

General safety training Mondi Frantschach GmbH

Gerald Klade

2025



Content General safety training

The following instructions are included:

- Work safety
- Management system for food safety of products according to FSSC 22000
- Waste separation
- Fire safety regulations
- VEXAT (Regulation of explosive atmospheres)

This instruction is valid:

- For all employees of Mondi Frantschach
- For short term employees and contractors

For better readability, only the masculine spelling is used in the text. Of course, this refers to all persons.





Work safety

Gerald Klade

Integrated management system (IMS)

Beside the

Safety- and Health management system (SGM)

ISO 45001:2018

we are also certified according to the management systems listed below:

- Quality management System (QMS) ISO 9001:2015
- Environment management system (UMS)
- Management system for food safety of products

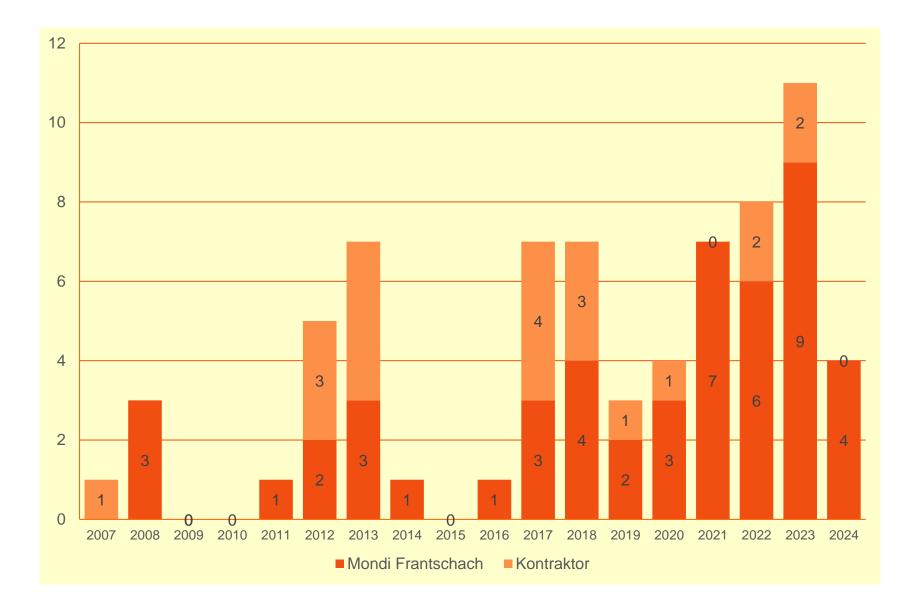
ISO 14001:2015

FSSC 22000





Lost time injuries since 2007 > 1 Working day





9 Mondi Safety rules

Rule One:

 \geq Work with a valid permit when required.

Rule Two:

Respect speed limits, keep travelling paths, using seat belts and only use a mobile phone with hands-free equipment while driving.

Rule Three:

Obtain authorisation before entering a confined space and take the necessary precautions.

Rule Four:

 \geq Protect yourself against falling when working at heights.



Sicherheitsregel 1

Sind die Änderungen an den Anlagen, Maschinen und des Umfeldes dokumentiert? Sind Sie und das Personal geschult?



Sicherheitsregel 2 BEDIENEN VON MOBILEN ANLAGEN UND GERÄTEN Sind Sie sich der Gefahren mobilger Anlagen und Geräte bewusst?



Sicherheitsregel 3 ARBEITEN IN ENGEN RÄUMEN

Sind Sie sich der Gefahr beengter Räume bewusst? Sind Sie ich der Wichtigkeit einer Arbeitsbewilligung für beengte Räume bewusst?



Sicherheitsregel 4 ARBEITEN IN HÖHEN Sind Sie ausreichend gegen Absturz gesichert?



9 Mondi Safety rules

Rule Five:

 \succ Test isolation before work begins and use specified life-saving equipment.

Rule Six:

> Obtain authorization before overriding or disabling protective equipment.

Rule Seven:

Do not stand or walk under a suspended load.

Rule Eight:

Conduct a chemicals assessment and wear specified PPE when required

Rule Nine:

Work in forest Not relevant for Mondi Frantschach



Sicherheitsregel 5 ISOLIERUNG VON ENERGIE UND MASCHINEN Haben Sie die Maschine so abgesichert, dass Sie ohne Risiko arbeiten können? AUS+SICHERN



Sicherheitsregel 6 Sicheres Arbeiten an Laufenden und Rotierenden Maschiner

Sind alle Schutzeinrichtungen in Funktion? Sind Sie sich der Gefahren bewusst, wenn Sie bei laufenden Maschinen arbeiten müssen?



Sicherheitsregel 7 DURCHFÜHREN VON HEBEARBEITEN UND MATERIALTRANSPORT Beim Transport von Materialien ist auf den persönlichen Schutz und den Schutz der Mitarbeiter zu achten!



Sicherheitsregel 8 UMGANG MIT CHEMIKALIEN UND GEFÄHRLICHEN SUBSTANZEN Sind Sie sich der Gefahren beim Umgang mit Chemikalien bewusst?

as haben Sie in Notfallsituationen zu



Toolbox Talks

• There are separate "Toolbox Talks" incl. knowledge checks for each Mondi safety rule. These can be assigned to individual employees by the department management via the LMS (learning management system).





Terms

• General safety instruction (according to §14 AschG) => 1x per year training by the supervisor

 Workplace-related safety instruction => safety instruction specifically related to the workplace must be demonstrably carried out by the respective supervisor before starting work for the first time and once a year in accordance with the departmental documents (e.g. ZIH, PF, ZF, HP, RDIC).

Work accidents

• Location, time and causal connection with the work must be recorded at the same time. (must be reported to the supervisor immediately)

Accidents on the way to or from work

 Accidents on the way from or to the workplace (also on the way to the doctor or bank => life-saving measures (must be reported to the supervisor immediately)

Work related illnesses

• Work-related illness. (List of 52 occupational diseases. These are listed in the ASVG Appendix1)

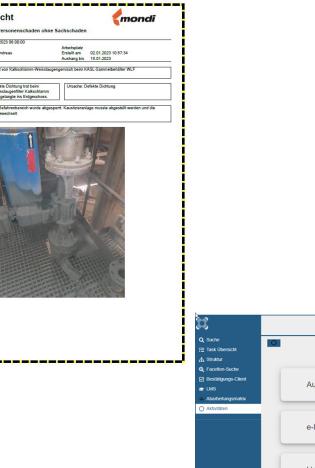


SHE Software - Syneris

- Incidents (reporting in the SHE software)
 - o A personal injury, with losttime
 - ${\rm o}$ B personal injury, without losttime
 - $_{\rm O}$ C no personal injury, with property damage
 - D no personal injury, without property damage
- Reporting of environmentally malfunctions
- Assignment of instructions
- E-learning with knowledge verification
- Preparation of safety & health documents

This software can be accessed in Mondi Intranet





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Suche	0	
Task Übersicht	—	
Struktur		
Facetten-Suche		
Bestätigungs-Client	Audits	
LMS	, tauto	
Abarbeitungsmatrix		
Aktivitäten		
	e-learning	
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	Unterweisungen	
		Vorfallsbericht oder umweltrelevante
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	SiGe-Dokumente downloaden	Settlesseterang endeeen
		Vorfallsbericht erfassen



General prohibitions

• Smoking is prohibited with the exception of areas marked as smoking zones.

Consuming alcohol and drugs is prohibited

o Persons who are clearly affected by medication, alcohol or drugs must leave the mill

Cycling ban

o on ice and snow and in the area of rail facilities

o when you drive with a bike you must wear a helmet with chin strip.











