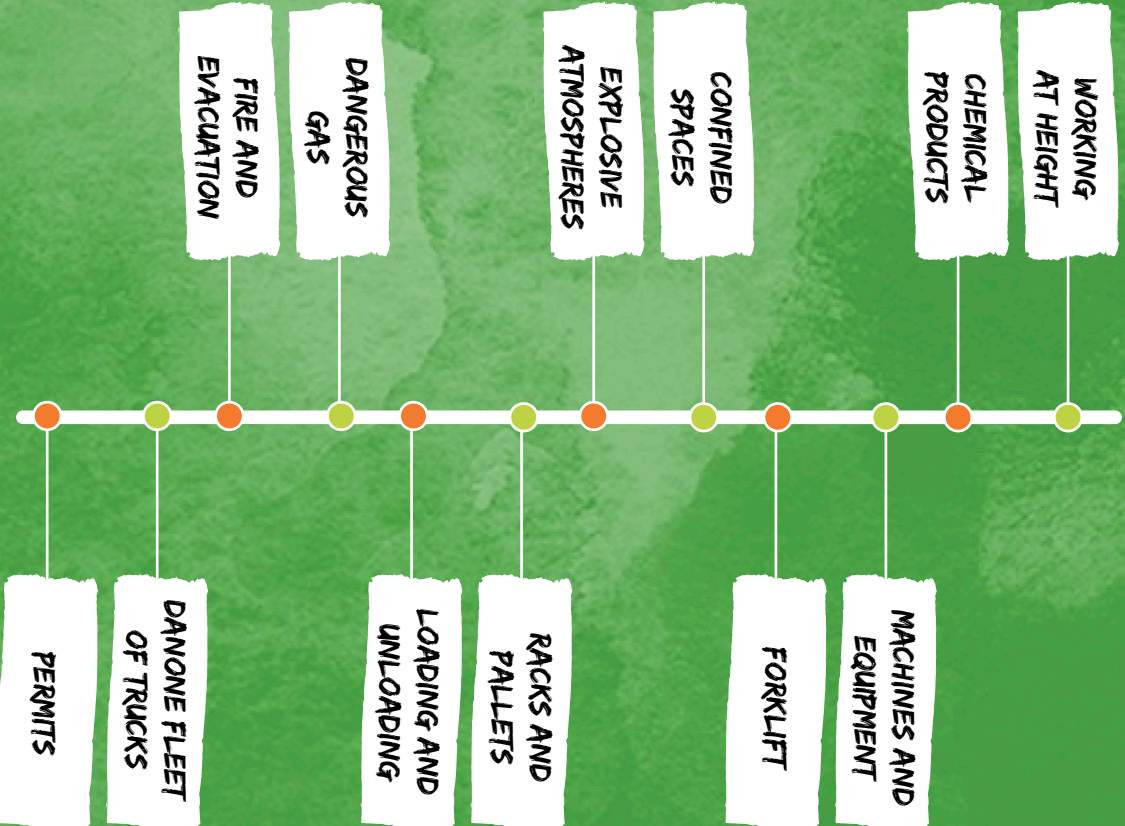




THE 12 BASIC AREAS





Even if, every day Danone employe working conditions are improving thanks to every Danoner's commitment, we can never ensure that someone will not be seriously injured without strictly applying demanding standards in daily life: that is why the **"12 basic areas"** were created.

This booklet explains the essential nature of these rules.

Collectively, we undertake to follow them and comply with them.

This booklet have Been created with the support of many Danoners around the world and a special thank to the Volvic Team for the creation of the first version of this document

August 2021

SUMMARY

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WHY 12 BASICS ?



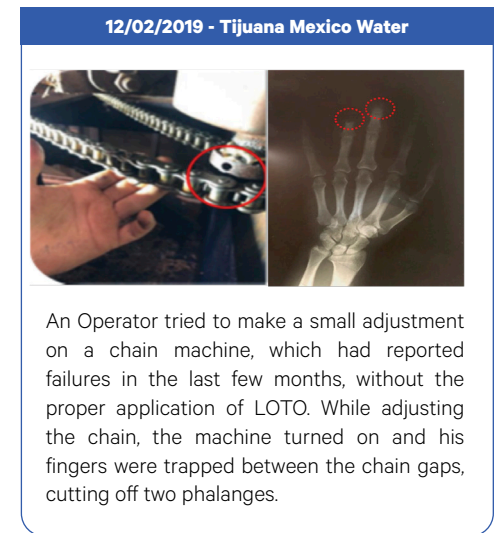
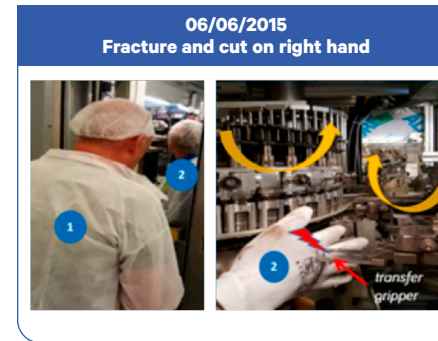
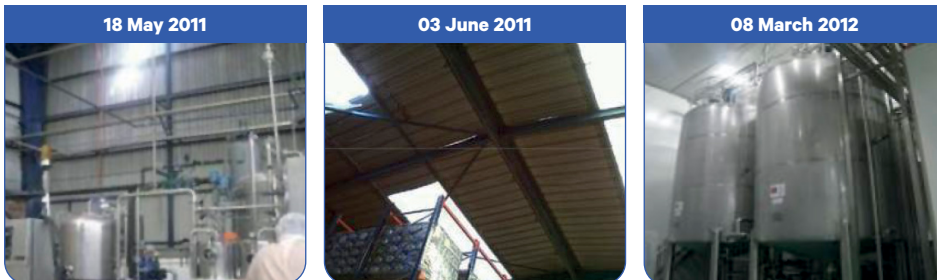
In spite of setting up the Wise approach with the company Dupont in 2006, the group has had to deal with fatal accidents.

The 12 basic areas were conceived from risk analyses and root causes of fatal accidents within Danone since 2008.

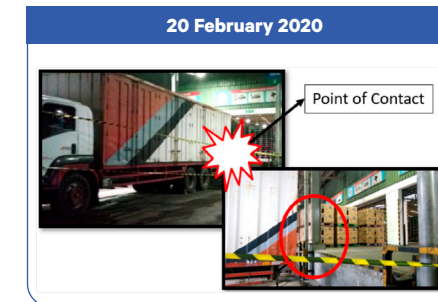
Between 2008 and 2020 there have been: 17 fatal accidents and 20 serious accidents

- Chemical products: 3 serious accidents
- Confined spaces: **2 fatal accidents**
- Electricity: **2 fatal accidents**
- Explosion: 1 serious accident
- Fire: 1 serious accident
- Forklift: 3 serious accidents/ **1 fatal accident**
- LOTO: **2 fatal accidents**
- Machines: 7 serious accidents/ **2 fatal accidents**
- Permission to work: **1 fatal accident**
- Working at height: 3 serious accidents/ **5 fatal accidents**
- Internal truck: **1 fatal accident**
- Loading/unloading : **1 fatal accident**

- Fatal traffic accidents: **43 between 2008 and 2013**



An Operator tried to make a small adjustment on a chain machine, which had reported failures in the last few months, without the proper application of LOTO. While adjusting the chain, the machine turned on and his fingers were trapped between the chain gaps, cutting off two phalanges.



GLOBAL PREVENTION APPROACH

The global prevention approach depends on the head of the local organisation. They are responsible for the safety of their personnel and must put in place a prevention policy.

The 9 general principles of prevention



Various Prevention Levels



PROCESS LEADING TO INDUSTRIAL ACCIDENT (IA)

Process leading to Industrial Accident



This damage, immediate or delayed, may be minor, serious or fatal.

Consequences of Industrial Accident and Occupational Diseases



Consequences of Industrial Accidents/Occupational Diseases

PHYSICAL CONSEQUENCES	ADMINISTRATIVE CONSEQUENCES	MORAL CONSEQUENCES
<ul style="list-style-type: none"> ● Pain ● Temporary or permanent disability ● Re-education ● Re-adaptation ● etc. 	<ul style="list-style-type: none"> ● Legal ● Financial ● Commercial ● Disciplinary ● Dismissal ● etc. 	<ul style="list-style-type: none"> ● Silo mentality ● Family problems ● Psychosocial disorders ● Effects on colleagues ● etc.

FINANCIAL COSTS	
DIRECT	INDIRECT
Costs due to: <ul style="list-style-type: none"> ● Medical appointments (doctor) ● Healthcare (medication, surgery etc.) ● Re-education activities ● Sick pay ● Pensions ● etc. 	Costs due to: <ul style="list-style-type: none"> ● Administrative management of the accident by departments of the company ● Management of replacement of the victim ● Loss of materials and damaged products ● Production stoppage ● Dissatisfaction of the end customer ● Loss of reputation ● etc.

APPLICATION OF THE 12 BASIC AREAS

Serious accidents involving the 12 basic areas (for example, accidents with or without stoppages, healthcare, near-accidents with a high potential seriousness) are the subject of an in-depth and exhaustive enquiry, comprising of the analysis of the fundamental root causes. Furthermore, preventive measures are communicated and implemented.

One or more persons for each 12 basic area are identified and responsible for implementing the standard. This person has obtained, through a solid knowledge of the standard, the risks and associated control measures.

An audit matrix has been set up by Danone. The requirements of this matrix are identified using asterisks.

- X.XX Risk level 1**
Finding may constitute a direct cause of a serious accident
- X.XX Risk level 2**
Finding may be an indirect cause of a serious accident
- X.XX Risk level 3**
Finding is in connection with the effectiveness of the management system

1 WORKING AT HEIGHT



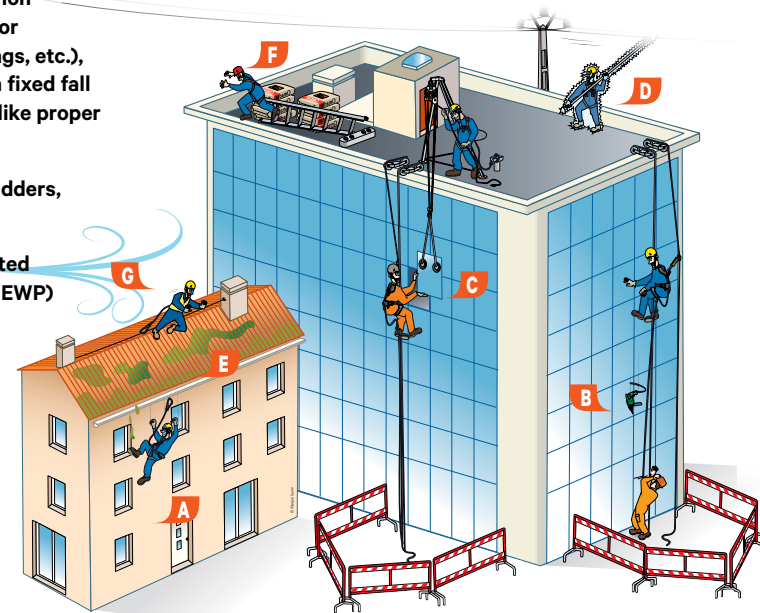
DEFINITION

Work at Height refers to any work activities being undertaken at an elevated position above safe (able to sustain load & prevent from falling) floor level.

RISKS

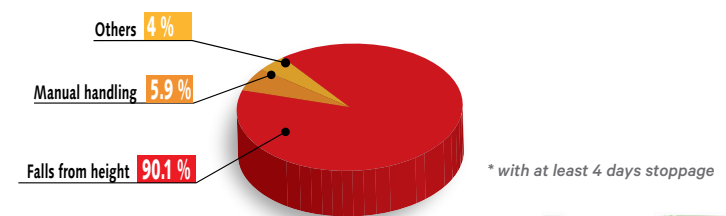
The following activities must be considered as work at height activities:

- A** Visits or works on roofs
 - B** Works performed on non-secured upper floors or platforms (false ceilings, etc.), e.g. not provided with fixed fall protection measures like proper guarding etc.
 - C** Use of ladders, stepladders, platforms, etc.
 - D** Work on mobile elevated working platforms (MEWP)
 - E** Work on scaffolds;
- Other risks:**
- Work nearby large holes / pit
 - Any trucks without adequate fall protection
 - Any work on a silo/tank



STATISTICS ON INDUSTRIAL ACCIDENTS ASSOCIATED WITH WORKING AT HEIGHT

● Distribution of IA* by type of accident (2019)



Source : EU

WHY BE ALERT TO RISKS ASSOCIATED WITH WORKING AT HEIGHT?

Falls from height cause numerous Industrial Accidents every year. They occur when using means of access and workstations (with or without collective or personal protection) and are due to:

- Unfamiliarity with or bad use of equipment.
- Lack of equipment.
- Working conditions that present risks.
- Not using Personal Protective Equipment, collective protection devices.
- Human behaviour: "I know, but I don't do it."
- Not following rules and procedures.

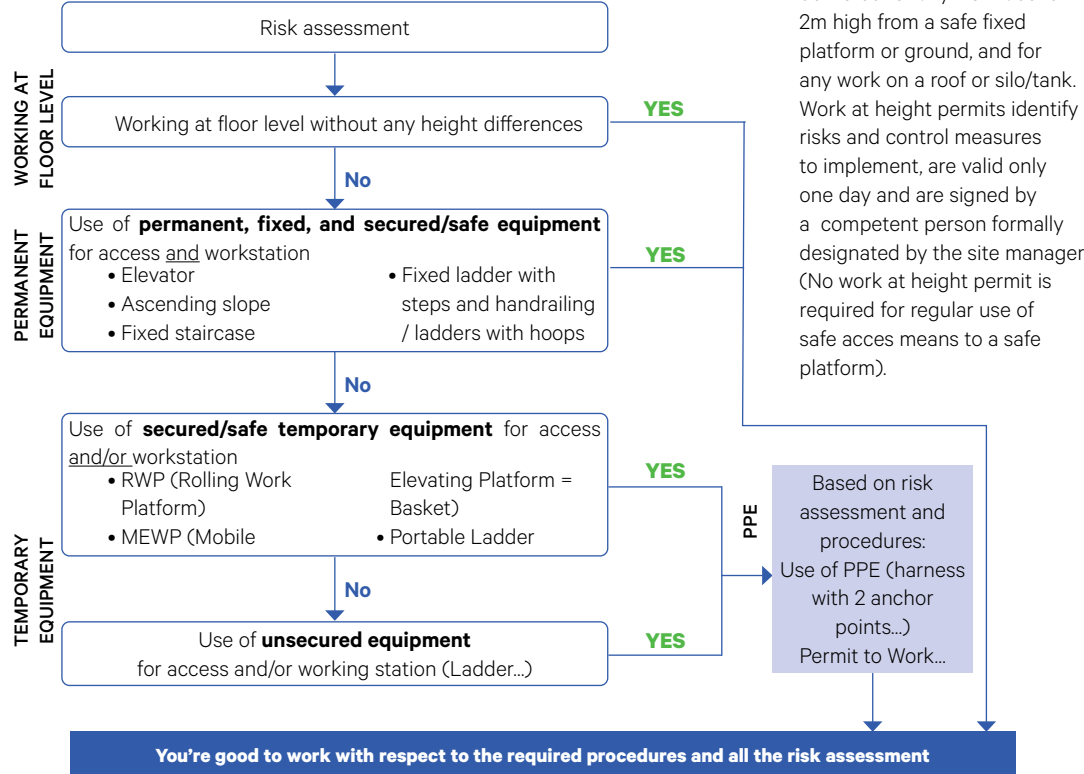
If working > 2m in a non secured working environment:

The person working at height must take "working at height" training.



PREVENTION OF RISKS FROM FALLS FROM HEIGHT

- Make a full risk assessment
- Check that workers are properly trained
- Define the process / ways of working
- Verify the condition of equipment, including barriers, handrails...



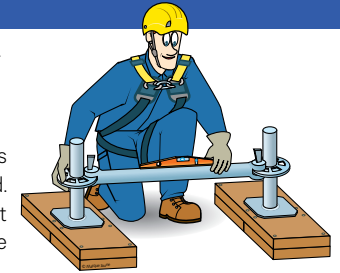
1.5 Work at height permits are delivered for any work above 2m high from a safe fixed platform or ground, and for any work on a roof or silo/tank. Work at height permits identify risks and control measures to implement, are valid only one day and are signed by a competent person formally designated by the site manager (No work at height permit is required for regular use of safe access means to a safe platform).

ESSENTIAL ELEMENTS

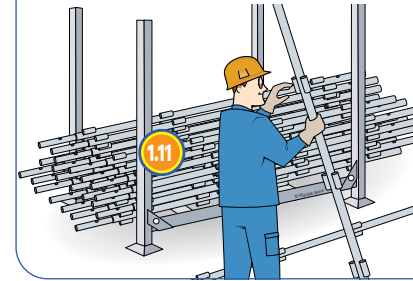
Means of Access and Workstations

SCAFFOLDING

- It must be installed by competent and authorised persons.
- It must be assessed by another qualified person (other than the assembler).

