpose.

4.6.2 Use suitable mechanical hand tools

Only select and provide hand tools with which the work tasks to be performed can be carried out safely.

Store tools in suitable, clean places (tool bags, boxes or cabinets).

When purchasing tools, make sure that handles on hand-held tools are designed so that they can be safely guided and hands cannot slip onto the tool.

Only use tools where dangerous tool parts are only accessible during the immediate work process, e.g. knives with automatic blade retraction.

4.6.3 Securing workpieces

Care must be taken to ensure that flying parts do not cause injury when using hand tools.

Lock the workpiece in a clamping device and do not hold it by hand, e.g. when sawing.

It must be ensured that the forces are safely absorbed during processing.

4.6.4 Use suitable electric hand tools

Is work on live parts only carried out with suitable hand tools?

Procure insulated tools and insulating aids!

4.6.5 Machines and systems

Machines must bear a CE mark and comply with the EC Machinery Directive[11] (Declaration of Conformity).

Machines for which this is not the case must be adapted to the minimum requirements of §§ 8 and 9 of the Ordinance on Industrial Safety and Health . [12]

Machines may only be used after instruction has been given.

Machines with potential hazards must also be protected against unauthorized use!

Ensure that body parts are not caught by parts of the machine (e.g. drill chuck, drilling tool, swarf) and provide guards to prevent this.

Remove chips.

[11] Directive 2006/42/EC
[12] Directive 2009/104/EC

4.7 Vehicles for safe transportation

4.7.1 Traffic rules

In road traffic, we naturally comply with the German Road Traffic Regulations (StVO).

This also applies on the LWT premises. In addition, we limit the maximum speed to 15 km/h.

However, the StVO may have been overridden on other company premises. For this reason, every LWT driver must inform themselves about the rules applicable there before entering another company's premises and observe them.

In parking lots, all parties involved in an accident are usually considered to be partly to blame.

If people could be endangered when reversing vehicles, reversing must be carried out by a guide.

4.7.2 Securing against movement

Vehicles must be secured against unintentional movement in any form before starting work.

When all wheels are on the ground, the parking brake can be activated.

If this is not the case, wheel chocks or other force transmission systems must be used.

Also forklift tongs, loading shovels, tilted cabs and flatbeds,

Vehicles with articulated steering, attachments must be secured, e.g. by locking, locking pins or pawls.

4.7.3 Securing the load

The load must be secured against shifting, tipping, falling and rolling away using suitable lashing equipment. See the "DGUV load securing" appendix.

The forces acting on the load result from braking, acceleration, cornering or friction.

Figure 11: Load securing methods

Figure 12: Load securing aids

According to road traffic regulations, loads may overstay depending on the distance of the route, but they must be identified by a red flag and in the dark by lighting.

4.7.4 Visibility in traffic

Lack of visibility for other road users is one of the main causes of collisions between vehicles and pedestrians.

This is why high-visibility clothing, such as the LWT warning vest, must be worn when traffic can be expected. Not only on construction sites, but also on the LWT site.

4.7.5 Reversing

Reversing with trucks requires special care and caution. Technical options should be used in addition to organizational safety measures:

- Install rear area monitoring
- Install camera systems
- Avoid reversing as far as possible (e.g. through structural optimization)
- Working with instructors
- Creating pedestrian freedom
- High-visibility clothing for all persons in the traffic area

4.7.6 Coupling trailers

When coupling trailers, incorrect operation often results in a fatal or serious accident, as the moving masses cannot be influenced manually.

The following points must be observed:

- No people between the vehicles (safe docking)
- Confusion-free connections
- Secure trailer with brakes and wedges when coupling

- Draw gear at coupling height
- Locking the jaws
- Check connection after coupling, secure coupling pin
- Connecting the connecting cables

4.8 Securing construction sites

We comply with DGUV regulation 38 on construction work (see appendix).