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Access regulations

- Access to the factory premises is only permitted via the reception desk or via the turnstiles with a chip card.
- Driving onto the mill premises or bringing private bicycles into the factory is prohibited.
- If a car has to be driven into the plant premises, only the driver may sit in the vehicle. All passengers must enter the plant via the turnstiles.
- Without safety shoes, people are only allowed to walk to and from work/changing rooms (also on the safety routes).
- Employees in office buildings or in offices do not need safety shoes while working in their area.
- During working hours, persons present in the plant area SHOULD also use this safety walkway. (Exception: in the course of a direct activity)



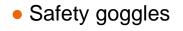


Signs for personal protective equipment (piktogram)



Helmet











• Protective suit (chemical prtoective suit, durst suit)



• Hearing protection (>80 dBA recommended, >85 dBA mandatory)



 Safety shoes (conductive safety according EN ISO 20345 bzw. EN 61340-5-1)





Rule 1 Work permit (1/4)

For the following work, there must be a completed and approved work permit with risk assessment (including required release certificates)! (according to the Mondi "Permit to Work" methodology!)

Minimum activities requiring permit to work				
1	1 Working at heights above 2m where there is a risk of falling and requires the use of fall arrest equipment.		(mondi	
2	Confined Space Entry.	(
3	Hot work outside designated hot work areas (any activity capable of producing flames, sparks heat generation or any other forms of ignition.		Mondi permit to work	
4	Non-operational lifting activities.		methodology	
5	Service, maintenance and/or installation of equipment with potential exposure to hazardous energy (Any source of electrical, mechanical, hydraulic, pneumatic, chemical, ionising radiation or thermal energy and explosive atmospheres, cutting and tie-inns into lines including pipeline breaking where hazardous materials are present or could be present or where the line is under pressure or above 50° or less than -5°.). Note 1: When electrical testing is conducted on equipment with a volltage of 400 volts or less, no permit to work is required. Note 2: When LOTO is performed by the operating/maintenance personnel of the equipment by local isolation point and this person him/ herself will conduct the task, a permit to work is not required, however a risk assessment and safe operating procedure is required.			



Work saf

Rule 1 Work permit (2/4)

For the following work, there must be a completed and approved work permit with risk assessment (including required release certificates) according to the Mondi "Permit to Work" methodology!

6	Excavations and trenches deeper than 1m.	{ mondi
7	Demolition activities and break-ins (breaking through building structures).	
8	Use of high-pressure devices above 200 bar (water cleaning, cutting, sandblasting, etc.).	Mondi permit to work methodology
9	Handling of asbestos-containing-material.	
10	Working on high voltage equipment (above 400 volts) where there is exposure to the energy source and or no suitable arc flash elimination, substitution or engineering protection.	
11	Work on live equipment where safety devices are compromised or isolation and lockout cannot be used (machine set up, alignment, testing, etc.).	
12	Scuba diving and surface provided air diving activities (approval from Group Head of Safety and Health)	
		VERSION: 20/07/2017



Not relevant for Mondi Frantschach



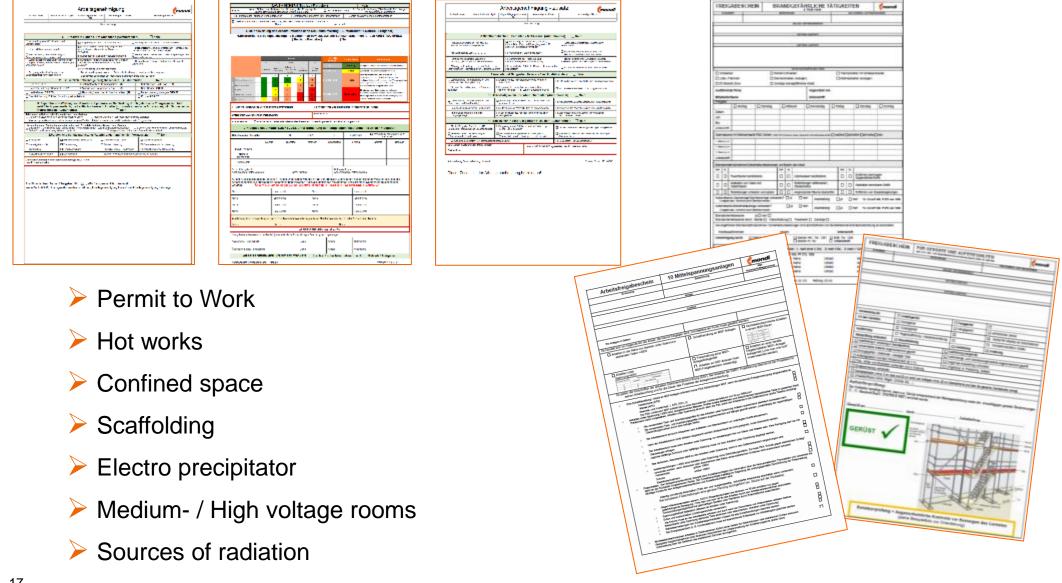
Rule 1 Work permit (3/4)

Main regulations:

- A work permit is required for all activities that do not occur on a regular basis in the mill or ONCE in a while on request of the departments for maintenance work.
- > Always consider what hazards and consequences may occur before starting work.
- Operating areas are only entered after notification in the control room.
- Before maintenance work, machines and systems must be properly switched off and secured. (Aus + Sichern).
- Pay attention to safety instructions and piping markings. Before opening flanges or fittings, obtain information from operators about substances contained therein and their potential hazards.
- > The **risk assessment** must be carried out before starting work.



Rule 1 Work permit (4/4)



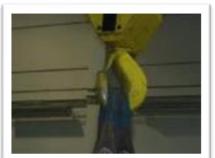
The operation of cranes and vehicles (forklifts, mobile cranes, overhead cranes ...) is only permitted with a forklift or crane license and an internal driver's license.

Rule 2 Operating cranes and vehicles

- \geq EI. manual lifting equipment- instruction by supervisor and internal driver's license.
- Seat belt obligation
- > Telepfhone calls only allowed wiht hands free equipment
- > The road traffic regulations apply
- Rail vehicles have the right of way













Everyone takes responsibility for safety in their own work environment and must watch out for their colleagues too!





Rule 3 Confined space (1/2)

<u>Terms:</u>

- Tanks and confined spaces are operating facilities that are sealed off from their environment to a considerable extent and thus have only a slight exchange with the ambient air. In addition to containers, this also includes silos, shafts, pits, ducts and pipelines.
- Access means all activities/work, such as maintenance, servicing, cleaning work or troubleshooting, during which the worker is in the tank, silos or confined spaces.

Features:

- > They are not designed for the permanent presence of people
- \succ There are only a limited number of inlet and outlet openings
- Hazardous gases may exist or be formed, or
- \succ materials are present that can flood or trap the entrant, or
- they are designed in such a way that the entrant could become trapped or suffocate.





Rule 3 Confined space (2/2)

Safety regulations:

- > Fill out the confined space permit and release by a competent person of the department (first line manager)
- Gas free measurement before entering
- Exact compliance with the measures of the confined space permit
- Stand by person must present at all times when entering the confined space (record of persons in the confined space)
- \succ If there are no more persons in the confined space, access must be blocked.





Rule 4 Working at Heights (1/2)

Definition:

Whenever working at a height of more than 2 meters, fall protection must be used if there is a risk of falling. Reason: This is due to the fact that this is the distance that a free-falling human body needs to turn completely around.

Scaffolding:

- All scaffolding work must be performed in accordance with the applicable standards and regulations in Austria or according to the "Mondi Scaffold Requirements"!
- Scaffolding may only be prepared and approved by trained specialty personnel.
- > A "helmet with chin straps" must be worn on scaffolding (working at heights)!