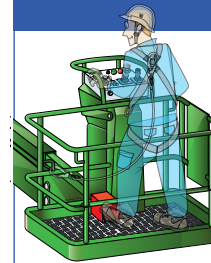


1.10 Scaffolding is stable and provided with barriers at 0.5 metres and 1 metre from the ground as well as a 10 cm baseboard. Equipment allowing access from one level to the next must be situated inside the structure (ladders, stairs). They are designed by a qualified person.



1.11 While in use, fixed scaffolds are inspected :
- at least weekly by a competent and authorised person
- and daily by users. The daily verification can be visual and based on a checklist.
Any user should be aware of risks and rules he must respect.
Prior to any use, user should verify visually the scaffold, check the scaffold tag, and all the conditions are met (weather,...).

MOBILE ELEVATING WORK PLATFORM (MEWP)

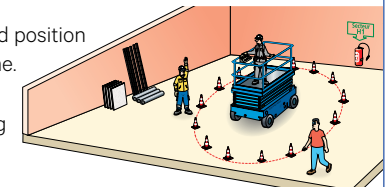


- The basket must be compliant. User manual in local language, periodic general inspection report (check the validity and observation date), maintenance log.
- Harness
- Helmets with chinstrap
- Lookout + traffic.
- Marking out.

1.14 The hoisting components (for example platforms, metal cage) have no visible damage and are certified. A metal cage in a good condition is distinguished by an anchoring point between the case and the vehicle situated at the base of the platform. The cage may be fastened in complete safety to the platform, access to the moving parts of the vehicle from the platform is not possible.

Any use of electrical power tools, should be assessed in the risk assessment, performed by a certified person, and dedicated measures should be put in place

No movement of the MEWP while the basket is in an elevated position
A lookout (person on the floor) should be in place at any time.



1.16 To operate a MEWP, the user must be trained according to local regulation and authorized (permit to work).

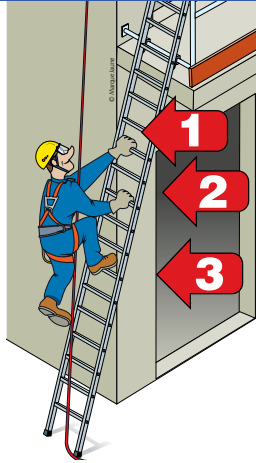
1.15 Lifting components (for example, platforms, metal cage and lift truck) are subject to inspection once a year.

LADDER

- Using a ladder is forbidden without risk assessment and permit

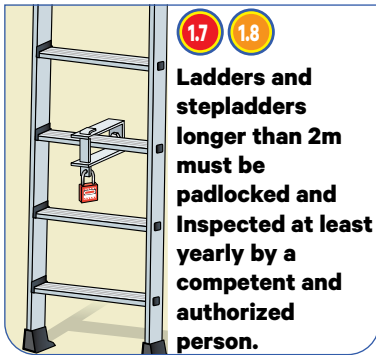
Do not forget the 3 points of contact rule when climbing up or down the rungs:

1 foot and 2 hands or 2 feet and 1 hand



Points for Particular Attention when Using a Ladder

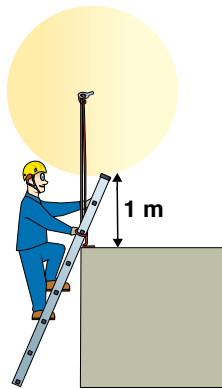
1.9 You are prohibited from using ladders, stepladders and footstools as a workstation. Nevertheless, this equipment may be used if there is no technical possibility of recourse to equipment ensuring collective protection of workers, or when the risk assessment has established that this risk is low, and it relates to short-term working without a repetitive nature.



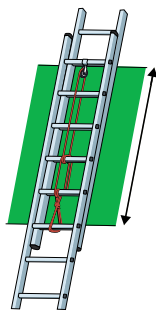
1.7 1.8

Ladders and stepladders longer than 2m must be padlocked and inspected at least yearly by a competent and authorized person.

- Two persons must be present, one person must ensure the stability of the ladder, marking out and monitoring. (Only one person may use the ladder).
- Traffic and marking out : a safe perimeter needs to be marked out and protected from traffic and pedestrians.
- Those involved with using the ladder must be trained in working at height.
- Harness inspected in advance by competent person.
- The ladder must comply with standard NF EN 93-131.
- Check the condition of ladder before using it (Note it is not checking)
- Ensure all environmental conditions are met



The ladder must extend at least one meter above the destination point.



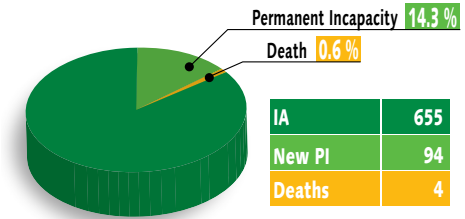
Overlapping of 5 rungs.



The ladder should be prevented from slipping, by anti-slip ladder feet or by a co-worker

SPECIFICS ASSOCIATED WITH WORKING ON ROOFS

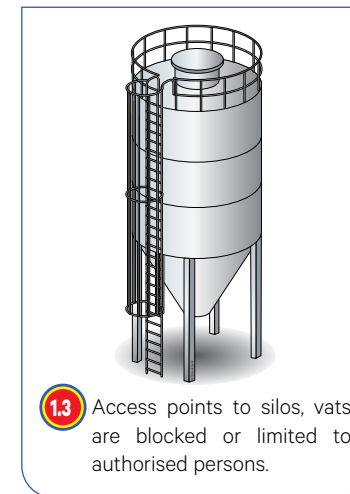
STATISTICS FOR INDUSTRIAL ACCIDENTS ON ROOFING, TERRACES AND GLASS ROOFS



ACCESS

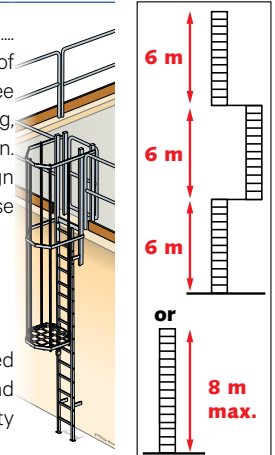
Access to areas for working at height are blocked off.

These access points are managed by an appointed person who provides authorisations.

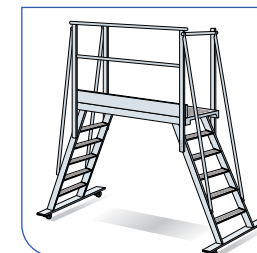


1.3 Access points to silos, vats are blocked or limited to authorised persons.

1.1 Access points to roofs ... are blocked at the point of entrance.. While an employee is working on a roof/ceiling, the access can be left open. Nevertheless, a warning sign must be displayed on these access points.

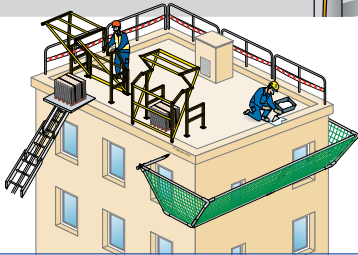
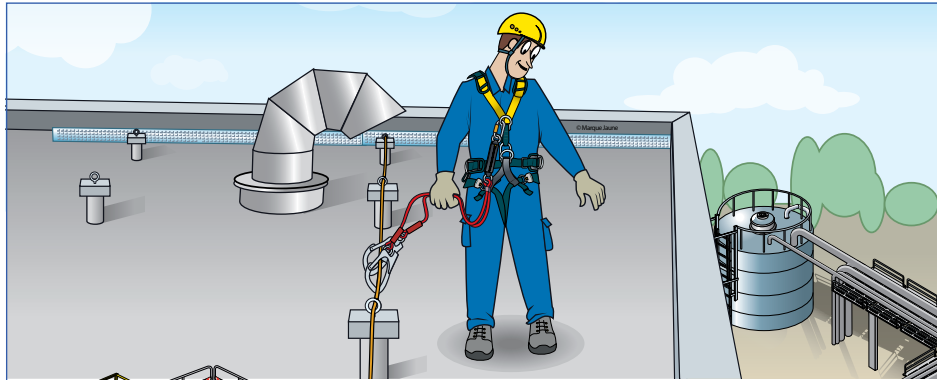


1.6 Fixed ladders are secured at 2 metres from the ground (safety ladders / with safety cradles).



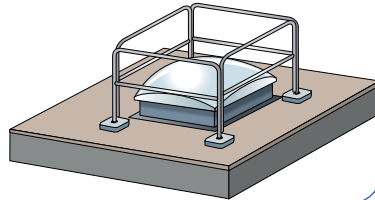
1.2 Access points to platforms, walkways higher than 3 metres (which are not used as a normal access path to working areas) are blocked or limited to authorised persons.

1.4 Platforms and walkways where work is regularly carried out must be secured by a barrier 1 metre high, an intermediate bar at 50 cm high as well as a baseboard. A mobile barrier must be installed at the level of access points to platforms if this is determined necessary by a risk assessment.



1.13 A barrier of sufficient height must be installed on the edge of the roof to prevent any risk of falling. If this is not the case, when working on the roof, a safety line must be installed at least 2 metres from the edge of the roof. This to be defined during the risk analysis. To be defined during the risk analysis.

1.12 A grid, or in certain cases a physical barrier, is installed around skylights (**skydomes**) to protect from falling through. A safety net may be put in place, according to an ISO standard (to be defined during the risk analysis).



WORK PROCEDURES

Access points to roofs and silos are all closed off on the site.

I have called on a trained expert to draw up a permit for working on the roof.

I have made sure that all access points are closed again whilst working and once the work is finished.

- 1.5**
- **Permit WAH required:**
 - Any (non)routine work above 2 m or above floor level
 - Any visit to or work on roof
 - Any work on a silo/tank
 - Any truck without risk ass. & adequate fall protection
 - **No permit WAH required:** using safe access to a safe platform above 2 m or above floor level

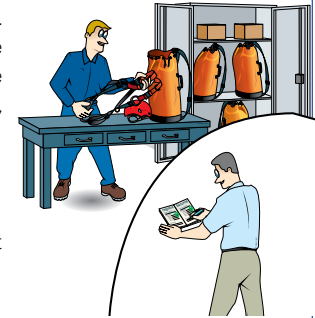


MAYBE PROTECTION AREA ON THE GROUND - SPECIAL PERMIT

REMINDERS OF SAFETY INSTRUCTIONS

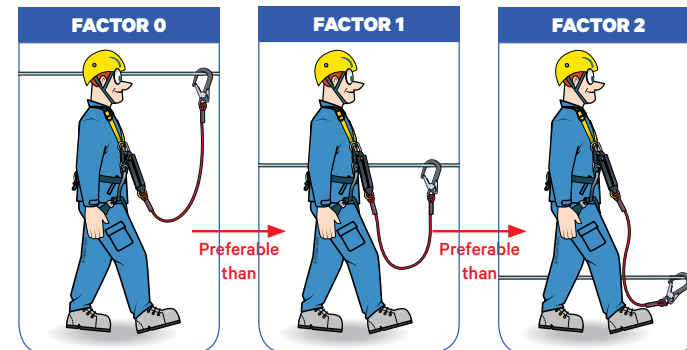


- The weather conditions must be favourable. Wind less than 60km\hour.
- There should be 1 person on the roof, and 1 person to oversee. While working on the edge of the roof, some preventive measures should be put in place to protect people on the floor from falling objects (safety perimeter on the ground, tools attached to the body...).
- The persons must be trained in working at height.
- The equipment used must be suitable for the situation.
- A specialist supervisor for working on roofs must be present on the site.
- The operating method is clear and suited to the risks.
- PPE must be in a good condition and inspected.



FALL FACTOR

1.17 The fall factor measures the greatness of the fall - the higher the fall factor the more severe the impact will be. It is calculated by dividing the height (or distance) of the fall by the length of the support (tether, rope, fall arrest equipment etc.). To reduce the length of the fall from height and to avoid free falling (Danone obligation : < 1 m), the anchor point should be chosen as high as possible.



2 CHEMICAL PRODUCTS



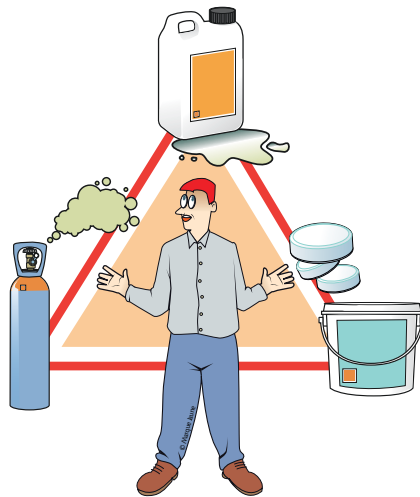
WHAT ARE THE MAIN RISKS?

Chemical products present risks to persons, installations or the environment intoxication, asphyxiation, fire, explosion, pollution etc. They may also cause more gradual harmful effects after years of exposure. If chemical products are not used cautiously, these may cause industrial accidents, and occupational diseases. All these types of risks must be taken into account in the management of the prevention of chemical risks.

Adhesives, resins, fluids, diluents, degreasers, colourants, paint etc. Chemical products are present in all sectors of activity.

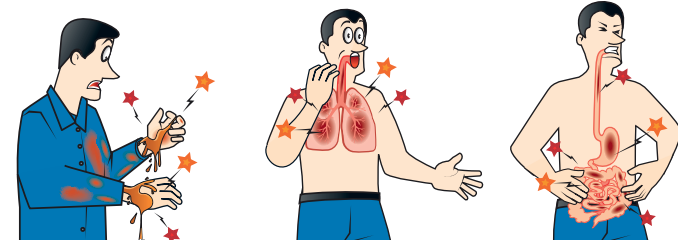
- They are used in a deliberate way as (pure) substances or more frequently as mixtures: industrial synthesis, laboratory analysis, surface treatment, stripping, degreasing, cleaning etc.
- They are emitted by an activity or a process (combustion, degradation etc.) in the form of dust, fumes, vapours, gases or mists.
- Chemical products that come into contact with the human body (by airways, skin or mouth) may disrupt the normal functioning of the body.
- They may cause intoxications either immediately or through repeated contact with certain chemical agents (even at low doses), and may therefore affect the lungs, nerves, brain, kidneys etc.

Furthermore, chemical products are sometimes the cause of a fire and explosion, and may have repercussions beyond the company on the environment, particularly in the case of malfunctions (accidental toppling or spillage, failure of confinement, leaks etc.).



RISKS

- At work you may be in contact with a chemical product:
 - by breathing it in: inhaling fumes, dusts, vapours etc.
 - by touching it: contaminating yourself with a cloth drenched in solvent etc.
 - or by swallowing it: ingesting accidentally a product kept in food packaging, bringing dirty hands to your mouth etc.



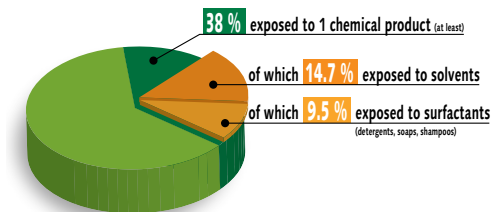
- These three exposure routes are often simultaneous. For example, an aerosol may at the same time penetrate through the airways, be deposited on the skin and contaminate the mouth.

Avoid contact with chemical products as much as possible.

STATISTICS ON INDUSTRIAL ACCIDENTS ASSOCIATED WITH CHEMICAL RISK

Since 1950	More than 100 000 chemical substances (European market).
Since 1990	Of 21 000 accidents reported, around 700 are associated with chemical risks in all sectors of activity.
In 2011	30 000 chemical substances were marketed in quantities greater than one tonne per year. 8 000 substances were subject to harmonised classification and labelling at the European level.