4.8.1 Securing the construction site

The first step in securing a construction site is to understand emergency measures:

- Find out about the nearest emergency exits and about the opening direction of doors. Where are the assembly points?
- Where are emergency calls, first aid stations? Carry a first aid kit with you if there is no first aid station nearby
- Where is the nearest fire extinguisher? Carry your own if there is none nearby
- Check whether traffic routes are wide enough .
- Traffic routes with fall hazards must be equipped with suitable side protection.
- the lighting is sufficient. If not, lamps must be used
- Check the noise level. If this is high, see section Noise

4.8.2 Securing the work area

Our work area must be secure to protect us from traffic and to protect others from the negative consequences of our work:

- First of all, the location must be chosen so that we do not obstruct anyone and are safe ourselves.
- If this is not possible at first, then we have to make it possible, for example by deactivating gates or blocking through traffic.
- Our work area must be clearly cordoned off with tapes (not flutter tape), chains, fences, etc.
- Warning signs must be put up.
- Access to fire extinguishers and first-aid kits must be kept clear.

Unauthorized persons may not enter parts of the company if this poses a risk to health and safety. Employees may only be present in hazardous areas within the scope of their assigned tasks.

4.8.3 Distance to electrical power

Construction sites must be checked for overhead power lines during setup

When working with vehicles in the vicinity of live electrical overhead lines or contact lines, a safety distance depending on the rated voltage must be maintained.

If the safety distance cannot be maintained from overhead electrical lines or catenaries, the system must be voltage-free

4.8.4 Written instructions for assembly etc.

For assembly work, dismantling work as well as demolition and dismantling work that is subject to special safety requirements, written instructions must be available on the construction site that contain all the necessary information for the safe execution of this activity.

The instructions must contain the necessary protective measures according to the hierarchy of measures. Technical measures have priority over organizational and individual protective measures.

4.8.5 Block storage

Check whether stacking is permitted

Determine payloads and superimposed loads of storage devices

Determine the load-bearing capacity of the floor

Determine the stacking capacity of the stored goods

Calculate stability and slenderness

Determine permissible inclination (max. 2%)

Marking of storage locations and traffic routes

4.8.6 Obtain permits and reinforcement if necessary

It must also be checked whether permits from the customer or from us are required for our work (see section on hazardous work).

Some work cannot be carried out safely on your own. Help must then be obtained.

4.9 Working at height

4.9.1 Height

Depending on the height, the following measures are required:

- Height of 0 m: Measures to prevent falling or sinking into material(s)
- Height of 0.2 to 1.0 m: Measures against falling above an adjacent surface and against slipping
- Height of 1.0 m: Danger of falling: Measures required according to the hierarchy of measures (TOP: technical, organizational, personal protection)

4.9.2 Technical measures against falling

Structures and their parts, auxiliary structures, scaffolding, walkways, equipment and other facilities

- must not be overloaded.
- must be dimensioned, erected, supported, braced, anchored and designed in such a way that they can absorb and transfer the loads arising from the intended use.

If you are unsure, then we do not work in these areas unless we have proof of the load-bearing capacity.

Fall protection devices are, for example, covers, railings or side protection, must be

- be 1.0 m high up to a fall height of 12.0 m.
- be 1.1 m high from a fall height of 12.0 m.

For floor openings, fixed or removable barriers or covers made of load-bearing materials that are secured against unintentional lifting must be used.

The distance to the edge of the fall must be greater than 2.0 m.

If fall protection devices cannot be used for technical reasons, they must be replaced by protective equipment to catch falling workers. Fall arrest systems are, for example, safety nets, protective walls and scaffolding that can absorb and dissipate the forces that occur.

4.9.3 PSAgA: Personal protective equipment against falls from a height

If fall protection and fall arrest systems cannot be used, personal fall protection equipment must be used.

4.9.4 Eliminate hazards from falling objects

Falling objects and people falling from platforms, mezzanines and landings can lead to fatal accidents or serious injuries.