Rule 4 Working at Heights (2/2)

Moving elevating platform:

- During any movement of the lifting platform, all persons in the working platform (basket) must maintain "3point contact". This means that both feet are on the floor of the basket and at least one hand is holding on.
- Only instructed persons may operate lifting platforms.
- Workers who are in the work cage must wear a helmet with chin strap and safety harness and attach it to the anchor point in the work cage. The standing position in the workman basket must not be raised. The use of webbing fall arresters is not permitted. Recommendation: fall arrester with built-in brake.
- The danger area below must be cordoned off.
- > When used, perform a function and visual check in accordance with the operating instructions...







Rule 5 Isolation of energy

Personal lock:

- Every Mondi employee and contractor must ensure that they have a personal lock and that this is also used in accordance with Mondi regulations (one man - one lock).
- Every person working at the workplace has to secure himself with his personal lock. This must be clearly identifiable => name and telephone number.









Role 6 Moving and rotating machinery

General:

- > Work is prohibited at unsecured nip points.
- Obtain authorization from the person in charge before overriding or disabling a safety-protective devise.
- > Report any damaged or missing safety-protective equipment.
- It is forbidden to approach running and rotating machines with ties, scarves, neckerchiefs or open long hair.

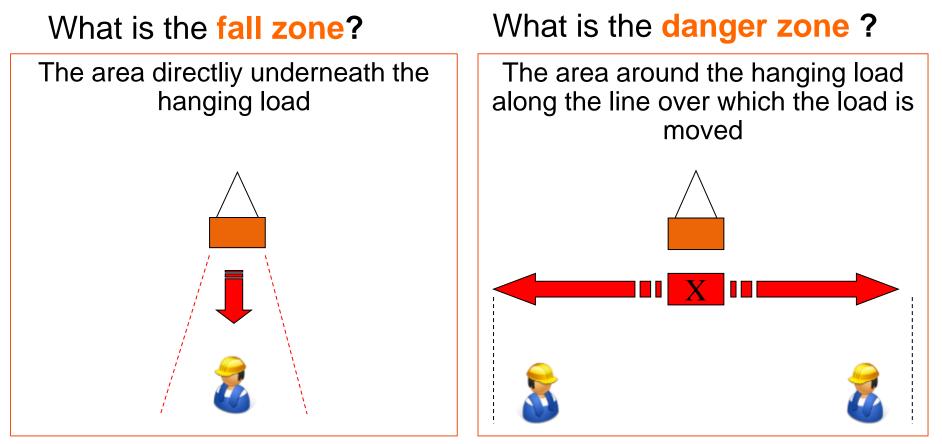






Rule 7 Lifting (1/2)

Terms Fall- and Danger zone:



> While lifting the fall- and danger zone is not allowed to enter

> Cardinal rule: Never stay under suspended load.



Rule 7 Lifting (2/2)

General:

> Compliance with all points according to work permit "Supplementary" Non-operational lifting work

8 Nichtbetriebliche Hubarbeiten - Mobilkräne (Ausführender) 🛛 🗌 Nein							
☐ Hublastplan vorhanden >10t bzw. bei Einsatz mehrerer Kräne (Beilage)	Aufstellungsort, Abstützung, Stabilität, erforderlicher Platz und Bewegungsradius für sicheren Hubvorgang vorhanden	☐ Absperren der Gefahren- Fallzone bzw. Zutrittsverbot					
☐ Max. zu hebende Last:	Kranhaken mit Sicherheitslasche	Bewertung Witterungsbedingung und Windgeschwindigkeit vor Hubbeginn					
☐ Richtige Anschlagmittel verwendet (Prüfung) gemäß AM-VO, Dimensionierung	Sichtprüfung der Hubgeräte und Lastaufnahmegeräte vor Hubvorgang	☐ Heiße freistrahlende Anlagenteile (Kamin, Kalkofen…) bzw. Stromleitungen im Hebebereich					
☐ Führungsseile, -stangen zum Manövrieren der Last vorhanden (Vermeidung von Quetschgefahren)	☐ Unterirdische Schächte, Kanäle, Hindernisse im Hebebereich	Kommunikation mittels Funk, Handsignale					

- Lifting ares must be demarcated (danger zone) and signed
- \succ "Tag Lines" (tag sticks) must be used during lifting operations to prevent:
 - the load from swinging
 - when manual handling is required to position the load
- Crane operator must not start lifting while someone is in the danger zone









Rule 8 Hazardous substances (1/2)

General:

- \succ Observe the safety instructions in the safety data sheet.
- Be sure to use the proper personal protective equipment (PPE) as specified in the work permit.
- > Know the location of the nearest emergency shower and eye wash bottle.
- If a chemical burn does occur, seek an emergency shower immediately. A long rinse with water is absolutely necessary.

Definition of acids and alkali:

Acids:

Acids or their aqueous solutions, which are considered to be hazardous substances, are highly corrosive substances which, depending on the temperature, concentration and exposure time, can strongly irritate or destroy living tissue.

Alkalis:

Alkalis and their aqueous solutions are strongly-reacting alkaline substances which, depending on temperature, concentration and exposure time, can strongly irritate or destroy living tissue. They are generally more corrosive than acids.







Rule 8 Hazardous substances (2/2)

Personal protective equipment (PPE)

- Safety helmet with protective visor
- Tight-fitting safety goggles
- Chemical-resistant protective suit
- Chemical-resistant protective gloves ATTENTION: ensure they are worn properly (Are the ends of the gloves pulled over the suit – yes/no?)
- Rubber boots
- If the protective clothing becomes contaminated, it must be rinsed with a sufficient amount of water
- The PPE to be worn in each case, is to be used according to the evaluation of the workplace or according to the work permit.





Sources of radiation

- Radiation areas and sources of radiation are marked with a yellow sign or label
- Staying in a radiation protection area is only permitted for persons who are equipped with a dosimeter (persons exposed to radiation). Stay only as long as is absolutely necessary
- If work has to be carried out in the area where there are sources of radiation, the sources of radiation must be shut off by specially trained persons => permit necessary
- Employees of the electrical workshop shut off the sources of radiation







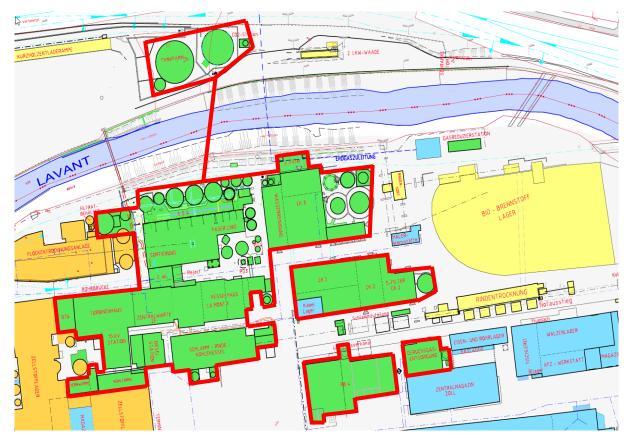


Special rules pulp mill



Protective eyewear obligation

In the red marked area of the pulp mill you must wear protective googles.