Number of exposures to chemical products



Source : EU

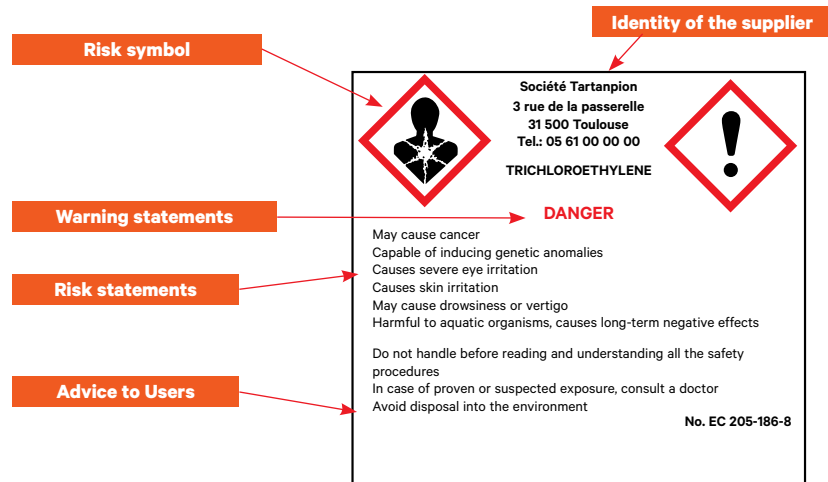
AVOIDING RISKS

Identifying chemical risks

In a company, there are a number of ways to find out information about the risks associated with chemical products. These include labels, data sheets

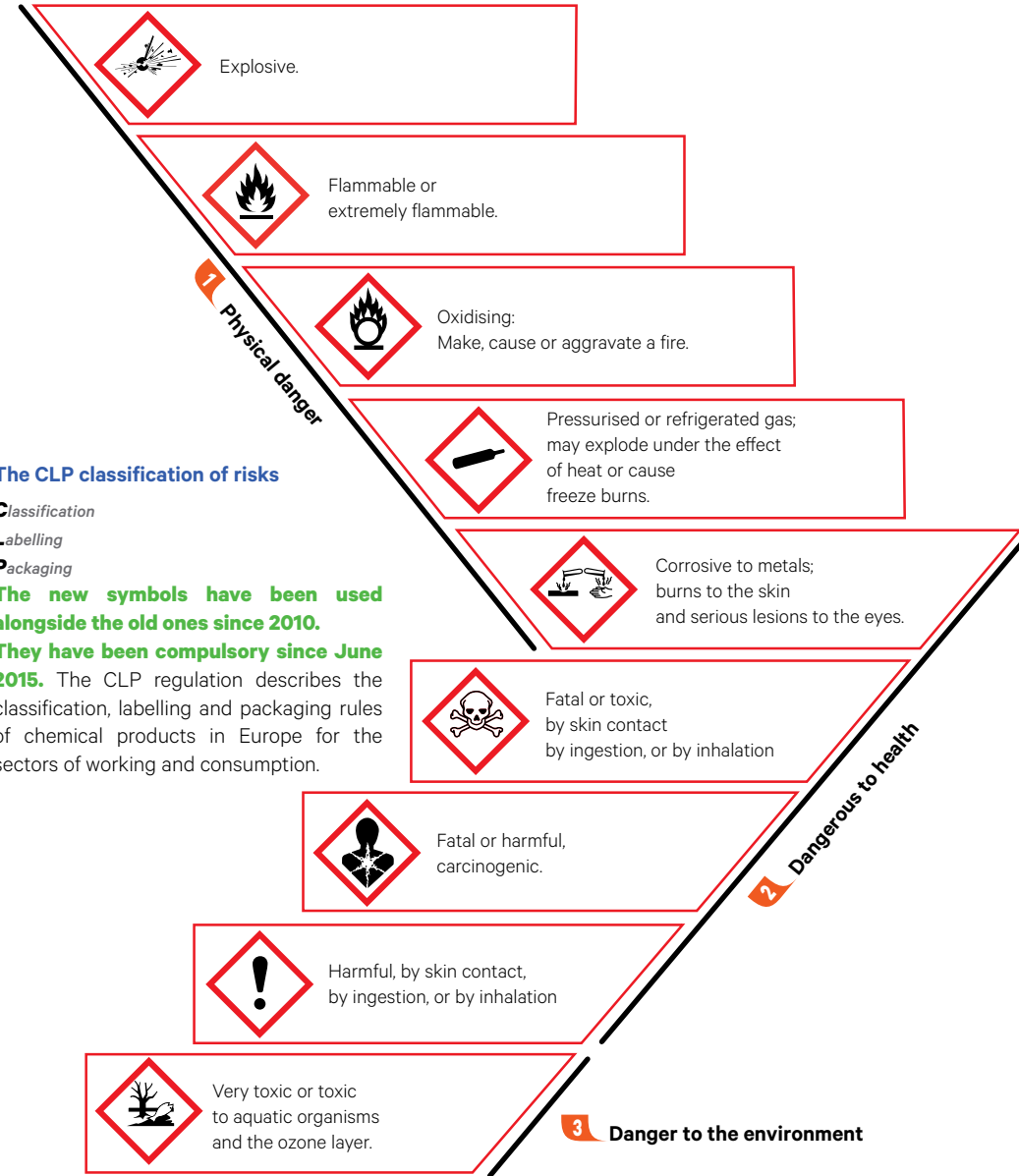
How do you read a label?

The label must appear on the original receptacle and on each successive packaging where it is put in a box or re-packaged.



I only use chemicals when I am trained.
I follow the advice and storage rules related to the risk identification of the chemical

The 9 symbols of the CLP regulation in 3 categories:



The CLP classification of risks

Classification

Labelling

Packaging

The new symbols have been used alongside the old ones since 2010.

They have been compulsory since June 2015. The CLP regulation describes the classification, labelling and packaging rules of chemical products in Europe for the sectors of working and consumption.

IMPORTANT Do not simply look at the symbols but read the label in full: all the risks are not represented by the symbols – the same symbol or pictogram may indicate products that are dangerous to health or to the environment.

Safety Data Sheets (SDS)

● For each product that is dangerous to people and the environment, there is a corresponding **Safety Data Sheet** compiled by the product manufacturer.

It is compulsory.

It informs and provides all the **additional information** relating to the risks to health and the environment, associated with the usage of the product, as well as indication on the means of protection and measures to be taken in case of emergency.










● The SDS and label are two parts of the regulatory measures for informing the company using chemical products.

SDS

This form contains 18 compulsory headings to comply with the regulations:

- 1 • Identification of the substance/preparation and the company or business responsible for marketing it.
- 2 • Information on its components.
- 3 • Identification of risks - Classification of the substance.
- 4 • First aid.
- 5 • Fire-fighting measures; prevention of explosions and fires.
- 6 • Measures to be taken in case of accidental dispersion.
- 7 • Storage, usage and handling precautions.
- 8 • Procedures for controlling exposure to workers and properties of the Personal Protection Equipment.
- 9 • Physical and chemical properties.
- 10 • Stability of the product and reactivity.
- 11 • Toxicological information.
- 12 • Ecological information.
- 13 • Considerations relating to disposal.
- 14 • Information relating to transport.
- 15 • Regulatory information.
- 16 • Other information.
- 17 • Date.
- 18 • In local language.

Example:

 Station Instructions No. 203 Laboratory Disinfection and Sterilisation		Compiled by TORREJON T Applicable on: 01/09/2013
RISK	PREVENTION	
 FIRE	FOLLOW THE STERILISATION STANDARDS DO NOT SPRAY ALCOHOL CLOSE TO A NAKED FLAMED AND ONTO HOT MATERIAL KEEP FLAME AWAY FROM WALLS AND FLOW FILTER	
 SPATTERING	STORAGE OF LIMITED ALCOHOL WASH BOTTLE CLOSE EXTINGUISHER 	
 HOT POINT	WAIT 10 MIN BEFORE TOUCHING PARTS USE DISPOSABLE CUPS 	
 BURNS	REGULARLY CLEAN THE AREAS DO NOT OBSTRUCT CORRIDORS AND PASSAGES	
 NOISE	USE NEW EQUIPMENT (silent-running product spraying pumps)	

Station Instructions

● This document must be easy to access, the content comes from the results of the risk assessment.

● The station instructions (or forms) are written information tools intended to inform workers of the risks to which they may be exposed and the action taken to avoid them. They relate to a task (cleaning a machine, for example), a process in several steps (packaging medication) or using a chemical product at various work stations (reception, storage, weighing etc.). Where the risk assessment has concluded a risk of exposure to chemical risks, the employer must compile station instructions.

SDS

2.18 A proper procedure for management of chemical products is in place. This includes the technical properties of all the products as well as the Safety Data Sheets of these products. It covers the introduction of new chemical products (validation process, storage, usage, emergency treatment).



INTERVENTION SUR ZONES CHIMIQUES

RISQUES	PRÉVENTION	PHOTO
 <p>MANIPULATION DE PRODUITS CHIMIQUES</p>	 <p>TENUE COMPLETE OBLIGATOIRE</p> <p>ARRET OBLIGATOIRE DE L'INSTALLATION AVANT INTERVENTION</p> <p>PROJECTION</p> <p>TOUCHEZ PAS</p> <p>LAVEZ VOS MAINS</p> <p>ATTENTION</p> <p>LORS DES DÉPLACEMENTS ET DE VOS INTERVENTIONS</p> <p>INTERVENTION A DEUX OBLIGATOIRE</p>	 <p>*Pensez à rincer votre équipement après utilisation.</p>

PPE

2.8 High, adequate protection, in good condition, is compulsory (1) to access zones having a high concentration of chemical products (CIP, process rooms, storage areas and any other zone on the basis of the risk assessment) as well as for handling chemical products. PPE may vary depending on the tasks to be carried out and must be selected on the basis of a risk assessment of the exposure to chemical products.



BEST PRACTICE

Act on the Work Situation - Act on the Risk

- Limit contact with products as much as possible.
- If possible, remove the hazardous chemical product.
- If not possible, substitute for a less hazardous product with comparable efficacy.
- Check the availability of first aid equipment.
- It is preferable to use chemicals in a closed system where there is no human intervention.
- Mechanise the process or automate certain tasks: working in enclosed spaces, transfer products by pipework, mechanised sampling, automatic cleaning, etc.
- Limit stocks in the workshop.
- Remove or limit the presence of personnel not required for the tasks concerned.
- In all cases, the preference should be collective protection measures (abstraction, ventilation, restricted access to areas, vacuum exhaust removal of the workstation etc.) over personal protection.
- Wear the Personal Protection Equipment required (gloves, masks, jumpsuits): they must be for personal use, suitable for the risk, in good condition and maintained).

Always Handle Chemical Products with Caution

- Following the operating methods, instructions, station instructions etc.
- If you put a chemical product into another receptacle, this must be labelled.
- Never mix two products, unless it is specifically stated, because some are incompatible with each other.
- Indicate the remedial measures to be taken when problems and difficulties are encountered.
- Clean your workstation as required.
- Do not leave the equipment running, and do not leave out products, impregnated cloths etc.
- Do not take home your soiled work clothes.



ESSENTIAL ELEMENTS

STANDARD FOR CONNECTING CHEMICAL PRODUCTS

CIRCUITS WITH THE MINIMUM RISK OF LEAKS

- Avoid as much as possible flexible hoses and instead use suitable connections.

2.9

- If it is not possible to eliminate hoses.

- You must provide:

- hoses of a limited length,
- hoses fastened with splined ends and secure collars (no serflex),
- a transparent and airtight protection housing in the area of risk (allows you to see without taking it out of the housing),
- put a sump under pumps to channel any leaks.



CHOOSE THE RIGHT COMPONENT

- Serflex-type collars are generally prohibited and completely banned from products with risk, including compressed air.

- It is preferable to use chemicals in a closed system where there is no human intervention, the thread slips without anyone being able to tell.



- Well tightened or well crimped, these clamping collars guarantee excellent holding of the hose at the end.



PACKAGING

2.5

- Chemical products are used in their original container or a suitable container. Food packaging is prohibited.



HOLDING VAT

2.6

- A container for retaining spillages ensures collecting 110% of the largest container or ultra-corrosive chemical products in any location.



LIMITED ACCESS

2.1

- Areas with limited access (for example, the CIP room for cleaning, chemical cabinet, chemical products warehouse, the area for storing chemical products in the main shop, etc. excluding temporary storage areas) are controlled and shut off.



TYPES OF PRODUCT					
Storage					
	+	-	-	+	-
	-	+	-	0	0
	-	-	+	+	-
	+	0	+	+	+
	-	0	-	+	0*

Key:
 +: Compatible storage
 0: Storage possible
 -: Storage prohibited, possibility of hazardous reaction

Certain products have specific properties: check using the SDS that these general rules are applicable.


*: Separate acids and bases.

STORAGE

2.3 The storage area of dangerous liquid chemical products (including aqueous ammonia) is designed according to the requirements described in the Safety Data Sheet as well as the legal requirements; particular for spaces where a significant quantity (> 1 tonne) of flammable products is stored. These spaces are provided with an appropriate ventilation system, a fire alarm, extinguishers as well as fire doors, in accordance with local regulations and the quantities of flammable products in stock.

IDENTIFICATION

2.7 All the containers are identified. A label indicates the place and the maximum quantity of each product.




CHEMICAL SPILLAGE KIT

2.12 The kits allowing accidental spillages to be managed are easily accessible.



- HYDRAULIC

2.10 Pipes, pumps, hoses etc. must meet the regulatory requirements, be identified, in a good condition and controlled.



3 CONFINED SPACES

INSPECTION OF CONDUITS

2.11 Conduits containing hazardous products are labelled and are subject to an annual inspection.

SAFETY SHOWERS

2.13 **2.14** Body and eye safety showers are correctly installed, the equipment is in a good condition and it is inspected at least once a year.



TRAINING

2.16 Persons that use chemical products are trained in the risks, the storage rules, PPE, etc.



SECURING BY EARTHING

2.4 An earthing system must be in place for the transfer of flammable liquids by pipework, or by hose and/or by gravity. All sources that may create sparks (and/or static electricity) are neutralised or secured (e.g. No Smoking signs clearly displayed and visible).

USAGE

2.15 The products are used in a volume suitable for their usage (team, day) and clearly identified.



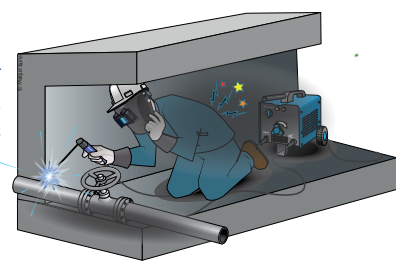
WASTE

2.17 The waste of chemical products is collected, identified and stored in safe conditions, separated by type, etc.



WHAT IS A CONFINED SPACE?

A confined space is defined as an area entirely or partially closed. This space is neither suitable or intended to be occupied by persons continuously. However, it is necessary to enter it temporarily for inspections, maintenance or repairs. During this work, the atmosphere may have significant risks to health and safety.



RISKS

Generally, any person entering into a confined space may therefore encounter risks due to:

- Lack of natural ventilation.
- Used materials or products.
- Its design.
- Its location.
- Equipment installed.
- The type of work undertaken.
- Rotative equipments inside tanks
- Electrical shocks (conductive environments)

The 4 Main Risks

- **Toxicity** (solid: muds etc.), (liquid: soiled water etc.), (gaseous: H2S etc.)
- **Ventilation**
- **Access**
- **Drowning**

Induced Risks

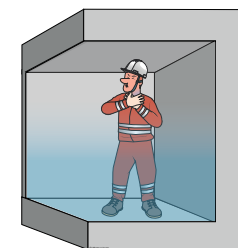
- **Asphyxiation/Anoxia**
- **Intoxication**
- **Explosion**



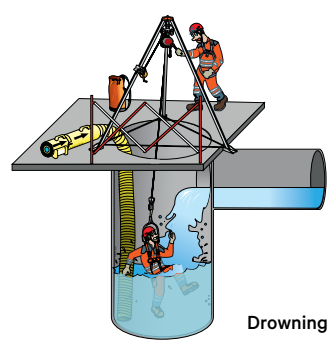
Explosion



Intoxication



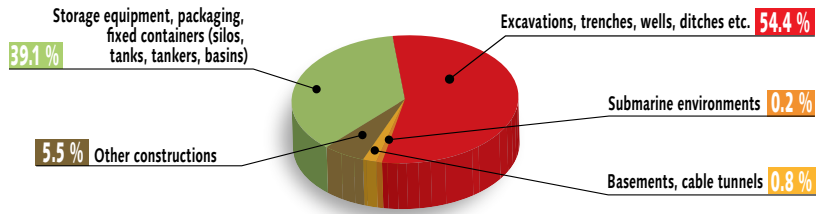
Asphyxiation/Anoxia



Drowning

Asphyxiation / Anoxia / Intoxication: These generally come from a lack of ventilation due to the accumulation of toxic gas and vapours, the formation of an explosive atmosphere or even an oxygen deficiency.

STATISTICS OF ACCIDENTS IN CONFINED SPACES (2016)

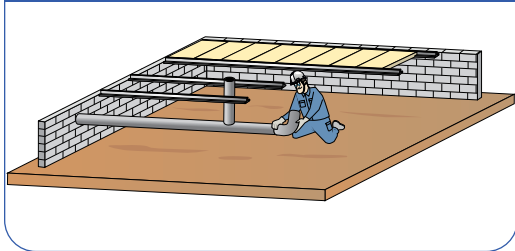


Source : EU

EXAMPLES OF CONFINED SPACES

There are many different kinds of confined spaces everywhere. These can be both small and large. Confined spaces may be under-ground, buried, may be buried or in the air with or without a roof.