Here too, technical measures must be taken first. These are first of all the safety devices against falling and additionally

- Secure load transfer points against falling, e.g. by lock railings.
- Secure stored goods against falling along traffic routes.
- Design stage floors, such as gratings or similar, in such a way that persons underneath are not endangered
- Stages, intermediate floors and platforms must be able to withstand the expected load.
- Observe the permissible load capacity.
- Load securing

4.9.5 Protection from falling objects

It is also dangerous to work under things or people. As a general rule, we do not work under suspended loads or loads that could fall

If this cannot be avoided, the following applies:

- Wear a helmet
- Install a board or net above us
- Maintain a horizontal distance

4.9.6 Ladders[13]

Ladders may only be used if

- employees stand safely at all times when climbing and working on the ladder and
- can hold on securely.
- If a load has to be carried on a ladder, this must not prevent it from being held securely.
- The height to be bridged is less than five meters
- This is used for less than two hours

[13] We comply with DGUV 208 016 - The use of ladders and steps

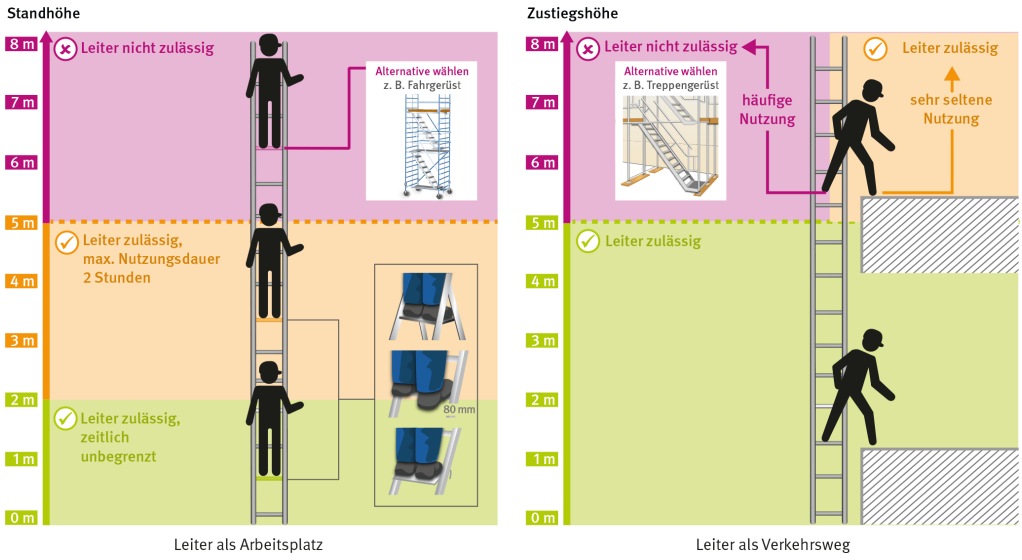

Figure 13: Ladders

If these requirements cannot be met, scaffolding, aerial work platforms or other work platforms can be used.

Ladders must be additionally secured (e.g. against tipping over) if

- the nature of the work to be carried out requires this,
- they are set up on or near traffic routes and that the ladders are secured against tipping over.

The precautions to be taken when using portable ladders can be found on the safety markings on the ladder in the form of pictograms. The manufacturer's instructions must also be observed.

4.9.7 Stages

If ladders are not suitable, then platforms can be

- in buildings up to a maximum height of 12.00 m
- may be used outside buildings up to a maximum of 8.00 m if
- the instructions for assembly and use permit this

The same rules apply as for ladders and additionally:

- It is not permitted to work on two or more working levels at the same time.
- Access to the working platform is generally only permitted on the inside of the scaffolding.
- Mobile work platforms

    - Only move slowly (maximum walking speed) and on level, stable and obstacle-free ground. Only drive lengthways or across corners.
    - There must be no objects on the scaffolding when it is being moved. Loose parts must be secured against falling before moving.
    - No persons may be on the work platform during the procedure. Exception: monitoring and control purposes with separate risk assessment
    - Castors must be secured by brake levers after the procedure.
    - Avoid any impact
- The access hatches must always be closed except when climbing through.
- Climbing over mobile scaffolding is prohibited.
- Do not jump on surfaces
- It is forbidden to increase the height of the surface by using ladders, boxes or other devices.
- Mobile working platforms must not be lifted or suspended.
- In the event of an approaching storm (from wind force 6) and after completion of the work, secure mobile working platforms against overturning.
- Horizontal and vertical loads that could cause the mobile working platform to tip over must be avoided

On roofs and building components, measures are required according to the hierarchy of measures.