 Fibreline, evaporation, power plant, bark boiler, recovery boiler, GGE



Caustizising / lime kiln



Waste water treatment

Exceptions:

- Blue marked walkways or visitor paths
- Control rooms, MSR rooms, sanitary facilities and social rooms
- Gas reduction station
- On-site workshops, provided that activities without safety goggles are permitted



Special hazards in the pulp mill

In the area of the pulp mill, there are special hazards \succ

- Chemical burns from acids, alkalis, lime, chemicals Ο
- Burns from steam, hot surfaces and media Ο
- Remote-controlled systems and automatically starting machines Ο



Personal Protective Equipment

Head protection Ο

Ο

- helmet
- Eye protection Ο

Hearing protection

- Protective clothing Ο
- Foot protection Ο

- in the designated areas
- Protective goggles or helmet with visor
- Long uniform trousers and long-sleeved uniform blouse
- Safety shoes





Special hazards - (H₂S)

- Access to the areas in the pulp mill is only permitted with a personal H₂S warning device an acoustic alarm sounds in case of an alarm
- Stationary gas warning systems are installed in the following areas in case of an alarm, a siren is triggered and the all-round lights at the entrance doors are activated
 - Fiber line (cooking, sorting, evaporation plant)
 - Recovery boiler RB4, odour gas disposal system

What to do if a danger alarm starts

- All work must be stopped immediately and secured
- The facility must be vacated immediately the use of elevators is prohibited.
- Entering or re-entering the building is strictly forbidden.
- The instructions of the operating personnel must be followed.
- Entering the building and resuming work is only permitted after approval by the foreman of the pulp mill







Hazard alarms in the area recovery boiler

Entering and leaving the building recovery boiler RB 4

Entering and leaving the RB 4 must be reported in the central control room (phone 04352 / 530-403)

In a dangerous situation, an evacuation alarm is triggered (siren and / or flashing lights)

- What to do if a danger alarm starts:
 - All work must be stopped securely.
 - Immediately leave the building following the marked escape routes and go to the "canteen" assembly point. The use of elevators is prohibited!
 - Protective masks are available in the elevators and must be used if necessary.
 - Two oxygen bottles are installed in elevator CK3 for emergencies (lack of oxygen due to heavy smoke development), which can be opened if necessary.
 - The instructions of the operating staff must be followed.
- Entering the building and resuming work is only permitted after approval by the foreman of the pulp mill





Hazard alarms in the area caustification / lime kiln

Warning shooting activities with an industrial cannon at the lime kiln

- Before starting any shooting activities at the lime kiln, an optical alarm (flashing lights) is activated on all entrance doors of the causticizing and lime kiln building. It is forbidden to enter the building in question.
- People who are in the building are requested by the operating staff to leave the building.
- Re-entering the building is only permitted after the alarm (strobe lights) has been lifted.

Acid wash

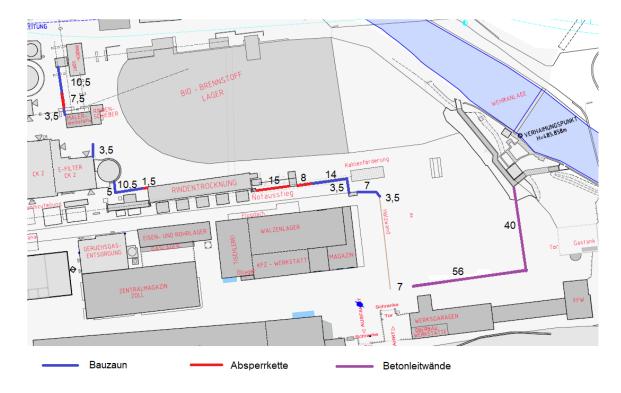
- Before the start of an acid wash, the affected area is cordoned off by the operating staff. A corresponding visual notice for an ongoing acid wash is activated. Entering the corresponding areas is prohibited.
- People who are in the corresponding areas are requested by the operating personnel to leave them.
- Re-entering the corresponding areas is only permitted after the barriers have been dismantled and the visual notice has been deactivated.



Bark storage area

The following measures must be observed in order to increase and sustainably guarantee safety at the bark storage area.

- 1. Passage and cycling across the bark storage area strictly prohibited.
- 2. If work (e.g. maintenance activities) is required in this area, this must be reported to the bark driver in person before entering.
- 3. If access or passage by motor vehicles is necessary, visual contact must be established with the bark driver.



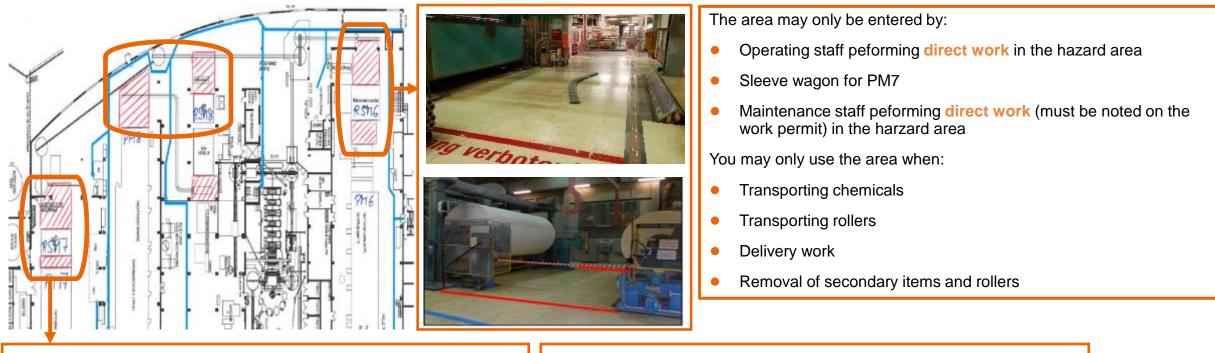


Special rules paper mill



Specific regulations (1/5)

It is forbidden to walk in front of the pope reel to winder of each paper machine (see sketches for designated areas)











PM8: You are not permitted to walk in this area when the warning light is on



Specific regulations (2/5)

Prohibition of passage through hall 5, new pulp storage hall



The area may only be entered by:

- Employees of flash dryer plant
- Employees of loading department
- Supervisor from loading department and paper mill
- Management papermill / MD
- Maintenance employees only if work or checks are carried out in this area





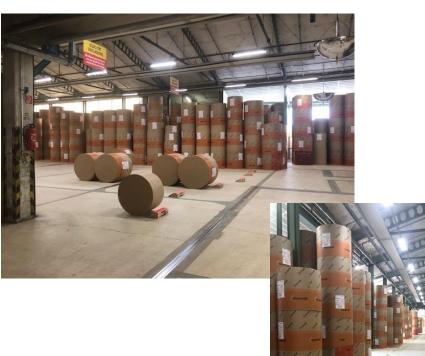


AUDITS in this area must always be reported to the foreman loading department!



Specific regulations (3/5)

Prohibition of passage role storage



The area may only be entered by:

- Employees of flash dryer plant
- Employees of loading department
- Supervisor from loading department and paper mill
- Management papermill / MD
- Maintenance employees only if work or checks are carried out in this area

Durchgang verboten



If AUDITS in this area will be done or guides tours, you must inform the foreman loading department!

 \rightarrow Flash light must be switched on!



Specific regulations (4/5)

Prohibition of passage "Fremdzellstoffauflöseanlage (FZA)"



The area may only be entered by:

- Employees of "Fremdzellstoffanlage"
- Employees of loading department
- Supervisor from loading department and paper mill
- Management papermill / MD
- Maintenance employees only if work or checks are carried out in this area







AUDITS in this area must always be reported to the FLM paper mill!

Specific regulations (5/5)

Prohibition to enter "Alte Hackerei"



The area may only be entered by:

- Employees of "Fremdzellstoffanlage"
- Employees of loading department
- Supervisor from loading department and paper mill
- Management papermill / MD
- Maintenance employees only if work or checks are carried out in this area







AUDITS in this area must always be reported to the foreman loading department!

Mill-specific regulations – using knifes

- Preference must be given to use safety knives
- Paperknives with fixed blades PROHIBITED
- Stanley knives with snap-off blades are **PROHIBITED**
- Hygiene regulations
- Increased risk of injury



- When using knives (except slice cutters) your free hand <u>must</u> be protected with a "cut-resistant glove" from cut protection class F.
- Making aids for cutting work (e.g., see photo) PROHIBITED.