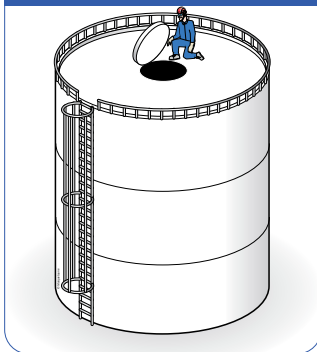
SANITARY SPACE, BASEMENT



MANHOLE



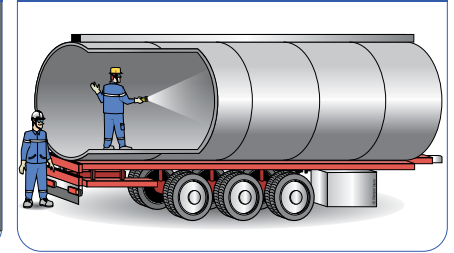
TANK



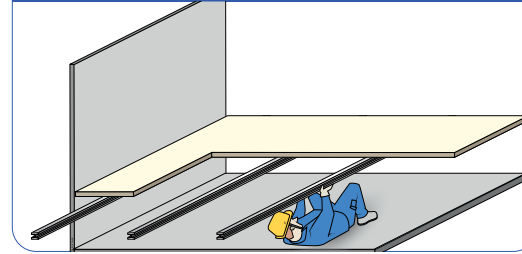
DRAINS / SEWERS



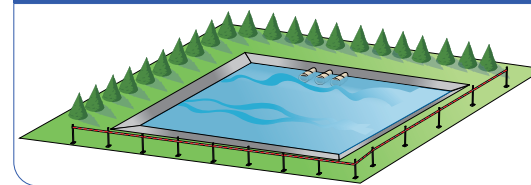
TANKER



BASEMENT, TECHNICAL OR UNDERGROUND ROOM



STORM BASIN



EXAMPLES OF MOST COMMON HAZARDOUS GASES

Chemical formula	Name of gas	Appearance	Odour/olfactory threshold	Remarks
CO	Carbonic oxide or carbon monoxide	Colourless	Odourless	Toxic, extremely flammable
CO ₂	Carbon dioxide	Colourless	Odourless	Asphyxiating, presents an inherent toxicity
H ₂ S	Hydrogen sulphide	Colourless	Odour of bad eggs at low concentration: from 0.02 to 0.1 ppm Anaesthesia of the smell above 100 ppm	Very toxic and extremely flammable
CH ₄	Methane	Colourless	Odourless	Extremely flammable
NH ₃	Ammonia	Colourless	Sharp smell detectable from 0.5 ppm	Toxic, irritant and flammable
Cl ₂	Chlorine	Greenish yellow	Sharp and suffocating smell detectable from 0.2 ppm	Toxic and irritant, due to reactivity, may cause a fire or explosion
ClO ₂	Chlorine dioxide	Yellow-green to red-brown	Sharp and suffocating smell	Toxic, corrosive, oxidant, unstable, may cause a fire or explosion
O ₃	Ozone	Colourless to bluish	Characteristic sharp smell detectable from 0.01 ppm	Very irritant, powerful oxidant, may cause a fire or explosion
N ₂	Nitrogen	Colourless	Odourless	Asphyxiating

WORK PROCEDURES

I have a job to do in a confined space.

I must contact an authorised person to issue a permit for working in a confined space on the site.

Compilation of the permit for working in a confined space with atmospheric measurements, risk analysis, PPE required.

3.4

To be renewed every day

POINTS FOR PARTICULAR ATTENTION WHEN WORKING IN A CONFINED SPACE

- Atmospheric measurements taken at 3 points (high-low-middle)
- Means of detecting the atmosphere present on the individual persons working.
- Lookout is present and trained in emergency situations
- Emergency extraction system in place
- Ensured ventilation
- Permit compiled and present at the place the work is carried out
- First aider present on site. There is communication in place between those working inside and outside, as well as emergency response team or first aiders
- Clear access to the confined space entry point should be maintained at all times.
- **Always need to indicate the right level of O₂ (19% - 21%)**
- Perform a task risk assessment to ensure that all local regulations are followed (chemical, ATEX, exposure levels, O₂ levels)

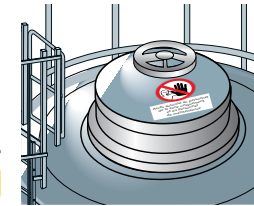
ESSENTIAL ELEMENTS

IDENTIFICATION

- 3.1 All the confined spaces are clearly identified (tanks, silos, closed machines, tanker etc.) and access identified and blocked off.



DANGER !
ESPACE CONFINÉ



COMPULSORY
ENTRY PERMIT

TANKER

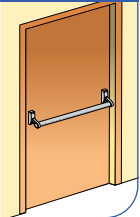
- 3.3 Any entry into the tanker follows the procedure for entering a confined space. Working in a confined space is subject to authorisation.

Formulaire



SYSTEM FOR OPENING THE DOOR

- 3.2 Closed rooms (cold rooms, storage rooms etc.) are equipped with an internal emergency system for opening the doors.



OXYGEN MEASURES

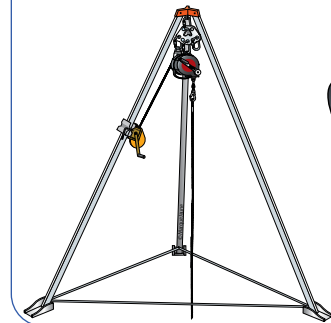
- 3.11 Before entering each time and during the work, operators take measurements of the atmosphere, gas, explosimetry. The gas detector is attached to the body of the person entering the confined space. The gas detector must be checked every 6 months to ensure it is correctly working. Regular control / calibration of the Oxygen measurement device (according to local regulation)



- 3.12 Confined spaces are inventoried.

EQUIPMENT INSPECTION

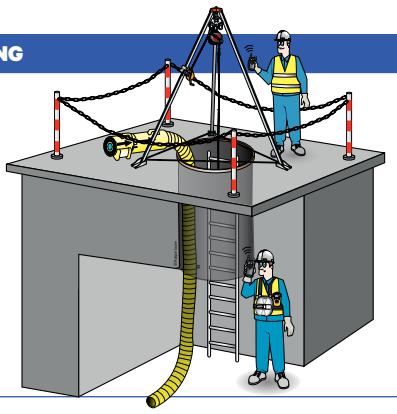
- 3.9 The safety equipment (e.g.: harness, stilt etc.) is checked once a year.



4 EXPLOSIVE ATMOSPHERES

MONITORING

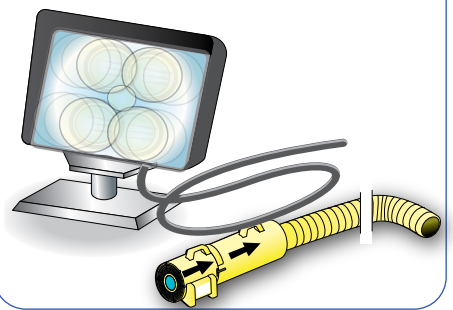
3.8 While work is performed, a 2nd person is present on the outside. He is fully dedicated to watch over the worker and responsible for the evacuation system. He must never enter into the confined space. All the items of PPE must be in place at all times. A first aider is immediately able to be contacted.



VENTILATION AND LIGHTING

3.7 Fans, of the correct size, allowing ventilation are installed. The fans are regularly inspected to ensure fully operational.. Low voltage 24 VAC lighting is in place.

- only use electrical tool dedicated and designed to confined space works.

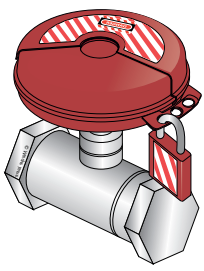


FIRST AID EXERCISES

3.6 Rescue / evacuation exercise must be performed once a year.

General principles:

- 3.5** Entry into confined spaces is authorised for those employed by Danone and sub-contractors once a permit has been compiled. Danone employees will only be qualified to work in confined spaces following specific training.
- 3.10** Where work is carried out, all the sources of energy present in the confined spaces are identified and neutralised with lock out tag out (LOTO) equipment.



Danoner & Contractors who have been validated (prevention plan done / qualification verified / permits ...) are allowed to enter confined spaces.

WHAT IS AN EXPLOSIVE ATMOSPHERE?

An explosive atmosphere is a mixture with air, in atmospheric conditions of flammable substances in the form of gas, vapours or dust in which, after igniting, combustion propagates to the entire unburned mixture.

Explosive Atmosphere Directive 1999/92/EC

RISKS: MAIN SOURCES OF IGNITION

- 1 Electricity** (sparks, heating etc.).
- 2 Stray electrical currents:** (heating or sparks between metal parts).
- 3 Electrostatic:** discharges by sparks.
- 4 Thermal** (hot surfaces, cigarettes, naked flames, working near hot point etc.).
- 5 Mechanical** (sparks, heating etc.).
- 6 Chemical** (exothermic reactions, spontaneous heating etc.).
- 7 Bacteriological** (bacterial fermentation etc.).
- 8 Climatic** (lightning, sun etc.).

In industry, flammable products are stored in vats made inert with nitrogen, and signposted with the symbol:

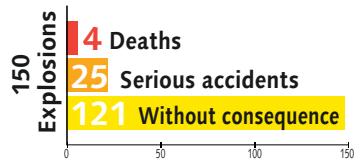


GOOD TO KNOW:

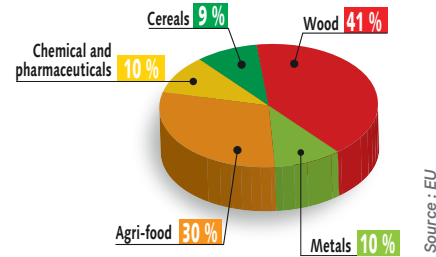
- The risks of asphyxiation, anoxia and intoxication generally come from a lack of ventilation due to the accumulation of toxic gas and vapours, the formation of an explosive atmosphere or even an oxygen deficiency.
- A location made inert with nitrogen presents a fatal risk of anoxia.
- Even one very low energy spark (a few microjoules: μJ) produced by static electricity may be the source of an explosion.
- Be Aware: A significant rise in temperature can mean that the spontaneous ignition temperature is reached for that gas or vapour which can trigger an explosion without the need for a direct contact with a flame or spark.

STATISTICS OF EXPLOSIONS ASSOCIATED WITH EXPLOSIVE ATMOSPHERES

- Consequences of explosions in places of work within Europe annually (averaged over the past 10 years 2006 to 2016)



- Explosion Incidents by Industry



THE EXPLOSION MECHANISM

An explosion is a rapid oxidation (combustion) or decomposition reaction causing a temperature and pressure increase.

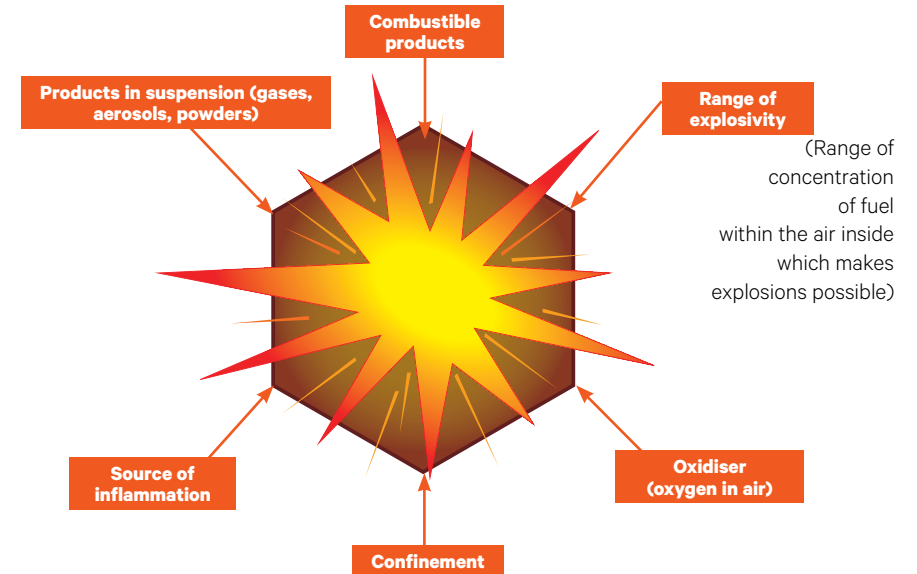
The Lower and Upper Flammability Limits define the range of explosivity. For these reasons, in practice, they are designated as Lower and Upper Explosion Levels.

The flash point: it is the temperature from which a fuel emits vapours in a sufficient quantity that it's mixture with the air is flammable. The lower the flash point, the more flammable the fuel is.

The spontaneous ignition temperature: this is the temperature from which the vapours emitted by a fuel combust spontaneously.

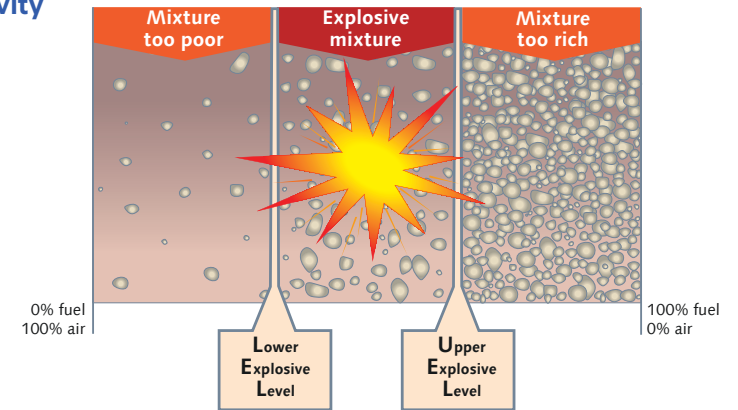
Upper Explosive Level (UEL) and Lower Explosive Level (LEL): Defines the limits of concentration where the gas or vapour (fuel) in the air will explode. There must only be a certain concentration of the fuel in the air.

For an Explosion, There Must Be 6 Conditions Combined Simultaneously:



A mixture is considered as dust if the median diameter is less than 500 microns.

Range of Explosivity



A few examples of flash points of aromatics:

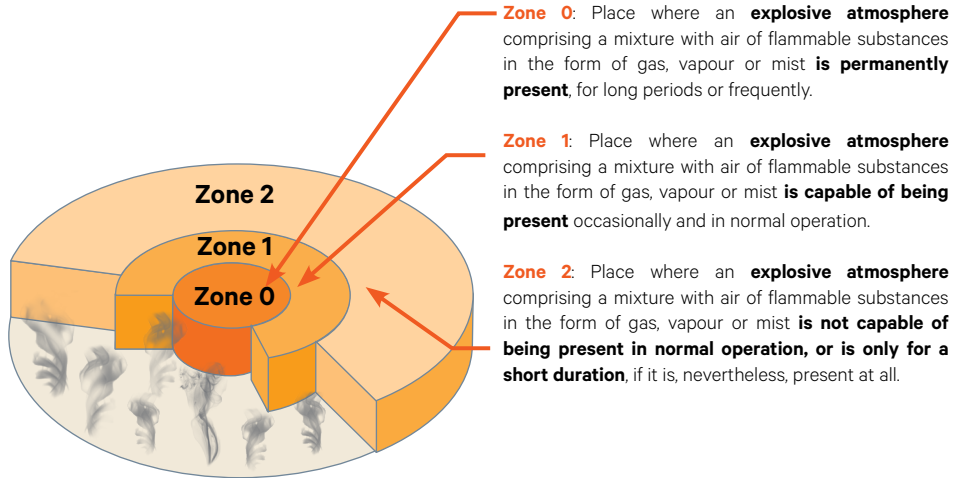
	MIE: Minimum Ignition Energy	Spontaneous ignition time in powder	Minimum inflammation concentration	Explosion pressure
Powdered PET	35mj	500°	125g/m ³	7bars
Sugar	30mj	400°	45g/m ³	8bars
Cacao	100mj	510°	75g/m ³	5bars
Powder milk	50mj	490°	50g/m ³	7bars

EXPLOSIVE ATMOSPHERE ZONES

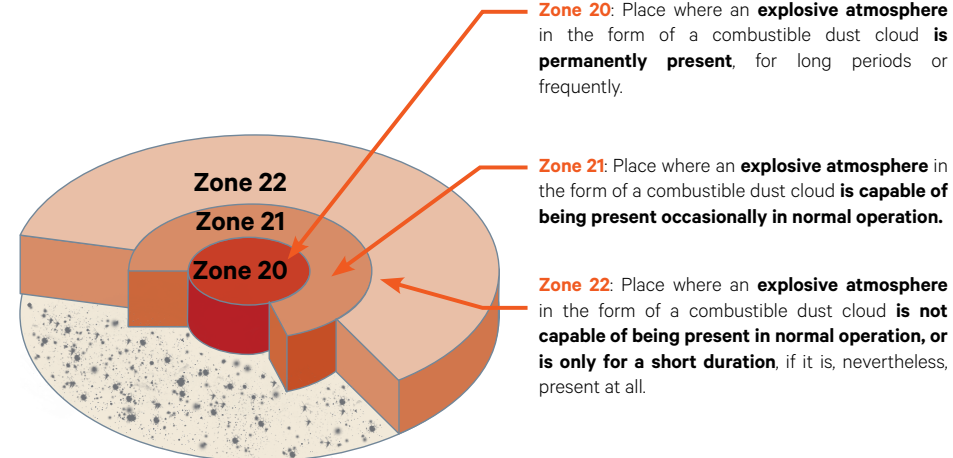
An explosive atmosphere is a mixture of air and flammable substances in the form of gases, vapours or dusts.

Regulations classify into **three zones** depending on the significance of the risk. They also distinguish between cases of gases & vapours and those of dusts.

Gas and Vapour Zone



Dust Zone



PRECAUTIONS, EQUIPMENT AND AUTHORISATIONS

Avoid the Risk with Combustible Materials

- Maintain the concentration of the combustible material outside its range of explosivity by:
 - Abstracting vapours or dusts.
 - Diluting the air.
 - Frequent cleaning of dust deposits.
 - Setting up calibrated detectors etc.