- Access points must be locked and clearly marked.
- Load-bearing walkways for persons and work equipment with a width of more than 0.5 m must be enclosed on both sides.
- Skylight domes and arcade rooflights must be fitted with suitable enclosures, coverings and under-tensions, unless the curb projects more than 0.5 m above the roof surface.

4.9.8 Scaffolding

We do not erect scaffolding ourselves, and we only use it after instruction from specialists.

4.10 Lifting vehicles[14]

Only designated persons may drive lifting vehicles at LWT.

If you come into contact with a lifting vehicle, always avoid it and make eye contact.

4.10.1 Industrial trucks

Only use industrial trucks with sufficient load capacity for the load.

Driving with industrial trucks:

- only drive at a speed that is adapted to the traffic conditions
- Cornering only at greatly reduced speed
- Make clear traffic regulations at intersections in front of traffic routes and hall entrances.

Lift max. off the ground (50 cm) and load in such a way that the load cannot fall or move unintentionally.

Please note the following:

- When leaving the appliances, remove the key and take it with you.
- For the transportation of persons, industrial trucks with special seats or stands and with handholds within the contour must be used.
- Select industrial trucks according to the loads to be transported and load them in such a way that the driver can see the roadway.
- Forklift trucks with a load capacity of up to 10 tons and transverse forklift trucks must be designed or equipped in such a way that the risk of the vehicle tipping over is limited
- If visibility is insufficient, a guide must be provided or visual aids such as a camera on the industrial truck must be used.

Attachments must be adapted to the load and the vehicle

Forklifts with a maximum design speed of more than 6 km/h require an operating license. If the speed exceeds 20 km/h, an official license plate is required in accordance with § 18 (4) StVZO.

4.10.2 Lifting platforms

No unnecessary standing in the movement area of the lifting platform

[14] DGUV 68 - Industrial trucks, see appendix

Only access or leave the lift via the designated access points

Only control the lift from the intended control points

It should also be noted:

- Work may only be carried out on and under raised vehicles if they are secured against rolling, sliding, tipping over or sinking.
- Workstations at height on vehicles may only be climbed onto if it is ensured that the vehicles or the equipment used to climb onto them cannot tip over, roll away or slide off.
- Work in raised vehicles and on vehicles with a fall height of more than 1 m may only be carried out if measures have been taken to prevent people from falling.
- For mobile lifts: Set up in such a way that no crushing and shearing points occur due to the movement of the lift
- Set up the lift in a stable position
- Support the lift if the ground is not stable and check that the supports are properly positioned
- Before starting work on the load handling attachment, the devices to prevent persons from falling and objects from falling must be brought into the protective position.

4.10.3 Cranes

LWT does not procure or use cranes itself.

4.11 Hazardous work

Hazardous work is work where there may be an increased or particular risk from the work process, the type of activity, the substances used and the environment.

4.11.1 Monitoring hazardous work

Persons must be adequately supervised and monitored when carrying out hazardous work:

In principle, hazardous work should not be carried out by one person alone. However, it may be necessary for operational reasons to assign a person to carry out such work alone in exceptional cases. Then

- if this person is within sight of others,
- or a timed reporting system must be set up through which an agreed call is made at certain intervals.

If dangerous work is carried out jointly by several people and requires mutual communication to avoid danger, it must be ensured that a reliable person who is familiar with the work supervises it.

4.11.2 Hot work, Hot Work

This section regulates additional safety measures for welding, cutting, soldering, assembly and abrasive cutting work if the risk of fire cannot be ruled out during such work.

A permit for hot work is then required ("Hot work" template, see appendix). The following must be observed:

- All combustible materials and objects must be removed. Removal also includes combustible materials and objects that are firmly attached to the building, e.g. changing rooms or insulation.
- Plan the start and end of work from a fire safety perspective
- Determining the safety measures before starting work
- Provide a suitable type and number of extinguishing devices
- Determine the duration of the fire watch
- Document fire protection measures in "Hot work permit"

4.11.3 Fire watch

In the case of hot work, a fire watch must be appointed who must be on site continuously during the work and for 60 minutes after its completion in order to be able to detect and extinguish smoldering fires and any pockets of embers.