Mill-specific regulations

Work with angle grinder

- Wear the necessary additional PPE (face protection with safety goggles, longsleeved clothing, leather gloves)
- Use the additional handle if this is not possible with the one-hand angle grinder, a risk analysis must be carried out as part of the permit to work.
- Do not use broken or compromised discs

Working with impact drills

- Only impact drills equipped with kickback protection may be used.
- The handle must be used correctly when drilling

General regulations for the use of electrical equipment

- All electrical work equipment must be inspected and marked annually (according to ÖVE/ÖNORM E 8701-1/-2) by a qualified electrician.
- \succ Only inspected devices may be used.





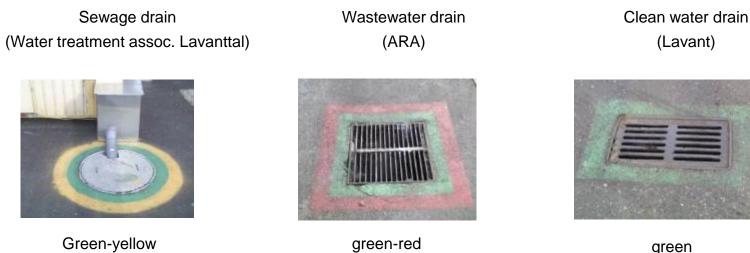




Millwide markings of channels

- Precautionary measures must be taken to prevent water pollution and when storing and handling waterpolluting liquids!
- > In case of minor incidents (e.g., leakage of a liquid product), immediate action must be taken with the operator in order to limit the damage.

Location of "Kanaldichtkissen": Emergency container pulp mill, Cellar PM 8, Flash dryer system, woodyard



Marking of the drains within the plant area:



Green-yellow

green-red

Chain of rescue – what to do in a case of emergency

Important phone numbers:

- Reception/central control station: 214
- Rescue: [0] 144
 Fire department: [0] 122
 Police: [0] 133
- Emergency number for poison: [0] 01-4064343
- Euro emergency call

NOTRUFE für rasche Hilfe im Notfall							
Feuerwehr	122						
Polizei	133						
Rettung	144						
Ärztenotruf	141						
Bergrettung	140						
Wasserrettung	130						
Euro-Notruf	112						
Vergiftungsnotruf Kinderschutz-Hotline	01-4064343 0800-202050						
 WO wird Hilfe be WAS ist passier WIEVIELE Verlet WER ruft an? 	t?						



[0] 112





Immediate life-saving measures:

- Securing / rescuing
- Stable lateral positioning
- Defibrillation, ventilation and cardiac massage
- Hemostasis
- Anti-shock measures
- Guide in rescue teams
- Clear the access route
- Always stay calm and exercise caution



What to do in case of a mill-wide emergency

- N LUNK
- In order to have an overview of how many people are in our plant during a factory-wide emergency (evacuation), there are meeting points based on the fire protection plan!
- \succ These are found in the following areas:
 - Waste water treatment
 - Woodyard
 - Canteen
 - Fire department
 - Garage Hallerwirt

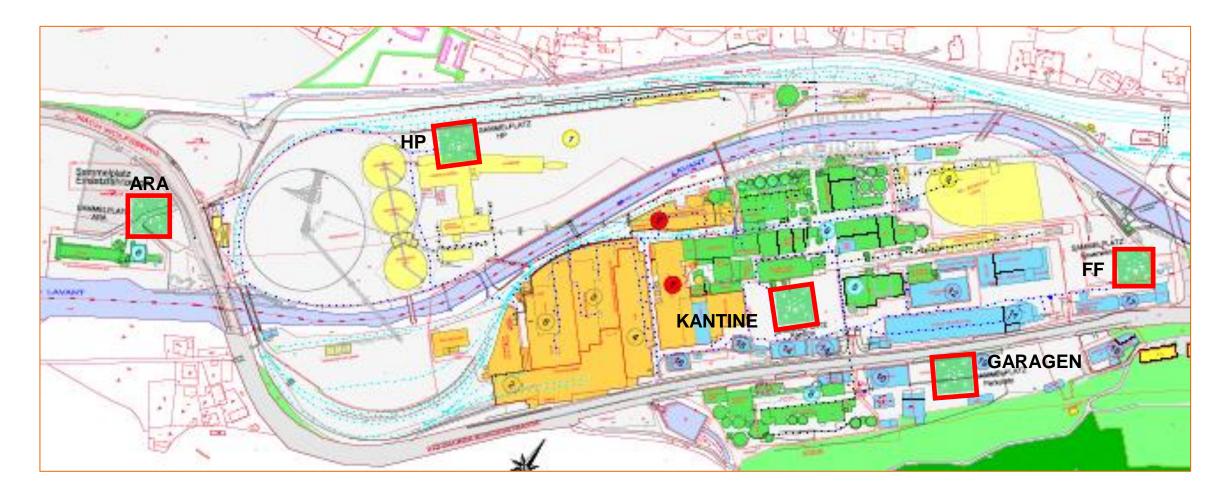


All employees, suppliers and contractors who are on the factory premises during an emergency must adhere to the instructions of the evacuation leader!



Evacuation – assembly points







Evacuation – assembly points



• In case of a **mill-wide emergency**, the following assembly points must be visited:

Assembly Point ARA: Papermill, Loading Department, Pulpmill, Woodyard

Assembly Point Garage: Offices (TB, Kfm. Büro IBM), RDIC, Magazin, Central Maintenance Department

• In case of **area-specific evacuations**, the following assembly points must be visited:

Assembly Point HP: Papermill, Loading Department, Pulpmill, Woodyard

Assembly Point Kantine: Offices (TB, Kfm. Büro IBM), RDIC

Assembly Point Feuerwehr: Magazin, Central Maintenance Department

• **EXCEPTION**: The fire brigade manager or the evacuation manager/evacuation helper is responsible for allocating the assembly point differently.



Rescue equipment – emergency equipment

The rescue equipment is found in Recovery Boiler 4 (ground floor)! Here you will find:

- Rescue reel and rescue equipment
- Defibrillator (other defibrillators are in the central control roll pulp mill, control room PM 8)
- First aid kit
- Fire brigade St. Gertraud is trained for the rescue of persons from confined spaces. In case of an emergency, you can immediately trigger the alarm via the LAWZ warning center.

Mill doctor is in the IBM building











Food safety Management System for Products according FSSC 22000

Hygiene Regulations in the areas Paper mill and Flash drying plant

Elke Juri

Hygiene regulations

This work instruction applies:

• For all employees at Mondi Frantschach, including temporary employees, visitors, technicians, suppliers and also serves as supporting evidence for the recurrent training.

Please note:

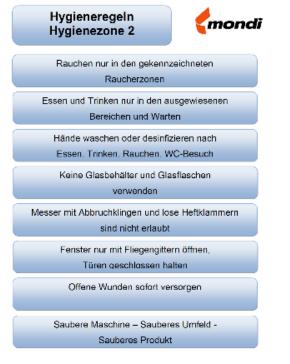
- Some of our products go into the food industry, which requires a high level on the cleanliness and hygiene of the product, and also to the production itself.
- For this reason, certain rules have to be followed in following production areas, which are particularly critical for the product
 - o paper mill
 - o flash drying plant



Hygiene area 1 and Hygiene area 2

• At the **Wood yard** and in the **Pulp mill**, there is no potential for risk in terms of product hygiene because it is a closed circle.