Avoiding Sources of Ignition

SIGNAGE

The following warning panel must be displayed at the access point of an explosive atmosphere together with the respective zoning level.

Example:

EXPLOSIVE ATMOSPHERE (vat of GPL chancet fruit)

Compiled by:

Applicable on: 23/08/2018

Zoning		
Gases	Powders	
0	20	Explosive atmosphere present PERMANENTLY in normal operation
1	21	Explosive atmosphere present OCCASIONALLY in normal operation
2	22	Explosive atmosphere present OCCASIONALLY in case of MALFUNCTION

Prevention:

- Zone with grating with limited access.
- No parking close by.
- Periodic maintenance and inspection of the vat.
- Comply with safety distances when removing.

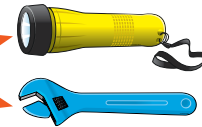
If there is a problem, advise:

- **Garage team leader**

Equipment

ACTION ON EQUIPMENT

- all equipment use in the zone should marked and rated accordingly to the zone classification
- Anti-sparking tooling
- Earthing, equipotential bonding.
- Earthing of the explosive atmosphere equipment.



Authorisations

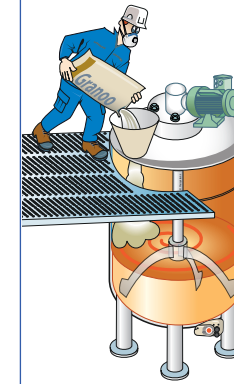
On the site, any non-routine maintenance work in the explosive atmosphere zone must be subject to a Work Permit in the explosive atmosphere zone.

WORK PERMIT

- 4.10** For non-routine maintenance work in a potentially explosive environment, a work permit should be issued. This permit should identify risk and control measures to be implemented. It is approved by a competent person formally designated by the site manager and is only valid one day.

ESSENTIAL ELEMENTS

RISK ASSESSMENT



- 4.11** A risk assessment exists. Explosive products are entered on a list. Explosive atmosphere zones are known and identified.

DANGER OF EXPLOSION



PRODUCTS AND STORAGE

- 4.6** The explosive products are stored in an adequate location, with restricted access.
- The explosive atmosphere zones comply with legal standards (explosion-proof lighting etc.).



INSTRUCTIONS/PROCEDURES/RULES

4.6

ZONE ATEX (cuve de GPL chancet fruit) Rédigé par :
Applicable le : 23/08/2018

EX DANGER ATMOSPHERE EXPLOSIVE

Zonage		
Les gaz	Les poudres	
0	20	ATEX présente en PERMANENCE en fonctionnement normal
1	21	ATEX présente OCCASIONNELLEMENT en fonctionnement normal
2	22	ATEX présente OCCASIONNELLEMENT en cas de DYSFONCTIONNEMENT

Prévention :

- Zone grillagée à accès limité.
- Interdiction de stationnement à proximité.
- Maintenance et vérification périodique de la cuve.
- Respecter les distances de sécurité lors du dépotage.

En cas de problème, prévenir :

- Jean-Luc SERVIER : 06 67 59 24 53
- Chef d'équipe Garage

Zone 1 : In contact des vapeurs de gaz inflammables
Zone 2 : In contact de la zone de libération de gaz

CONTROL

- 4.1** The equipment complies with explosive atmosphere standards as well as the insurer Requirements.



EARTHING

- 4.7** The equipment has earthing and an explosion-proof electrical system.

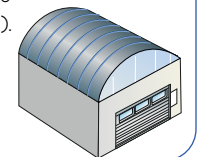
TRAINING

- 4.9** All the people working in the areas with an explosive atmosphere receive specific training on the risks of explosive atmospheres.



CLEANLINESS OF WAREHOUSING PREMISES

- 4.2** **4.3** The premises for warehousing and usage of powders are clean (no accumulation of dust). A regular cleaning schedule is in place.



5 DANGEROUS GASES



WHAT IS A DANGEROUS GAS?

Dangerous gases present a potential danger to human beings in a certain concentration. In the Danone factories, these gases are used in numerous pieces of equipment. The main gases used on the site are: CO₂, acetylene, ammonia, nitrogen, argon, oxygen, helium and propane etc. It is important to be able to identify these gases and know what risks they present to our health and safety.

RISKS

- **Risk of fire and/or explosion.**

For example: butane, propane.



- **Risk of intoxication.**

For example: monoxide, hydrogen, carbon dioxide, chlorine, ammonia.



- **Risk of suffocation.**

For example: lack of oxygen. Oxygen may be used up or displaced by another gas.



Risks of Splashing and Spattering

- Lack of maintenance or bad maintenance of equipment may cause an inadvertent movement of the pressure pipe, an explosion or breakage of fragile objects (seals, welds, taps etc.), consequently risking spattering, a cloud of dust, a shock wave, problem noises or a leakage of potentially-dangerous products (gases or liquids).

It is useful to observe a certain number of rules and regulations when handling.

PROPERTIES OF GASES

Before using gases, it is necessary to know their specific properties. They may be flammable, oxidising, toxic, corrosive, mutagenic or dangerous to the environment.

Some gases have several of these properties at the same time. Inert gases may, by replacing the oxygen in the air, have an asphyxiating effect. In the bottles, the gases are stored under pressure in a compressed state, liquefied or dissolved. In tanks/bottles, gases are stored under pressure in a compressed state, liquefied or dissolved.

Compressed gas under pressure	
Combustible gases having a level of flammability in air or other oxidising substances.	
Spontaneously igniting gases having a flammability temperature < 100°C. These gases mixed in air or other oxidising substances may ignite at ambient temperature.	
Oxidising gases accelerate combustion but are not combustible themselves.	
Corrosive gases attack numerous materials, particularly metals and have a corrosive effect on skin and mucous membranes.	
Toxic gases may seriously harm human health or even be fatal if they are breathed in or absorbed by the skin.	
Gases that are a risk to the environment which may destroy the ozone layer, contribute to global warming or even risk water reserves.	
Some gases are classed as carcinogenic and/or mutagenic substances and may have long-term consequences on human health.	

TOXIC AND / OR CORROSIVE GASES

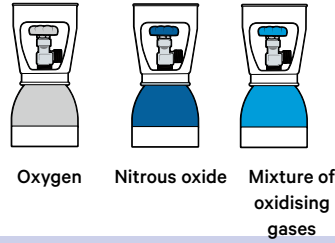
- These are the gases that have short-term, low-dose health effects. They can be deadly



Ammonia

OXIDISING GASES

- These are gases that activate and accelerate combustion.
- The main oxidising gases are oxygen, nitrous oxide and mixtures of oxidising gases.



IN THE CASE OF OVER-OXIDATION THERE IS AN INCREASED RISK OF FIRE



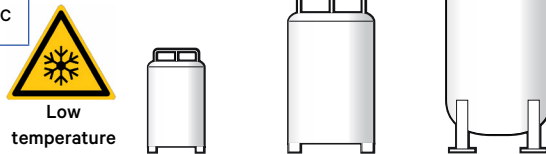
These gases are mostly heavier than air: pay attention to low points.

CRYOGENIC GASES

- These are gases in liquid form, maintained at very cold temperatures. An increase in temperature causes a change from liquid form to gaseous form.

Main contents

Gas in liquid form	N2 (nitrogen)	Ar (argon)	O2 (oxygen)
Temperature (°C)	-196 °C	-186 °C	-183 °C



Cryogenic burns

- Never allow a cryogenic gas or frozen pipework to get in contact with bare skin.
- Use suitable personal protection equipment (cryogenic gloves, goggles, long-sleeved clothing etc.).

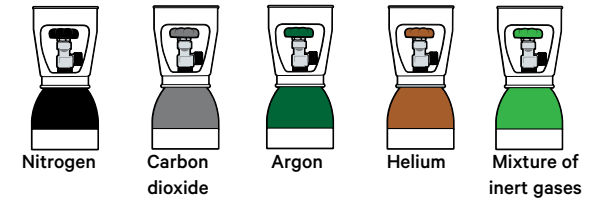
IN THE CASE OF SUBOXIDATION, there is a risk of asphyxiation.

Cryogenic gases are heavier than air: pay attention to low points.

INERT GASES

- These are invisible, silent and odourless.

The main inert gases:



IN THE CASE OF SUBOXIDATION, there is a risk of asphyxiation.



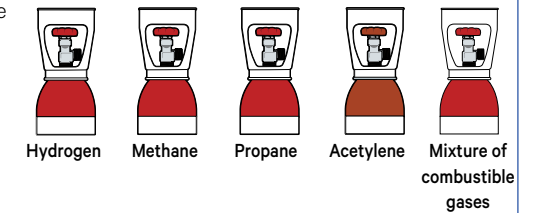
Most inert gases are heavier than air

FLAMMABLE GASES

- These are gases that burn very easily in the presence of air or an oxidant. Mixed in certain proportions with air, they can even become explosive.

Risk factors

Confined spaces, presence of oxidant, a source of energy nearby, inappropriate storage etc.



PREVENTION MEASURES AND BEST PRACTICE

● It is important to have instruments to detect, measure and control any concentration of dangerous gases to assess the risks associated with toxic substances in ambient air or explosive mixtures of gases and vapours.

It will be necessary to install a gas detection system following the results of the risk analysis.

Instructions for risk-free handling and usage:

- Use the smallest possible and practical bottle for a specific task.
- Follow the advice of the supplier in relation to the lifetime of bottles. Gas bottles are designed so as to be as light as possible, while remaining solid and secure. Do not allow bottles to drop onto one another on the ground. Gas bottles must not, under any circumstances, be used for other purposes, for example cylinders.
- Do not form an electric arc on a gas bottle. Burns caused by an electric arc may dissolve the metal and make the bottle fragile.
- Do not attempt to alter gas bottles in any way. Do not repaint them, do not change the marking or identification system and do not touch the threads of the tap or safety devices.
- Apart from this being illegal, re-filling gas bottles or changing their content may be dangerous for any non-specialist to do. Such activities may cause an explosion, contamination or degradation of the bottle.

General precautions to be taken in all circumstances when storing compressed gas:

- Only trained and authorised personnel must have access to storage spaces.
- Limit as much as possible the quantity of compressed gas in storage spaces.
- Regularly inspect storage spaces to detect any faults, such as a damaged bottle, a leak or bad maintenance.
- Correct any faults as quickly as possible.

ACTIONS TO BE TAKEN IN THE CASE OF ACCIDENT

- Breathing in inert gases may cause dizziness leading to apnea. Bring the person concerned into the open air as quickly as possible, whilst ensuring your own condition and safety first; and then if necessary use artificial respiration on the person. In the open air, the person must be kept warm and at rest.
- If there is any contact between a corrosive gas and the skin or eyes, rinse immediately with plenty of water for at least 15 minutes.
- Liquefied cryogenic gases cause ice burns on the skin. Rinse the wound delicately with warm water: if possible, delicately remove the clothing concerned. In case of major ice burns, it is necessary to bathe the person concerned with warm water.

**In any case, you must consult a doctor.
Never perform first aid on a person if you are not sure you can do so safely.
It is important to maintain appropriate ventilation.**

ESSENTIAL ELEMENTS

RISK ASSESSMENT

- 5.12** Tasks undertaken in a space where gas is stored and handled are subject to a risk assessment.
- 5.10** Adequate equipment must be carried by the employee.
- 5.11** A study is carried out by a specialist for risks associated with facilities containing **more than 1 tonne of ammonia** gas are assessed, control measures identified and implemented.

TRAINING

- 5.1** Persons working with dangerous gases have received specific training in these risks.



STORAGE

- 5.3** Gas bottles comply with the appropriate storage requirements (locked spaces, attached to a fixed point, protection of the valve from impacts, etc.).



STORAGE ZONES

- 5.2** Gas storage zones have a defined safety perimeter and restricted access.



GAS INSTALLATIONS

- 5.4** Gas installations meeting the requirements (e.g.: earthing system etc.) are identified, in a good condition and regularly inspected.



ISOLATING VALVES

- 5.5** The isolation valves are identified, accessible and with a preventive maintenance schedule.



6 FIRE AND EVACUATION

LOCKING ACCESS POINTS

5.9 When they are not being used, openings, flaps etc. sufficiently large to allow an employee to be able to pass their head through, and giving access to spaces/equipment that may present dangerous gases or present risks of anoxia are locked and labelled with appropriate danger symbols.

SENSORS AND ALARMS

5.6 Sensors and alarms are in place to detect any gas leak and measure excessive flows.



EMERGENCY EQUIPMENT

5.7 All the emergency equipment is situated correctly, in a good condition and regularly inspected.



EMERGENCY PROCEDURE

5.8 An emergency procedure is known by everybody. The personnel are reminded of at least every 6 months

DEFINITION

- A fire is a combustion reaction, uncontrolled in space and time.
- Evacuation refers to the procedure to remove personnel away from the risk of fire to a safe place.

FIRES IN A PLACE OF WORK

A fire in a place of work is often serious; it causes injuries, sometimes deaths, with significant damage to the premises and the equipment. A fire occurring in an industrial establishment often causes its closure (temporary or permanently) with irreparable economic consequences on the business: in nearly 70% of disasters, the business disappears and the personnel are left without a job. (see statistics on the next page)

CAUSES OF FIRE

- | | |
|-------------------------------|---|
| A Imprudence | G Mechanical cause |
| B Malice | H Lightning |
| C Spattering of sparks | I Vegetation neighbouring a building |
| D Overheating | J Fermentation |
| E Chemical products | |
| F Short circuit | |



Human Causes

Impudence, ignorance, malice, technical negligence etc.

Industrial Causes

Electrical systems Causes:

- An electrical installation in a bad condition.
- Lack of protection devices (fuses, circuit breaker).
- Static electricity.
- Production of hot points (welds, heater, etc.).
- Blocking protective equipment (circuit breakers, contactors).

Chemical Causes:

- Bad handling of dangerous products.

Biological Causes:

- Fermentation.
- Gas leaks.

Mechanical Causes:

- Mechanical heating:

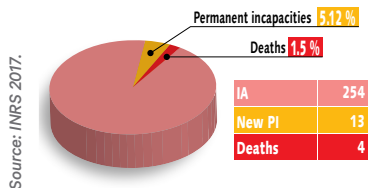
Natural Causes

Lightning, sun (drought) etc.

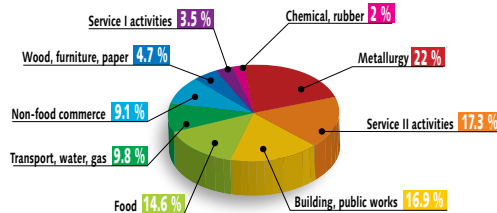
STATISTICS ON FIRES

At a Place of Work

• Fires at places of work in 2016



• Fires by type of work in 2016



4 838
Warehouses
and industrial
premises

Count of the Main Places of Fires for the Year 2019

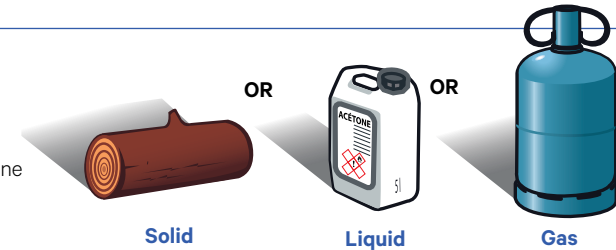
FIRE

Definition

Fire is the chemical reaction of three elements **fuel**, an **oxidising agent** and a **source of heat**, combined simultaneously.

• Fuel

A **fuel** is a solid, liquid or gaseous component that has the property of burning (for example: wood, acetone, butane etc.).



• Oxidiser

An **oxidising agent** is a solid, liquid or gaseous component that has the property of increasing the ability, or allowing a fuel to combust. The oxidising agent that is everywhere is air.



• Source of heat

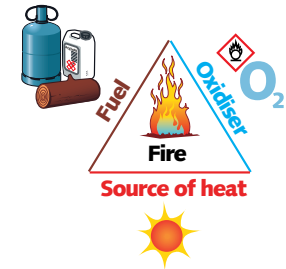
A **source of heat** is a component that has the property of emitting heat (for example: a UV ray, a spark, friction etc.).



The fuel, the oxidiser and the source of heat form the three sides of the fire triangle.

This simple geometric shape illustrates the important point that by suppressing just one side of the fire triangle, the possibility of a fire will be eliminated.

Therefore it is important that all means of fire fighting on the premises take action on one or more components of the fire triangle.

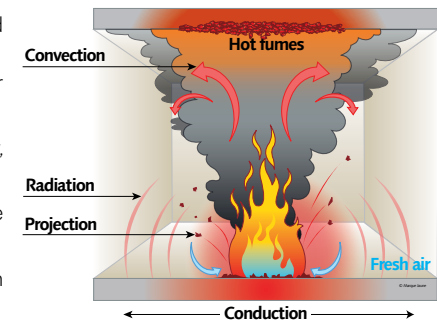


FIRE

Spread of Fire

Depending on certain conditions, fire may be able to spread according to the following distinct means:

- **By conduction:** the fire spreads from one material another by direct contact or through a conducting surface.
- **By convection:** the fire spreads by transporting hot air, due to the heat of flames and smoke.
- **By radiation:** fire spreads by infrared wave emitted by the flames.
- **By projection:** the fire spreads due to material(s) which may be spattered, such as embers, sparks.