The fire watch must check the work area regularly, at least every 30 minutes for a further 2 hours.

The following aspects can each reduce the duration of the follow-up check by 30 minutes:

- The building is equipped with adequate automatic sprinkler protection.
- No combustible building materials (e.g. wood, plastic, asphalt/tar etc.) were used in the roof, ceiling, wall or floor structure
- All combustible materials, flammable liquids, combustible dust or fiber accumulations and oil deposits must be kept at least 11 m away from the work area.

4.11.4 Working in confined spaces, Confined Spaces

This work is only permitted with a completed "Containers, silos and confined spaces" template (see appendix). The points requested in this permit must be observed.

See also the DGUV rule on containers, silos and confined spaces in the appendix[15] .

4.11.5 Working in explosive atmospheres, ATEX

Such work is prohibited - LWT does not carry it out.

[15] DGUV 113 004 - Containers, silos and confined spaces

5 Environment, environmental management

Protecting the environment is a high priority for LWT GmbH. Last but not least, we advertise that we are environmentally friendly.

This means that we are particularly careful in the following cases:

- We reduce waste by using suitable packaging, for example
- We dispose of waste and garbage professionally, including from our construction sites. Waste yard
- We separate waste according to local conditions
- We leave construction sites clean and tidy. In most cases, this means swept clean

We remove liquids (and take their toxicity into account). All vehicles and the workshop have absorbers for oil and other hazardous substances and the option of transporting and disposing of brewed absorbers professionally (hazardous waste).

6 Emergencies and first aid

Refer journalists to the management!

6.1 Alarm plan

Behavior in the event of an accident and first aid in accordance with the first aid instructions available in the office, warehouse or cars.

Notes on first aid	Twice in the office, in the warehouse and in the assembly cars Each with a first aid kit E.g. the appendix "DGUV 204-006 - First aid"
Public emergency call Operational emergency call	112 +49 2161 40604 - 112
First aid personnel	Heike Wiemann Kristina Koster
Doctors to be consulted	BAD 02166 13390451, Kloetersgasse 15, 41236 Mönchengladbach, Ms. Kronfeld on 28.3.2023 anna.kronfeld@bad-gmbh.de kira.gutt@bad-gmbh.de
Hospitals to be approached	Maria Hilf Clinics Viersener Str. 450, 41063 Mönchengladbach 021618920 Evangelical Hospital BETHESDA Mönchengladbach Ludwig-Weber-Straße 15, 41061 Mönchengladbach 021619812150

6.2 First aid kits

Two first aid kits are suitable:

- Small first aid kit according to DIN 13 157: minimum contents for small first aid kits
- Large first aid kit according to DIN 13 169: This DIN standard 13169 applies to the so-called large first aid kit, which must be available for commercial operations - such as offices, administrative companies or retail. A construction site with up to 10 employees must have a DIN 13157. From the eleventh (up to the 50th) employee, DIN 13169 is mandatory, but can practically be replaced by two DIN 13157s.

The vehicle first aid kit (DIN 13164) is not suitable and should be replaced.

First aid kits should be distributed around the workplace in such a way that they are no more than 100 m or one floor away from permanent workstations. The first aid material must be kept available at all times and easily accessible in suitable containers, protected against damaging influences (contamination, moisture and extreme temperatures) in sufficient quantities and replenished and renewed in good time.

6.3 Care for strangers

We also look after the health of strangers who need help.

- Provide first aid if necessary.
- Call for help and stay with the injured person until they have been treated
- Offer moral support
- Being afraid is normal
- Report objectively: What did I see, hear and do?

6.4 Documentation of first aid

The following is documented for each first aid service provided:

- Name of the injured or sick person,
- Date/time of the accident or damage to health,
- Place
- Course of events
- Nature and extent of the injury/illness,
- Names of the witnesses,
- Date and time of the first aid treatment,
- Type and manner of first aid measures,
- Name of the person providing first aid

This can be done in the booklet on the shelf next to the meeting room.