Hygiene area 2

Areas with little risk of contamination, because paper and market pulp production is carried out at high temperatures

- Stock preparation up to dryer section at the individual paper machines
- Flash drying plant except baler (area 3)
- Loading (In the area of loading, the goods are already packed)
- Risks
 - Foreign objects such as glass or metal pieces
 - Pests
 - Cleanliness of the buildings and facilities



Hygiene area 3

Hygiene area 3

Areas with a high risk of contamination

Areas in the Paper mill

- Paper rewind of the individual machines
- Roll transport
- Roll wrapping machine until transfer loading
- Baler up to packaging

Risks

- Foreign objects such as glass or metal pieces
- O Pests
- Cleanliness of the buildings and facilities
- Personal hygiene

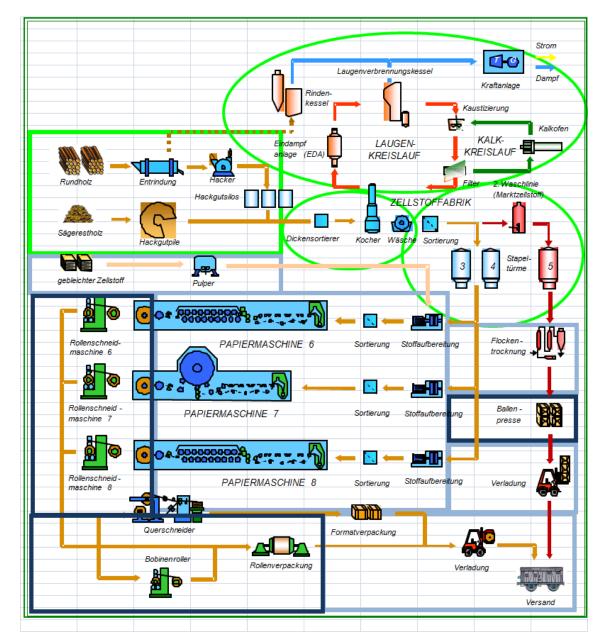




Saubere Maschine – Sauberes Umfeld -Sauberes Produkt



Hygiene areas at Mondi Frantschach



- Hygiene area 1
 - Wood yard
 - Pulp mill

Hygiene area 2

- Stock preparation up to dryer section at the individual paper machines
- Flash drying plant except baler (area 3)
- Loading (In the area of loading, the goods are already packed)

Hygiene area 3

- Paper rewind of the individual machines
- Roll transport
- Roll wrapping machine until transfer loading



Hygiene regulation paper mill (1/3)

No smoking

 Smoking is prohibited in the mill except in the marked smoking areas. After smoking, hands have to be cleaned

Eating and drinking

- Food and drinks (except water in PET bottles), including chewing gum are strictly forbidden in the "hygiene area 3".
- It is allowed to eat and drink in the control rooms or in the marked areas

Hand cleaning

 Hands must be cleaned (washed or desinfected) before starting to work, after a break (eat, smoke), after using the toilet or after working with unclean items.

Glass prohibition

 In the production area there is glass prohibition. Drinks, yogurt, etc. may only be consumed from plastic containers or cans.

Waste

Separate collection of waste must be disposed in the appropriate waste containers with cover.







Hygiene regulations paper mill (2/3)

Doors and windows

• Only open windows equipped with fly screens. Doors should be kept closed

> Housekeeping:

- The workspace and the area around must be kept in a clean condition
- Work surfaces, utensils, containers, machinery must be kept clean

> Ways:

 In the area of the roll-transport-system by the paper machines, the conveyor belts have to be crossed only at the blue-marked ways

Knives / Tools:

- It is not allowed to use knifes with break-off blades
- Tools have to be put away immediately after use





Hygiene regulations paper mill (3/3)

Work chlothes:

 It is possible to wear work clothes or private clothes, provided they are in a clean condition. Work clothing should be changed immediately when contaminated. Working clothes must be worn at the factory. Short arm shirts are allowed, but shirts without sleeves are not allowed

Hair / Nails:

 Nails have to be short and clean. Artificial nails are not allowed in the production area. Long hair must be tied together

Personal items:

 Wearing jewelry (except wedding ring), clocks and visible piercings are not allowed in the production area. Personal items must be stored securely. Excepted from this rule are only visitors who stay exclusively within the blue-marked visitor ways.

Cell phones:

- Making calls in the "hygiene area 3" is only allowed in the control rooms or on the blue-marked paths.
 Otherwise, cell phones have to be kept save.
- Injuries / Illnesses :
- Open wounds must be supplied immediately. It's not allowed to take medicine to the production, except for emergency medications such as asthma spray





Waste separation Mondi Frantschach GmbH

Elke Juri

Recyclables and residual waste separation in the factory

Glass

Paper	Glas Packaging	Plastic Packaging	Metall Packaging	Bio Waste	Wood Waste	Iron scrap	Residual waste
 ✓ YES ☺ Newspapers, catalogues, magazines, books, brochures, notebooks, folded cartons, cardboard, corrugated cardboard, non-soiled paper ×NO ⊗ Composite materials (e.g., beverage cartons) Plastic wrapping (e.g., catalogue wrapping) Dirty paper 	 ✓ YES ☺ Beverage bottles, disposable glass bottles, jam jars, pickle jars, empty medicine bottles ★ NO ☺ Window glass, drinking glasses, laboratory glassware, mirror glass, crystal glass, wired glass, light bulbs, ceramics, porcelain, fireproof glassware 	 ✓ YES ☺ Blister packaging, packaging made from plastic such as: cups (empty), carrier bags, bottles, lids, caps, canisters, composite materials such as: milk cartons, juice boxes, coffee vacuum packaging × NO ⊗ Plastics that are not packaging, such as pipes, hoses household items 	 ✓ YES ☺ Beverage cans, tin cans, crown caps, metal lids, aluminum foil, metal bowls, metal tubes, completely emptied aerosol dispensers × NO ⊗ Screws, iron parts, wires, nails, engine parts, everyday metal objects, aerosol dispensers not completely emptied 	 ✓ YES ☺ Fruit and vegetable scraps, garden waste, food waste, tea bags, coffee filters with brewed liquid, leaves, cut flowers, potted plants, potting soil, shrub and grass clippings × NO ⊗ Plastic bags, vacuum cleaner bags, used cooking oils and grease, cigarette ash, hygiene products 	 ✓ YES ☺ Untreated wood, disposable wooden pallets, Euro pallets, packaging wood, carpentry waste wood ✓ NO ☺ Coated wood, lacquered wood Cable waste Cable waste is collected at the scrap yard 	 ✓ YES ☺ Screws, nails, wires, iron parts, completely emptied aerosol dispensers × NO ☺ Electronic waste, batteries, aerosol dispensers not completely emptied, oil-contaminated waste Collection in containers for scrap metal or directly at the scrap yard 	 ✓ YES ☺ Light bulbs, mirror glass, flat glass, waxed paper, hygiene products, rubber waste, vacuum bags, ashes (cold), soiled plastics, leather waste, sweepings, flower pots × NO ☺ Construction waste, bulky waste, hazardous waste oil and fat, batteries, old electrical appliances
in th ✓ Pape ✓ Plast ✓ Bioge	er packaging enic waste l packaging	er	 Units for collecting Plastics Plastics Bio waste Paper Metal 	ion of	 Press waste to Saves lots of sp The goal: 	•	LASS DIE LUET RAUST

Glass packaging

Residue waste

As little residual waste as po

 \checkmark



Make

Hazardous waste

The most common hazardous waste in the factory

- > Oil-contaminated equipment and waste oil
- Electronic components
- Batteries
- Aerosol dispensers (spray cans), when they are not completely emptied
- Gas discharge lamps
- Agents such as detergents, solvents, chemicals, paints and varnishes

Oil-contaminated equipment	Oil-contaminated cleaning cloths	Waste oil for collection tank
✓ YES ©	✓ YES ©	✓ YES ☺
Solid grease and oil- contaminated equipment	Oil-contaminated cleaning cloths from the MEWA company (torn and whole)	Old oil from the factory area × NO PCB-containing waste oil (transformers)
✗ NO ⊗ Waste oil Used oil and air filters Oil-contaminated cleaning cloths from the MEWA co. Electronic components	The cloths are exchanged in the magazine * NO ® Oil-contaminated paper towels	Waste grease

Delivery to the interim storage facility for hazardous waste must be done after consultation with the mechanical workshop.