DANONE PLANT EVACUATION PROCEDURE

KNOW THE EVACUATION PROCEDURE OF YOUR PLANT OR DC



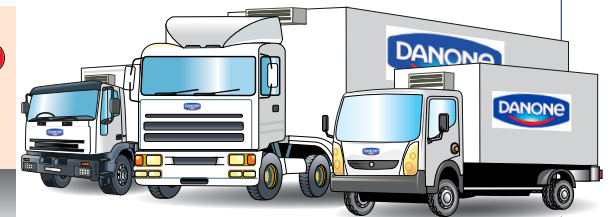
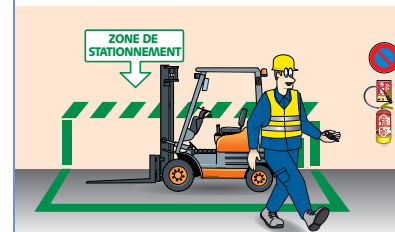
- If you see a fire, raise the alarm in accordance with the evacuation procedure of your plant or DC.



- It is mandatory to obey an evacuation order of the Fire Brigade Team.



- Stop your machinery properly;



- The logistics drivers must park trucks and forklifts away from evacuation routes.



- Know the evacuation routes;
- Leave the plant or DC by the nearest exit and go to the assembly point.

ESSENTIAL ELEMENTS

EQUIPMENT

- 6.1** Detection systems, alarms, emergency exits, autonomous safety lighting blocks are in place and regularly inspected.
- Assembly points are correctly situated.



Assembly point



INSPECTIONS

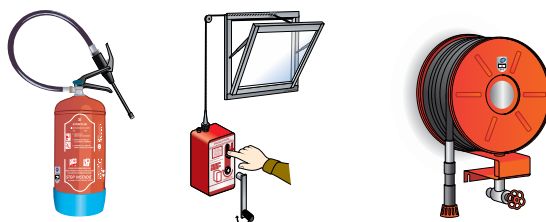
6.2

Business DANONE				
Stop Fire				
Date entered into service		01/2016		
M	MA	Re	R-A	By
X				12/01/2017 JM

M = Maintenance MA = Additional maintenance
Re = Reload R-A = Revision in workshop

6.3

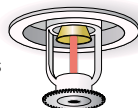
6.4



- The detection systems and the alarms are subject to inspection at least once a year.
- Fire-fighting equipment (extinguishers, sprinklers etc.) are regularly inspected (including by insurer), visible and accessible.

6.5

The pumps of the automatic fire extinguishing systems ("sprinkler") as well as associated systems are tested at least once a month.



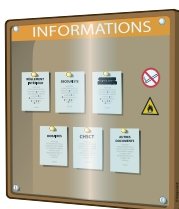
EMERGENCY PROCEDURES AND EXERCISES

6.9

6.11 Emergency procedures exist and are known to all employees.

Evacuation exercises have been conducted in the course of the last 12 months.

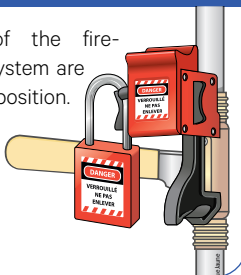
Fire risks have been identified and the emergency scenarios have been defined and tested.



EXTINGUISHING VALVES

6.6

The valves of the fire-extinguishing system are locked in open position.



NO SMOKING

6.10

A rule prohibiting smoking in areas representing risks of fire has been communicated and applied on the site.



7 MACHINES AND EQUIPMENT

DEFINITION OF A MACHINE

An assembly, fitted with or intended to be fitted with a drive system other than direct effort applied by a human or animal, consisting of linked parts or components, at least one of which moves, and which are joined together for a specific application.

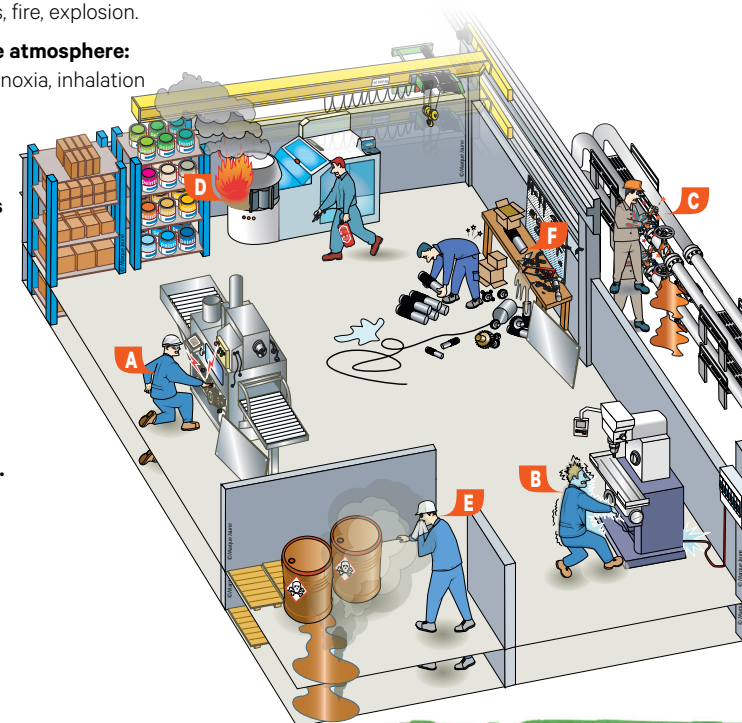
Work equipment may cause accidents if not designed, installed, maintained or used in accordance with specifications given by the designer or manufacturer of the equipment.

RISKS ASSOCIATED WITH EQUIPMENT HAZARDS

Please find hereunder a associated with equipment :

- A Risks from Mechanical Hazards:** crushing, shearing, trapping, pulled in, pulled along, bruises, imprisonment, impact, abrasion, release of fluids under pressure, loss of stability, slipping, loss of balance, falling, cuts, strangulation, severing, tearing, eye lesions, burial, vibration, noise, etc.
- B Risks from Electrical:** electrification, electrocution, exposure to ionising radiation.
- C Risks associated with fluids:** gas, pressurised liquids, vacuum pressure.
- D Risks from Thermal:** burns, fire, explosion.
- E Risks due to unbreathable atmosphere:** intoxication, asphyxiation, anoxia, inhalation and ingestion of dust.
- F Risks associated with non-compliance with ergonomic principles**


Additional risks can be generated by not proper behavior while using machine or equipment, including postures, efforts, negligence, not using machine for the purpose it was designed...



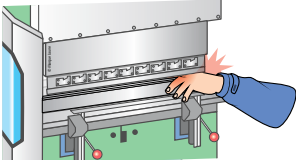
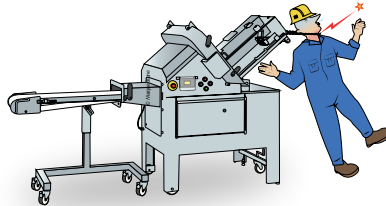
ASSOCIATED RISKS

The main risks associated with machines are mechanical hazards, in other words all the physical factors such as: severing, shearing, impact etc. caused by the mechanical actions of a machine component, a tool, a part, a solid material or a sprayed fluid. Other hazards may be caused by machines: risks due to noise, vibration, electrical energy etc.


CRUSHING AND STRANGULATION *CRRRR!*



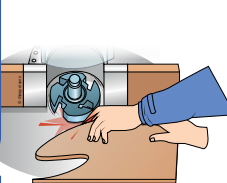
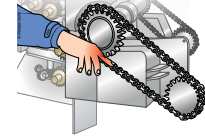
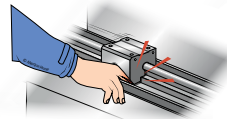

Danger due to crushing

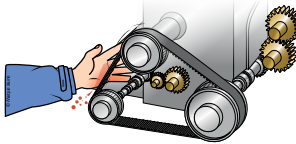

SHEARING, CUTTING OR SEVERING




Danger due to cutting, to shearing or severing

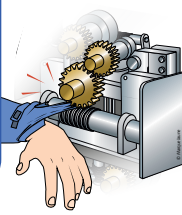
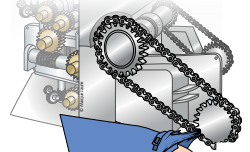
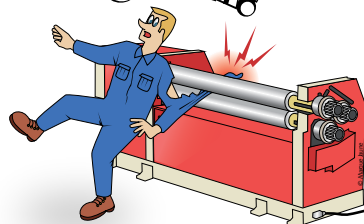
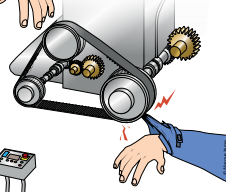
Danger of cutting and/or shearing


TRAPPING, DRAWING IN, PULLED ALONG, ENTANGLEMENT *CRRRR!*



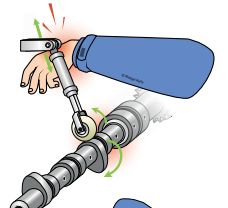
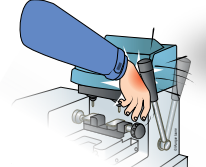
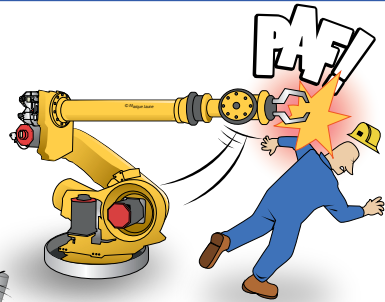
Danger due to driving, trapping or rolling


IMPACTS WITH SOLID ELEMENTS



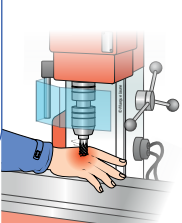
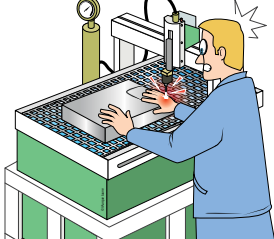

Danger due to impact


PERFORATION OR PRICKING



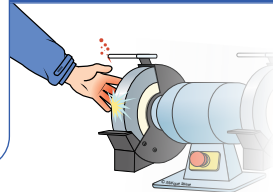
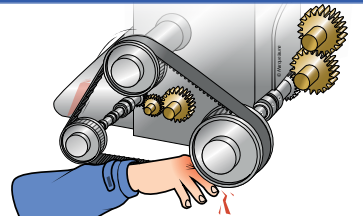
Danger of pricking or perforation


ABRASION



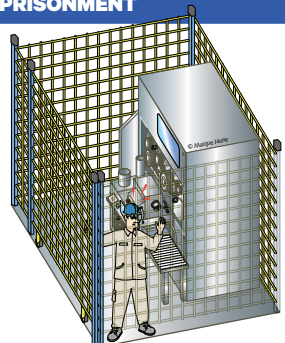
Danger of friction and abrasion

IMPRISONMENT



Danger due to imprisonment



PREVENTION MEASURES

Control of Risks

Control measures reducing any exposure to a running or live machine include:

- Safety devices,
- Locking devices,
- Motion detectors and access controls (e.g.: infrared barriers, etc.),
- Doors and gates,
- Two-hand controls,
- Training of personnel.

Protection or Guard Equipment

- Collective protections (such as screens, guards, light curtains...), fixed or mobile, must be in place and in good order to protect from risks of injuries.

Safety and operating devices

- Prior to using any equipment, it is necessary to verify that it has been inspected according to local regulation (for example: an inspection sticker), and check that it is in a good condition.
- These should be used only for their designed e.g. an emergency button should only be used for emergency and never for regular stop of a machine.

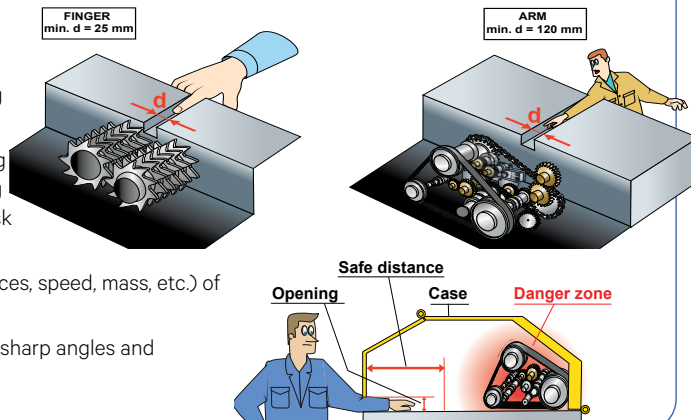
IMPORTANT Any usage of a machine or a piece of equipment having inadequate safety device or damaged controls may cause: amputation, skin burns, cuts, fractures or death!

SPECIFIC CASES

Certain prevention principles may be applied when altering machines already in service although it is generally more difficult.

For example, this relates to:

- Removing dangerous phenomena and making them inaccessible,
- Increasing or decreasing spaces between moving components to avoid risk of crushing,
- Limiting the energy (forces, speed, mass, etc.) of dangerous phenomena,
- Removing sharp edges, sharp angles and protruding parts.



Organisation of Work

- Work Instructions or SOP have to be defined, and respected at any time. They should cover the hazards, conditions & limits of usage, setting up & maintenance operation, etc. defined in the instruction manual and usage conditions supplied by the designer or manufacturer of the working equipment.
- The « do not touch » principle must be respected at any time while in operation.

Never do maintenance work on a machine in operation!

Periodic Checks

- The employer must ensure that periodic checks, some of which are compulsory, are conducted by an accredited body. These checks help to keep the equipment in a good condition.
- Prior to using any equipment, it is necessary to verify that it has been inspected according to local regulation (for example: an inspection sticker), and check that it is in a good condition.

Personal Protection Equipment

- Personal protection must be used to protect employees from formatting issue - extra space risks (ensure that there is complete and effective protection measures applied), such as, for example: protective visors or hearing defenders.

ESSENTIAL ELEMENTS

7.13

ELECTRICAL WORKS

- Appropriate measures are taken (screens, PPEs) while working at the vicinity of electrical live parts (includes works performed on low voltage installations). Protective measures are either defined through a risk assessment or by a qualified electrician.



LOTO PROCEDURE

- Any maintenance work on the process must be the subject of a formalised set of designed instructions. Only LOTO trained personnel may carry it out.

The main stages of Lock Out Tag Out (LOTO)

- Identify the work to be done and risks associated with carrying it out.
- Define the sources of energy to be shut off.
- Shut off each energy and allow the residual energy to dissipate (circuits, batteries etc.).
- Lock out with personal padlocks (each maintenance worker puts on their own padlock).
- Check the effectiveness of the lock out (check that the shut off of equipment is effective, taking into account mechanical instabilities).

CHECK AUTOMATED SYSTEM

7.7

7.8

Doors, gates and barriers are in a good condition and checked every year. A monitoring register exists.



TECHNICAL CABINETS

7.12

All the electrical cabinets are locked. Only authorised personnel may open them. PPE is compulsory for live working.



Danger Electricity

MAINTENANCE

7.1

Pressurised equipment is in a good condition and inspected regularly. It is kept in a good condition by qualified and trained staff.



ENERGY PRODUCTION

12.8

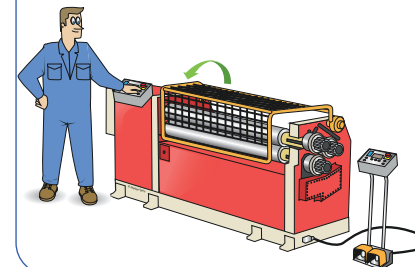
Only qualified personnel work in Energy production areas. The equipment is under periodic checking.



PROTECTION

7.2

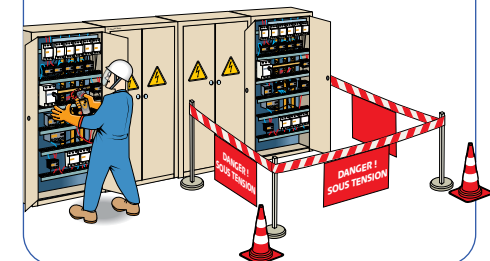
Danger zones around machines are clearly marked out. Entry points are identified. Any moving part is labelled. The access doors are fitted with safety devices. Emergency stops are present.



MARKING OUT

7.13

All work close to the equipment is marked out with the type of risk and duration of works. No cabinets should be left opened if the authorized worker is not present. If no other option, dedicated mitigation measures should be in place.

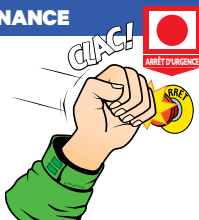


DOORS AND GATES

- 7.7** Doors and gates (e.g. rolling doors, fire doors separating buildings, steel gates, etc.) presenting risks of severe injuries in case of failure are in safe working condition.

MAINTENANCE

- 7.6** All the safety components of machines are subject to a preventive maintenance schedule (safety switch, emergency stop button, etc.).