7 List of illustrations

8 Attachments

8.1 Documents

Template	Instruction
Template	Transfer of duties
Template	Safe Job Analysis (SJA)
Template	Physical stresses
Template	Hot work
Template	Containers, silos and confined spaces
DGUV 1:	Principles of prevention
DGUV 38:	Construction work
DGUV 68:	Industrial trucks
DGUV 203-071:	Periodic inspection of electrical installations and equipment
DGUV 204-006:	First aid
DGUV 2013 09:	Load securing
DGUV 208 016:	The use of ladders and steps
DGUV 113 004:	Containers, silos and confined spaces

8.2 Sound pressure level in dB(A)

Noise is expressed in the logarithmic unit decibel (dB). Ten decibels more means a tenfold increase in sound energy, three decibels a doubling.

If the particular stresses of certain sound frequencies on the ear are also taken into account for the noise, the sound level is measured in the unit dB (A).

dB (A)[16]	
0	Hearing threshold of a person with normal hearing.

[16] Source: https://www.sueddeutsche.de/wissen/laerm-wie-laut-ist-welcher-laerm-1.632597, accessed on 15.3.2023

0 - 20	You can hardly hear it. Forest noise or whispering is roughly in this range.
20 - 40	Easy to hear (alarm clock ticking, computer fans, background noise in the house). Some people are already disturbed in their sleep by this.
40 - 60	Normal conversation volume or a quiet radio. Concentration can be disturbed here.
60 - 80	Loud conversation, a typewriter or a passing car. Lawnmowers, for example, are in the 80 dB (A) range. Noise at this volume can already lead to long-term health problems.
80 - 100	Passing trucks, power saws or angle grinders. Continuous noise can cause hearing damage.
110	The pain threshold is reached. Circular saws and jackhammers are in this range, but so is the noise in discotheques or music from a Walkman.
Over 120	Jet planes taking off, explosions and many a rock concert.

The sound (pressure) level should not be confused with the energy of the sound source.

The sound emitted by a sound source decreases with the distance from the source. For point sound sources, the decrease in level is 6 decibels per doubling of distance, for line sound sources 3 decibels.

In addition to the decrease in level with distance, the ground conditions, meteorological conditions and the presence of obstacles and reflective surfaces also have an influence on the sound immission (the sound pressure level at a specific location).

8.3 GHS labeling / CLP regulation

Pictogram	Description	Code	Signal word	Examples of hazardous properties
	Flame	GHS02	Danger / Attention	flammable, self-heating, self-decomposing, pyrophoric, water-reactive, organic peroxides
	Gas cylinder	GHS04	Attention	Gases under pressure, compressed, liquefied, refrigerated liquefied, dissolved gases
	Corrosive effect	GHS05	Danger / Attention	Corrosive to metals, corrosive to skin, serious eye damage
	Skull with crossed bones	GHS06	Danger	Acute toxicity
	big exclamation mark	GHS07	Attention	Skin irritant, eye irritant
	Health hazard	GHS08	Danger / Attention	Various health hazards
	Environment	GHS09	Attention	hazardous to water

8.4 Required representatives

First aid officer	One first aider for 2 to 20 employees present, for more than 20 employees present a) 5 % in administrative and commercial companies, b) 10 % in other companies Provide training for first aiders. Train first aiders at appropriate intervals (within 2 years).
Accident prevention officer Data Protection Officer	See corresponding sections
Fire protection officer[17][18]	A proportion of five percent of employees is generally sufficient for normal fire hazards in accordance with workplace regulation ASR A2.2 (comparable to office use, for example).
Testing of mechanical work equipment and hazardous substances	See corresponding sections
Electrical work equipment	See corresponding sections
Project-related occupational safety	See corresponding sections
Vehicle attendant	Check motor vehicles once a year, driving licenses (also for industrial trucks) every six months

[17] The employer can only appoint a person as a fire safety assistant if they have also been familiarized with the respective operational conditions (this also applies to fire department employees).
[18] The fire safety assistants must be given expert instruction with regard to their tasks. In addition to the basic principles of preventive fire protection, the training content includes knowledge of the company's fire protection organization, the functioning and effectiveness of fire extinguishing equipment, the dangers of fires and how to behave in the event of a fire. Practical exercises (extinguishing exercises) in handling fire extinguishing equipment are part of the expert instruction.