Batteries (hazardous waste):self-dispensed in the magazine Toner (printers and copiers) : self-dispensed in the magazine



Principles of waste separation

Recyclable materials must be separated

- Plastics do NOT belong in the waste paper container
- Fold cardboard packaging to save space
- If there is not enough space left in the waste paper containers, cardboard packaging should be taken to the paper press at the magazine

Hazardous waste must not be placed in the residual waste or recyclable material collection units

Hazardous waste such as:

- Used oil
- Oil contaminated equipment
- Batteries
- Compresses gas packages

Must NOT be into the residual waste or into recyclable material collection units









Please note

Hazardous waste does NOT belong in the residual waste container

Waste oil and oilcontaminated waste may not be disposed of with the residual waste!



Oil-contaminated waste is hazardous waste





Plastics do NOT belong in the waste paper container

Materials must be separated! Fold cartons together!



Separate, fold together









Fire safety regulations

Base: Workplace ordinance AStV § 45(2) Technical guidelines for preventative fire safety TRVB O 119/06 Klaus Dobrovz

Fire safety regulations (1/3)

General fire prevention measures

- Maintaining order and cleanliness in the building is a basic requirement for fire and accident prevention.
- A strict smoking ban applies on the entire factory premises and in the buildings, with the exception of the designated smoking areas.
- Remnants of tobacco or materials prone to spontaneous combustion may only be stored in non-flammable containers with tight-fitting lids.
- Combustible waste such as oil and soaked cleaning rags must be stored in a fire-proof manner (in closed containers in the respective operating department). Every 4 weeks, these are sent away from the magazine for cleaning (in containers provided for this purpose).











Fire safety regulations (2/3)

General fire prevention measures

- Hot work (welding, cutting, soldering, flames, etc.) may only be performed after prior approval (Hot work permit) from the plant foreman responsible for the operating area or fire protection officer
- \succ Exceptions to this are the designated and appropriately setup workshops.
- Electrical systems should be operated and maintained in accordance with the regulations. Flammable materials should not come into direct contact with lighting fixtures.
- Storing items of all kinds, whether flammable or incombustible in unsuitable places (hallways, escape routes and other traffic routes etc.) is prohibited.
- \succ The max. storage quantity of spray cans at the workplace is the daily requirement.

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Fire safety regulations (3/3)

General fire prevention measures

Fire extinguishers (wall hydrants and portable fire extinguishers) must not be moved – even temporarily –, obstructed from view (for example, through clothing or decorative material hung above them), misused or removed from the prescribed storage areas or used improperly.







Warning signs relating to fire protection and escape routes, and emergency lights must not be placed out of view, damaged or removed.



- \succ As far as possible, electrical equipment should be switched off after the work is completed.
- > Missing fire protection equipment (e.g., fire extinguishers) must be reported immediately.



Fire safety regulations

How can I make an emergency call?

The fire alarm can be activated automatically via a fire alarm system (automatic fire detectors and/or push button detectors) or manually via telephone



- > When making an emergency call, please always provide:
 - Who is speaking (name and location of person calling)
 - What has happened (injury, fire, traffic accident, natural disaster)
 - Where is help needed (address, directions)
 - How: indicate any special circumstances
 - How many injured parties there are

Internal emergency call nr.: 214







VEXAT

Regulation explosive atmospheres

Eva Unterluggauer

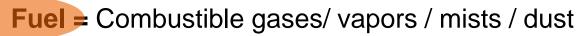
Legislation requires that a company in which explosive gases / vapors / mists / dusts occur

- Must determine and document the possible explosion hazards
- Must avoid explosive atmospheres (primary explosion protection), if not possible:
- prevents their ignition (secondary explosion protection => classification of Ex zones), if not possible:
- > minimize the effects of an explosion (constructive explosion protection)
- Must label the hazardous areas in the plant
- trains the employees on the potential dangers and correct behavior in Ex-zones



Definition explosive atmosphere

Mixture of



at Mondi Frantschach:

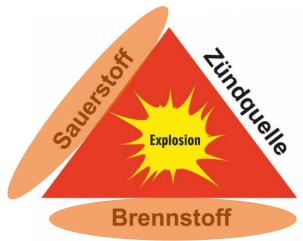
Diluted and concentrated non-condensable gases (DNCG/CNCG), stripper-off gas (SOG: methanol), natural/liquid gas, turpentine, ammonia, acetylene,...

Starch, bark dust, paper dust, rubber dust, starch,...



Explosive atmosphere + ignition source Explosion

Hot surfaces or gases Flames mechanically generated sparks electrical devices / compensating currents electromagnetic fields chemical reactions adiabatic compression ultrasound lightning strike optical / ionizing radiation

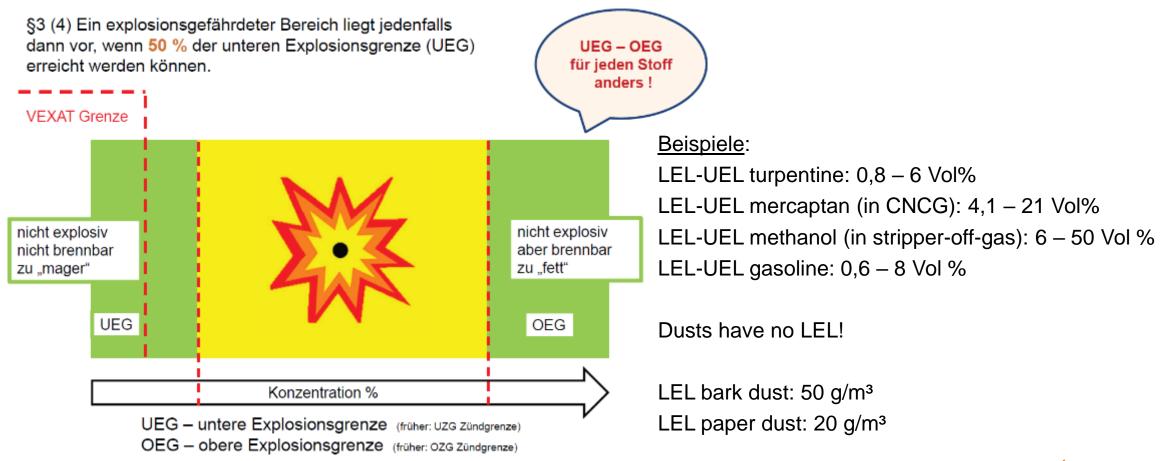




VEXAT – Regulation explosive atmospheres (BGBI II Nr. 309/2004) Characteristics (1/2)

Iower / upper explosion limit (LEL=UEG / UEL=OEG)

Concentration range at which the vapour (gas) - air mixture is explosive. Above/below this it is too lean/too rich



VEXAT – Regulation explosive atmospheres (BGBI II Nr. 309/2004) Characteristics (2/2)

- Flash point: Temperature at which a flammable vapor (gas)-air mixture forms above a liquid.
 - turpentine: 35°C
 - mercaptan (in CNCG): -18°C
 - hydrogen sulphide H2S: k.A., as boiling point at -60°C
 - methanol (in stripper-off gas): 9°C
 - Gasoline: -35°C

Ignition temperature: Temperatur at which the vapour-air mixture can ignite itself. Essential for equipment selection!

- turpentine: 220°C
- mercaptan (in CNCG): 340°C
- methanol (in stripper-off gas): 386°C
- Gasoline: 220°C

> Hazardous explosive atmosphere (heA) = Hazardous quantity of an explosive atmosphere

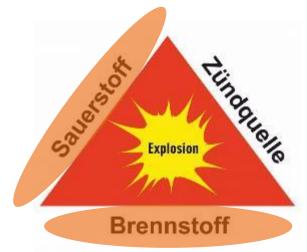
- > 10 liters volume
- ➤ 1/10000 room volume (80m³ => 8 l)
- Dust layer 1mm whirled-up



Definition of "Ex-Zone"

In an Ex-Zone (fuel + oxygen/air) an explosive atmosphere occurs

- permanently (Zone 0 (Gas) / 20 (Dust)) \rightarrow >50% of time(eg. within a shift)
- occasionally (Zone 1 (Gas) / 21 (Dust)) → <50% of time and > 30 min / month
- rarely (Zone 2 (Gas) / 22 (Dust)) → max. 1x per month for 30 min
- An Ex zone only indicates <u>how likely</u> an Ex atmosphere can occur and <u>NOT</u> whether an Ex-atmosphere is present when working there!
- The presence of an explosive atmosphere can only be determined via a gas measurement!