SPECIFIC ACTIONS

- 7.9** The risks associated with set up and maintenance operations on equipment under energy in stepper mode (for example using a jog/joystick/remote control) must be managed through specific instructions, based on a detailed risk assessment and training. e.g. 1 jog, 1 person

BYPASS PROCEDURE

- 7.10** Specific activities needing safety components to be bypassed are framed by a procedure and suitable risk analysis. Authorisation must be signed personally by the operations manager.

TRAINING

- 7.11** Specific training is put in place and a risk assessment is carried out for machines presenting a high risk of injury.

LACK OF BARRIER

- 7.3** In case no guard can be installed (case of some equipment used in maintenance shops), then safety instructions should be displayed, a specific training developed for operators and access to the area is restricted.

8 FORLIFT TRUCKS

CERTIFIED DRIVERS

Employees are trained by approved persons to authorise the operation of forklift. Certification provided by the employer is regularly renewed. Training in the operation of motorised forklift is established to ensure the safety of all persons.

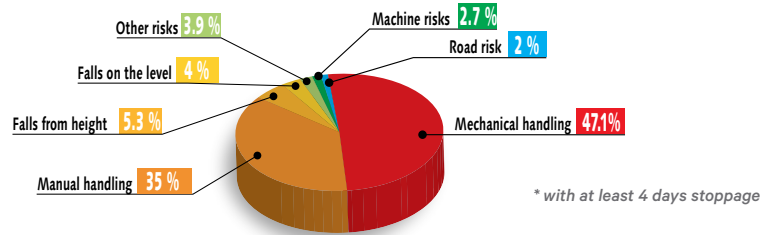
RISKS

- A** Risks associated with speed.
- B** Risks associated with non-compliance with signage.
- C** Risks associated with lack of visibility.
- D/E** Risk associated with poor ground condition.
- F** Risks associated with lifting or transporting persons (**strictly prohibited**).
- G** Risks of toppling associated with bad distribution of loads.
- H** Risks associated with bad palletisation.
- I** Risks associated with bad signage of traffic areas.
- J** Risks associated with a bad working position.



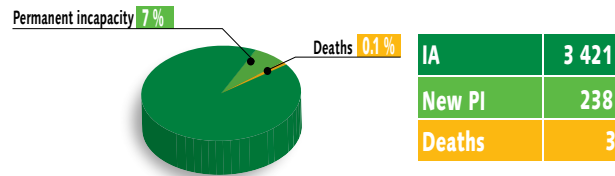
STATISTICS FOR ACCIDENTS ASSOCIATED WITH USAGE OF FORKLIFT

● Distribution of IA* by type of accident (2019)



Source : EU

● Motorised trucks (2019)



Source : EU

RULES FOR USING FORKLIFT

Starting Work

Before starting work, the truck driver must:

Consult the documents:

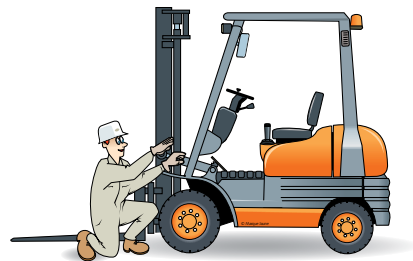
Certificate of conformity **CE** periodic general inspection report (check the validity and observation date), maintenance log.

Undertake a visual inspection of:

- The level of electrolyte in the batteries for electrical trucks, the level of fuel in combustion engine trucks, engine oil, coolant, greasing, level of hydraulic & brake fluids.
- Check there are no leaks under the truck.
- The condition and pressure of the tyres.
- The condition and lubrication of cylinders, hoses, mast, chassis, articulation components.
- The condition of the forks, spacing and locking.
- Adjustment of the seat, rear view mirrors and the seatbelt.
- Cleanliness of battery terminals.

Conduct tests on:

- The proper operation of the service brake, emergency stop controls, and audible signal.
- The centre of gravity and the handbrake.



Finishing Work

When finishing work, the truck driver must:

- Put the truck in a safe position.
- Ensure that it is parked.
- Top up the fuel level or put the batteries on to charge.
- Apply the handbrake and put in the centre of gravity.
- Remove the contact key or equivalent device.
- Report any problems after using the truck.

ESSENTIAL ELEMENTS

STOP

8.1 Access to starting trucks is controlled by an **individual key**. This key must be **removed** when the truck is parked.

SEATBELT

8.3 Seatbelts are used **at all times** by truck drivers.

DRIVING AUTHORISATION

8.10 Truck drivers are **trained and certified** as lift truck drivers (authorisation to operate). The validity must not exceed 5 years - check the training certificate for timeframe.

PROTECTION DEVICE

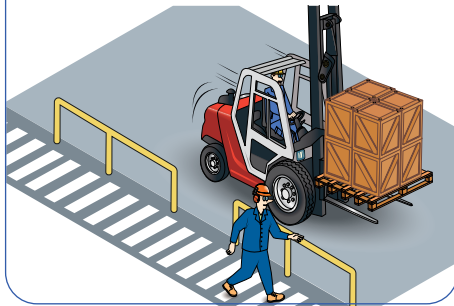
Fixed Protection Device



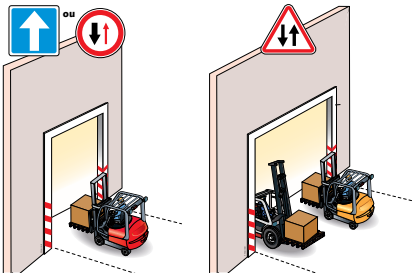
8.4 In storage spaces, forklift must be equipped with a fixed device to protect your head.

TRAFFIC AREA

8.5 Distinct lanes for vehicles (forklift, automatic guided vehicles (AGV), trucks) and pedestrians must be well defined for interior and exterior zones. Lanes must comply with the requirements for separation between trucks and pedestrians.



CIRCULATION AND PRIORITY

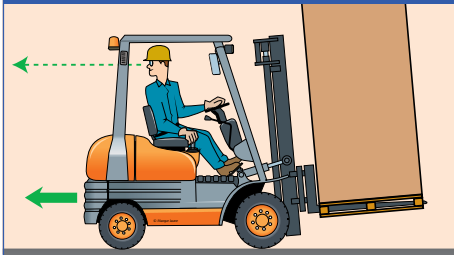


8.7 Compliance with priority rules between forklift themselves and pedestrians that have been defined and communicated.

Eye contact & Hand signal must be made between the driver and the pedestrian before the pedestrian crosses the walkway.

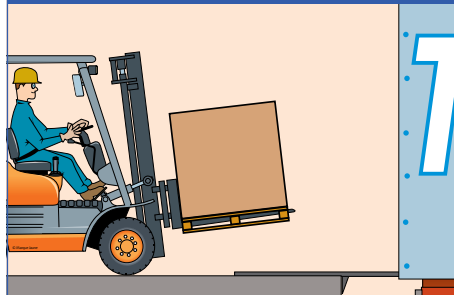


TRAFFIC AND VISIBILITY



8.8 When the truck is running, the forks must be in a low position (approximately 20 cm from the ground) and visibility must be guaranteed. If a load obstructs visibility, the forklift truck must be driven in reverse.

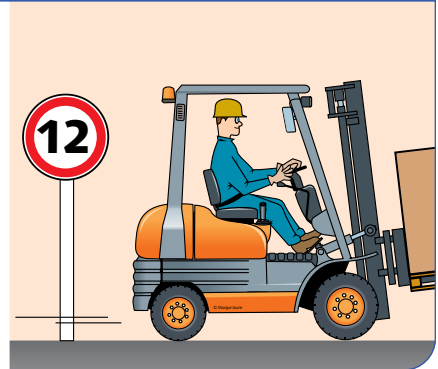
LOADING AND UNLOADING



8.6 Two forklift may not enter into a truck at the same time for the purposes of loading or unloading.

SPEED

- 8.9** Speed limit has to be defined depending on the type of zone:
- Limited to max 12 km/h if pedestrian are forbidden
 - Limited to max 6 km/h in case of coactivity between pedestrians and forklifts (e.g., at the points of crossing between forklift and pedestrians or in areas where pedestrians can walk or work close to forklifts without physical protection between them).
 - Other speed limits can be defined, but always based upon a risk assessment. The speed limits are known by the forklift drivers.



INSPECTION



8.2 A checklist is used every day to check the **critical points** of forklift.

PROHIBITION

Do not use your telephone while driving the truck! Do not smoke!



Example:

CONTROL POINT OF THE FORKlift TRUCK

Name	Date	Position (A/B/ C/J/ WE)	Hour meter	GENERAL CONDITION								SAFETY (If 1 of these elements is faulty, the forklift truck must not be used)					OBSERVATIONS	SIGNATURE OF TEAM LEADER	
				Cab	Tyre	Mast	Axle	Forks	Logys Hardware	Engine Cylinder	Door Cylinder	Levels	Rotating Beacon	Reversing Beep	Blue Light	Horn			Brake
Inspection Order				1/10	2	3	4	5	6/10	8	7	9	11	12	13	14	15		

I check the condition of my vehicle (truck, locomotive, truck etc.) and complete the monitoring booklet

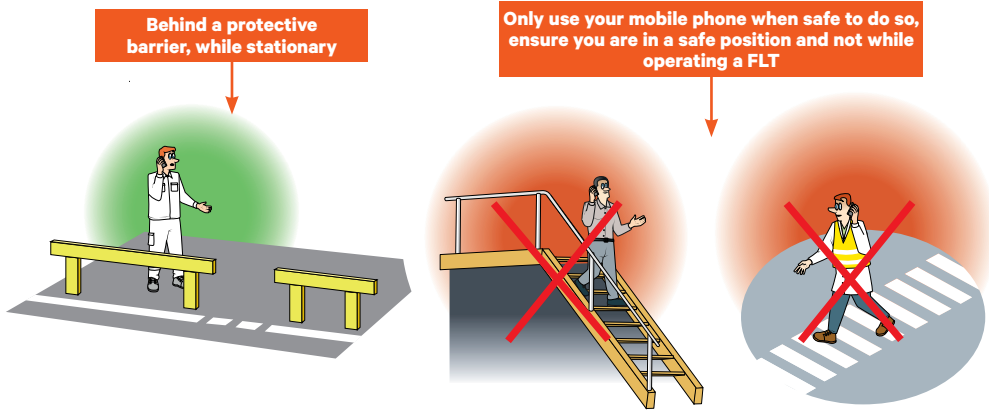
IF THERE IS A PROBLEM INFORM YOUR SUPERVISOR AND LOCK OUT THE FLT FOR REPAIR

9 RACKS AND PALLETS



I use my mobile phone
in a place physically secured
and only while stationary

Examples: walkway, behind barrier, pavement

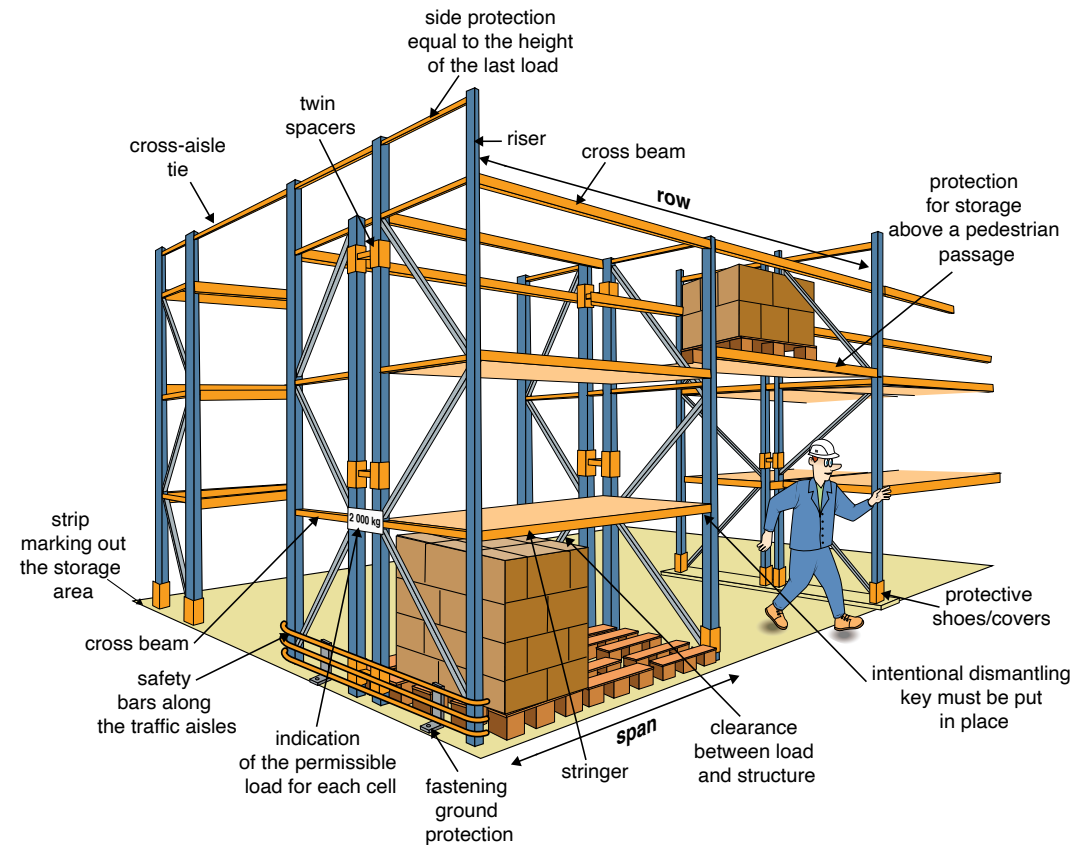


INCIDENT

8.12 Serious incidents due to forklifts (e.g., lost time and non lost time accidents, near misses with high severity potential) are thoroughly investigated, including a root cause analysis, and preventive measures communicated and implemented.

WHY USE A RACK?

Storage capacity at ground level is usually very limited, and therefore the development of high storage techniques over the past few years have allowed the maximum volume to be stored inside a premises. The most widespread solution for storing products at height consists of using metal storage racks. Storage on racks, despite of its apparent simplicity, presents specific risks for operating staff.



RISKS

There are two types of permanent risk:

- **Falling of a package or a load**

Falling of a package may cause considerable damage to the working environment or to persons present.

- **The collapse of the structure itself, which also causes stored loads to fall.**

With successive impacts and loads, the structure wears out, anchorages become loose, parts deform or break, the structure of the assembly is altered.



PREVENTION MEASURES

- **To avoid a package or a load falling, the measures to be taken are often simple.**

- Ensure that cases or boxes are stacked properly.
- Put on strapping or film over loads on pallets stored at height.
- Racks meet good engineering design and are in line with local regulatory requirements (fall through protection only in pedestrian areas, pallet backs stops, beams secured by 2 hooks, upstanding frames are attached to ground, foot protection,..). They are approved by the supplier or competent contractor.
- Store all pallets correctly and in a safe and secure manner to avoid placing damaged pallets in the rack.

- **To avoid the structures collapsing,**

- Carry out regular internal inspections on a frequent basis by the user.
- These internal inspections are verified by **annual or periodic inspection by an independent third party.**
- Undertake repair or replacement operations as regularly as possible.

BLOCKING OFF A RACK

- Racks which are damaged must be taken out of use to ensure items are not stored there until repaired.
- Clear system must be in place to ensure the rack is removed from use during this time e.g. a suitable barrier and signage advising people not to use the rack.

ESSENTIAL ELEMENTS

REQUIREMENTS OF RACKS



9.2 The racks must meet good engineering design and are in line with local regulatory requirements (fall through protection only in pedestrian areas, pallet backs stops, beams secured by 2 hooks, upstanding frames are attached to ground, foot protection,..). They are approved by the supplier or competent contractor.

INSPECTION

9.3 A regular audit system of the racks is in place (including the condition of racks, and stored materials/pallets). They are inspected and approved every year by persons authorised in the context of an internal audit schedule.



REQUIREMENTS OF PALLETS

9.1 Incoming pallets meet safety requirements: no overloading, not overloaded, balanced, stable, and in good visual condition.



LOAD

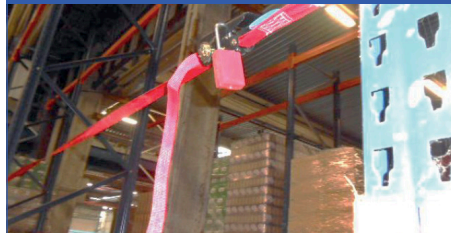


MAX load per level
3000 Kg

Contacts:	VOLVIC	SHOP
SECOMETAL	P. PICARD	G. GRENET
04 73 61 60 39	04 73 63 21 94	04 73 63 20 03

9.4 Racks loading meet requirement in terms of max weight, load balance in line with the supplier requirements.

BLOCKING PROCEDURE



9.5 Any damaged rack must be blocked off.

- A specific LOTO procedure is in place. Any incident leads to an analysis.

10 LOADING AND UNLOADING



DEFINITION

Loading and Unloading operations are defined as any activity involving the putting in place or the removal of goods in a road transport truck or vehicle. Goods are defined as finished products, raw materials, chemical products, equipment, waste, etc.

RISKS

Loading and unloading operations with trucks at the loading bay expose employees of the company and personnel of the transport businesses to risks of collision and crushing by trucks, motorised handling equipment loads, and to the risk of falling.

These risks are present during four main phases:

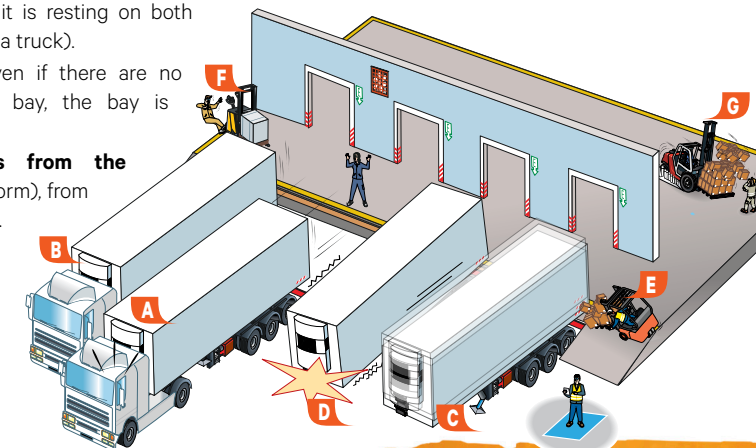
- Travelling in the site,
- Arrival and parking at the loading and unloading area,
- Actual loading and unloading operations,
- Departing the loading and unloading area.

• Examples of risk situations:

- A Unexpected departure:** The driver moves their truck forward while loading because he thinks that it has finished.
- B Progressive forward movement:** The truck creeps forward during loading due to the inertial force of the forklift.
- C Collapse of trailer stands:** The trailer stands and the trailer collapse due to damaged or badly-placed stands.
- D Tilting of the trailer:** The trailer tilts down when too heavy a load is located at the front of the trailer. It also happens when the trailer tilts on the side when it is resting on both stands (not attached to a truck).
- E Falls from forklift:** Even if there are no trucks at the loading bay, the bay is dangerous.
- F Falls of pedestrians from the platform** (slippery platform), from the truck, from its trailer.
- G Traffic accidents between pedestrians and forklift.**

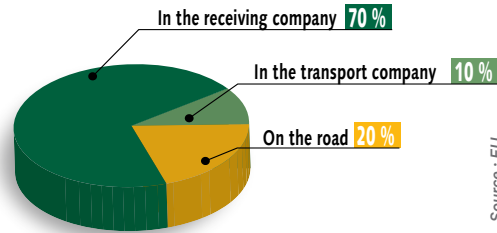
OTHERS

- H Hitting a pedestrian or a trolley** - when approaching loading/unloading area - if a pedestrian or a trolley is on the way of the trailer reversing - e.g. due to the lack of a reversing signal
- I Unloading double semi-trailers** - correct steps: unloading the second (last) semi-trailer, then disconnect it and unload the first semi-trailer



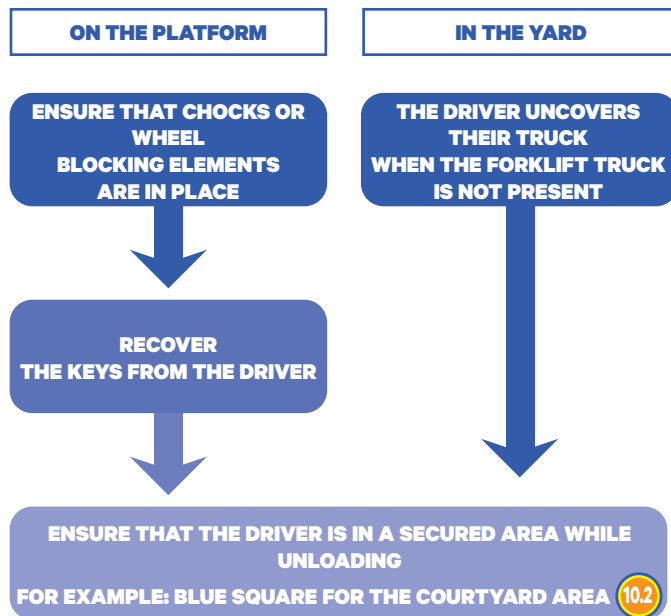
STATISTICS OF INDUSTRIAL ACCIDENTS BASED ON THE LOCATION OF THE ACCIDENT

Road transport of goods appears to be one of the sectors where accidents at work are the most frequent (twice as much as the national average). 70% of accidents occur when a vehicle is stopped, through loading and/or unloading operations in at a receiving company. (source carsat 2012)



Source : EU

LOADING/UNLOADING PROCEDURES



CHEMICAL PRODUCT TANKERS

THE DRIVER MUST COMPLY WITH THE UNLOADING PROTOCOL FOR THE SITE AND THE CHECKLISTS

Dépotage Soude ou Acide sulfurique (Reine – Ch1)

Rédigé par : BCY
Applicable le : 03/09/2012

RISQUES	MODE OPÉRATOIRE	Précautions à prendre
<p>CORROSIF</p> <p>Éviter tout contact physique : Provoque de graves brûlures</p> <p>EXPLOSIF : Soude + métaux léger = Hydrogène</p> <p>INCENDIE : Soude + eau = chaleur</p> <p>POLLUTION : si déversement accidentel</p>	<p>Le chauffeur : Présence obligatoire du début à la fin de l'opération + suivre les étapes de la check-list</p> <p>Personnel VOLVIC : Présence obligatoire du début à la fin + valider, étape par étape, la check-list de dépotage des produits chimiques à la station de dépotage + ne pas commencer le dépotage en cas de manquement aux instructions , + si une anomalie apparaît, stopper le transfert, éloigner le véhicule et prévenir le responsable</p> <p style="font-size: x-small;">Tout e anomalie ou non respect de ces règles fera l'objet d'un enregistrement et, si nécessaire, d'un courrier au prestataire .</p>	<p>Combinaison intégrale matières corrosives + EPI pour le chauffeur et le personnel VOLVIC</p> <div style="text-align: center;"> </div> <p>Pensez à rincer votre équipement après chaque utilisation</p> <p>En cas de contact avec la peau ou les yeux : DIPHOTÉRINE + MEDECIN</p>

Chemin d'enregistrement : Chancet / Environnement / Documents ISO 14001 / Gestion documentaire / Documents / Dépotage Soude – Acide sulfurique - Reine / Dernière MAJ : 03/08/2017 / Version D

ESSENTIAL ELEMENTS

BLOCKING ON PLATFORM

10.1 During loading/unloading operations, a secure system preventing any inadvertent ignition / starting up of the truck is in place (key management procedure, etc.).
The trucks at the platform are blocked by chocks or other effective automatic locks.

CONFORMITY OF LOADING

10.4 The maximum permissible load must be in accordance with the parameters of the means of transport (according to the registration certificate) + remember that the axle should be evenly loaded.

MAX load per level

3000 Kg

Contacts:	VOLVIC	SHOP
SECOMETAL	P. PICARD	G. GRENET
04 73 61 60 39	04 73 63 21 94	04 73 63 20 03

11 DANONE FLEET OF TRUCKS

TANKERS

10.6 For tankers (PET, sugar, powder, chemical products etc.), basic safety procedures are in place and followed (for example: working at height, risks of explosion, PPE etc.). Lifelines are in place and used.

Dépotage citerne PET – Extension 25 Danone



DEDICATED SPACE FOR DRIVER

10.2 During loading/unloading activities, truck drivers must be in a dedicated space.

The driver should be in the designated and described place.

I stop loading as soon as I know longer know where the driver is.



DANGEROUS PRODUCTS

10.8 For dangerous products, it must be physically impossible to mix products and a Danone employee must be present during unloading.

10.9 A suitably-trained Danone employee must be present to direct operations during loading/unloading of dangerous chemical products in bulk..



TRUCK MANOEUVRING

10.5 Trucks are fitted with a reversing alarm. If this is not the case, a second person situated at a secure location must help the truck driver when they are reversing. If this is not possible, a risk assessment must be conducted and control measures clearly identified.

SPEED

10.7 The speed of trucks must be limited and that must be displayed in a clearly visible way (< 20km/h).

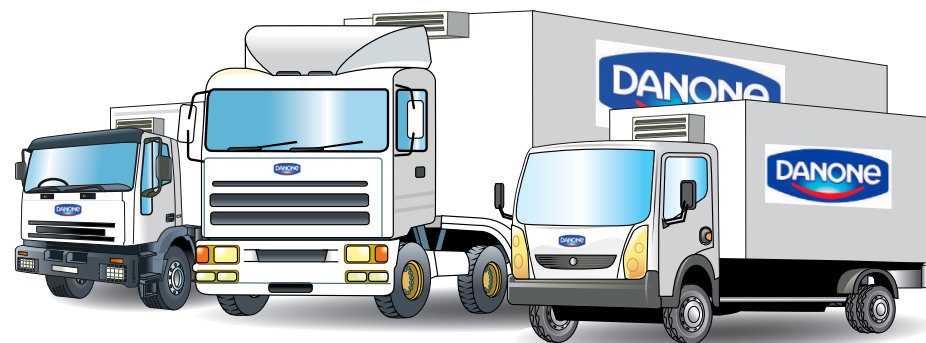


CONTROL OF BAYS

10.3 Trucks must be regulated according to the height of the truck platform and the space between the truck and the platform.

WHY DO WE NEED AWARENESS OF THIS SUBJECT?

It is a fundamental principle for Danone as there are a large number of vehicles which travel on our sites. Working alongside vehicles from other companies considerably increases the risk of collision.



RISKS

The risk of accident associated with vehicles may vary depending on the environment, e.g. the condition of the ground (stability, obstacles, etc.) or the weather conditions (rain, ice, snow, etc.).

Therefore, it is necessary to approach this matter with extreme caution and follow the rules to avoid accidents caused by overloading, a badly-distributed load, excessive speed on bends, sharp braking etc. Each manoeuvre made by a vehicle must be considered as potentially dangerous, even over short distances.

Think about your own safety in case of collision = wear your seatbelt.

Think about others = slow down, follow the highway code and the safety rules in force on the site.

MAINTENANCE

Putting together a schedule for replacement, maintenance and repair of vehicles may help to reduce the number of unexpected and costly breakdowns, as well as avoid accidents caused by a faulty part.

ESSENTIAL ELEMENTS

SAFETY EQUIPMENT

11.1 Trucks are equipped with a reversing alarm, headlights, a braking system, seatbelts for each passenger, a speed control system, a first aid kit, a high-visibility jacket, a triangle and an extinguisher, etc.

SAFETY EQUIPMENT

11.5 Trucks are in a good operating condition and are the subject of regular maintenance/inspection operations (for example, legal inspections + annual preventive maintenance schedule)

SAFETY OF DRIVERS

11.3 A system is put in place to check that the safety conditions are met so that drivers can perform their mission safely (make sure all drivers follow local regulation).

TRAINING

11.2 Drivers are trained and approved in accordance with local regulations.

LOAD

11.4 The load of the truck must be balanced in an appropriate way and meet regulatory requirements (for example, truck, balance, size, etc.).

MAINTENANCE PROCEDURE

11.6 During maintenance work or inside the garage, the truck is immobilised using wheel blocking devices, the keys are removed, the battery or the fuel tank is disconnected, the fuel pipe is blocked and empty, and the lock out/tag out (LOTO) procedure is applied.

The main stages of Lock Out Tag Out (LOTO)

1. Identify the work to be done and risks associated with carrying it out.
2. Define the sources of energy to be shut off.
3. Shut off each energy and allow the residual energy to dissipate (circuits, batteries etc.).
4. Lock out with personal padlocks (each maintenance worker puts on their own padlock).
5. Check the effectiveness of the lock out (check the effective shut off of the equipment, taking into account mechanical instabilities).

12 PERMITS



WHY IS A PERMIT NECESSARY?

A permit is used to entitle an individual to carry out work in complete safety after having analysed with them all the risks associated carrying out the task.

The document is generally accompanied by a checklist to help identify all the potential risks and to guard against them.

AVOIDING RISKS

Certain work is associated with specific dangers. People undertaking these activities must have specific knowledge and, as a result, have received precise instructions in relation to the work. If no written procedure is available, a permit to work is necessary to undertake all the non-routine high risk tasks.

It is necessary to ask the question if the work to be carried out will be done so in complete safety and in accordance with the schedule.

A permit to work has the main purpose of managing the specific risks associated with maintenance work and avoiding any accident.

PREVENTION

A good permit to work is not solely a piece of paper. It is useful to ensure compliance with instructions as well as prevention and control measures.

The permit to work in complete safety describes not only commitments of the worker to follow all the preventive measures, but also the commitment of the project owner to provide all the necessary information and all the equipment specifically required.

When a permit to work is submitted, this means that you are aware of the risk and preventive measures to be taken, but also that the work may only be carried out if all the conditions detailed on the permit to work are fully met.

Safety is paramount before starting any work.

Various Permits

● On the site, permits to work exist for the following:

- Working at height
- Working on roofs
- Confined spaces
- Hoisting
- Explosive atmospheres
- Fire
- Excavation
- Locking out
- Line breaking
- Prevention schedule
- Work

ESSENTIAL ELEMENTS

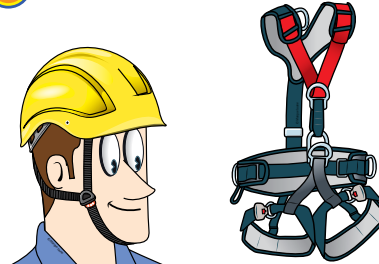
SUB-CONTRACTORS

12.1 Permit to work for sub-contractors.

The form includes sections for 'DESCRIPTION DE L'OPERATION', 'Plan de Prévention', 'Nom Prénom', 'Fonction', and 'Tél / Mail / Fax'.

PERMIT TO WORK AT HEIGHT

1.5 Working at height (sub-contractors).



HIGH VOLTAGE PERMIT

12.1 12.8 High Voltage Permit (approval + authorisation to work for sub-contractors). Locked high voltage zones with access limited to qualified personnel.

12.6 Danone employees and sub-contractors involved in high voltage or medium voltage work (>1kVA) are qualified (training, certificate, etc.).

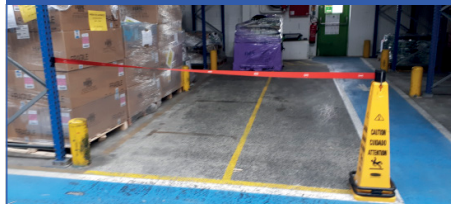
12.7 Prevention measures are taken to ensure that employees involved in work at high voltage or medium voltage (>1kVA) are not exposed to major risks (shut off equipment, personal protection equipment, etc.).

PERMIT TO ENTER

The form includes fields for 'Date de validité', 'N° de l'opération', and 'N° de l'agent responsable'.

3.4 Confined space permits are delivered prior to any confined space entry. Confined space permits identify risks and control measures to implement, are valid only one day and are signed by a competent person formally designated by the site manager.

RESTRICTION OF ZONE



12.3 Prevention measures must be taken to ensure that there is no major risk of interaction with site activities. Working zones are physically restricted.

EXCAVATION AND DEMOLITION

12.11 Prevention measures are taken in such a way that employees involved in demolition and excavation activities are not exposed to major risks. Access to sites on which excavation and demolition operations take place are blocked by a physical barrier.

CONTROL OF SUB-CONTRACTORS

12.4 The qualification or approval of sub-contractors is subject to systematic checking.

FIRE PERMIT

The form includes a 'STOP!' warning and text: 'Eviter les travaux par point chaud ou utiliser toute méthode de travail présentant moins de risques.' It also states: 'Working close to hot point (fire permit with monitoring after 2h and 4h for qualified sub-contractors with close-by extinguisher). Valid for 5 days and signed every day'.

HOISTING PERMIT

12.15 Handling objects of very large dimensions or heavy loads (qualification and permit for sub-contractors).

12.17 Prevention measures are in place.

The form includes sections for 'Analyse de la zone de travail' and 'RESEAUX AERIENS SUSCEPTIBLES D'ETRE RENCONTRÉS D'APRES LES PLANS OU LES CONNAISSANCES INTERNES'.

INSPECTION OF WORKS

12.2 In case of construction or maintenance work where the duration exceeds one day, work site inspections are performed at least once a day and recorded in the permit.

EXPLOSIVE ATMOSPHERE PERMIT

The form includes a 'N°:' field and a 'Lieu et emplacement des travaux' section.

4.10 In case of non-routine maintenance intervention in a potentially explosive environment, a detailed work permit should be issued. Explosive environment permits identify risks and control measures to implement. It is approved by a competent person formally designated by the site manager and is only valid one day.

EXCAVATION PERMIT

12.10 Excavation and demolition activities (qualification + permit sub-contractors).

12.13 Prevention measures are in place.

The form includes sections for 'ORDRE DE TRAVAIL', 'MOYENS DE PREVENTION ET DE PROTECTION', 'RECHERCHE SUR PLAN', and 'ENTREPRISE EXTERIEURE EVENTUELLEMENT'.

PERMIT ARCHIVING

12.18 Permits must be archived and accessible.

HIGH VOLTAGE PERMIT

12.5 For work on LVDB installations a permit valid for one day must be compiled.

NOTES



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