• What to avoid in the Ex-zone?

The Ingition of the Ex-Atmosphere!

• How can it be ignited?

How to avoid?

Examples:

- > Hot surfaces, flames
- Mechanically generated sparks
- Electrostatic discharge
- Electrical equipment
- Lightning strike

- → no fire/ smoking, no open light
- → avoid hot surfaces in the zone (e.g. engines, vehicles)
- ➔ do not store flammeble materials in ex.zones!
- → no hot work, low sparking tools
- → GAS MEASUREMENT during the activity!
- → wear dissipative footwear
- ➔ do not put on or take off clothes in the Ex-Zone
- ➔ grounding / potential compensation
- → use explosion-proof equipment
- ➔ no mobiles/ no radio devices in Ex-zones
- → electrical work only in de-energized state
- → ligthning protection system



- ATTENTION WHEN RELEASING HOT WORK (Permit 03 Hot works)
 - Hot work is not permitted in Ex zone
 - A gas measurement (release measurement) must be carried out before starting hot work, confirming that no Ex-atmosphere is present during the work
 - During hot work on pipelines / vessels of the pulp mill, a release measurement must ALWAYS be carried out, even if there is no Ex-zone indication
 - ATTENTION in case of dust deposits These must be removed before starting work (vacuum, wash-off, DO NOT blow off!).



Possible markings for Ex zones



In Frantschach, no zone differentiation in the labeling! The ex-atmosphere does not care which zone classification was chosen!



Ex or flame on pipes or containers: Ex-zone inside! No immediate danger!



- → Ex-Zone outside: yellow marking and / or information board →
- Ex zone from this marking (pipes inside, floor marking outside)







Safe working on systems that carry flammable fluids

- Many systems (pipelines, tanks and devices) carry flammable gases and liquids
- A system permanently filled with flammable gases or liquids without air is NOT an Ex-zone!
 - Examples: certain systems for turpentine, emulsion water, C-condensate, natural gas, liquid gas, heating oil,...
 - NKG und STG-systems are always Ex-zone (air content in the gases)
- But: if the system is opened, an explosive atmosphere can be formed due to the air ingress!
 - Eg: change of pumps, sensors,...
- Therefore:
 - Special care for work permits and work in such areas!
 - Empty / clean / flush and clear the system before starting work!







• Information on explosion hazards is summarized in the explosion protection documents (ExPD=ExSD)

• Contents (ExPD)

- > Explosion hazards in normal operation, during malfunctions, maintenance, testing, cleaning
- > Ex-protection measures (primary, secondary, constructive)
- Local determination of the Ex-areas and their classification into zones
- > Suitability of work equipment, electrical / non-electrical devices, clothing for Ex-zones
- Material characteristics (see also safety data sheet)
- > Ex-zones-plan: in written and graphical form
- Inspection and control intervals
- Working procedures in Ex-zones

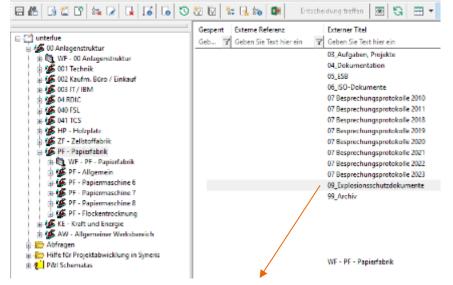
ExPD's can be found in

- > Syneris \rightarrow see next slide
- Drive K:\Abteilungen\PLANT Security\1 Explosionschutzdokumente PDF



Storage ExPD in Syneris

Objekt Bearbeiten Ansicht Extras Hilfe Reports



- Explosion protection documents ExPD are saved in the plant structure at the highest level in the individual plant sections (papermill, pulpmll, powerplant,...)
- O9_select Explosion protection documents (double-click)
 ExPD are listed
- All ExPD can be found using the search function under the "Explosion protection documentation" category

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Interner Titel		Interne Referenz			
Ex-Schutzkonzept Stärkelinie 2		Projekt 1901MOF pgag0091	E-MOD		
Externer Titel		Externe Referenz			
Ex-Schutzkonzept Stärkelinie 2		EX-PF-ALG-002			
Dokumententyp	/	Thematische Zuordnung		/	

Gesperr	t Interne Referenz	Interner Titel	Externe Referenz	Dok-Nr
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	G B111	In- und Außerbetriebnahme sowie Arbeite	EX-KE-EV-001-A02	EX-KE-EV-001-A02
	IR_09_2008_V1_10	Gasalarmplan	EX-KE-EV-001-A03	EX-KE-EV-001-A03
	Anhang A	Arbeitsfreigabeschein - Arbeiten im Bereic	EX-KE-EV-001-A04	EX-KE-EV-001-A04
	Anhang C	Wartungsplan	EX-KE-EV-001-A05	EX-KE-EV-001-A05
	Teil 17 Rev5	Ex-Schutzdokument Erdgasstation und Au	EX-KE-EV-001-A06	EX-KE-EV-001-A06
	Kärnten Netz Plan	Ex-Zonenplan Erdgasreduzierstation	EX-KE-EV-001-EXZP01	EX-KE-EV-001-EXZP01
	Teil 18 Rev4	Ex-Schutzdokument Ammoniakdosierung	EX-KE-FAW-001	EX-KE-FAW-001
	Teil 14 Rev5	Ex-Schutzdokument Abwasserreinigung	EX-KE-FAW-002	EX-KE-FAW-002
	Teil27 Rev4.pdf	Ex-Schutzdokument Stärkesilo	EX-PF-ALG-001	EX-PF-ALG-001
	Projekt 1901MOF	Ex-Schutzkonzept Stärkelinie 2	EX-PF-ALG-002	EX-PF-ALG-002
	Projekt 1901MOF	Ex-Zonenplan Silo	EX-PF-ALG-002-EXZP01	EX-PF-ALG-002-EXZP01
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Objekt Bearbeiten Ansicht Extras Hilfe Reports

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							EX-P	F-ALG	6- 0 02		Ex-	Ex-Schutzkonzept Stärkelinie 2						Projekt 1901MOF pgag0091E-MOE						
							EX-P	F-ALG	6-002	-EXZP01	Ex-	Zone	nplan Silo							Projekt 19	01M	OF Re	v01	
							EX-P	F-ALG	6-002·	-EXZP02	Ex-	Zone	nplan Big	Bag						Projekt 1	001M	OF Re	v01	
							EX-P	F-PM	-001		Ex-	Schut	tzdokume	nt Absaugan	nlage Cl	upaktu	ichschlei	ifmasch	ine	Teil 25 Re	v4			
							EX-P	F-PM	-003		Ex-	Schut	tzdokume	nt Absaugan	nlage Ro	llenscl	hneidma	schine	PM6	Teil 21 Rev4				
							EX-P	F-PM	-004		Ex-	Ex-Schutzdokument Absauganlage Rollenschneidmaschine PM8							Teil 23 Rev4					
							EX-P	F-PM	-005		Ex-	Schut	tzdokume	nt Hilfsanlag	jen der	PF				Teil 16 Re	v4			

ExPD in Syneris

- Explosion protection documents ExPD can contain several documents. The main document is superordinate, eg: EX-ZF-FL-005
- → Associated appendices or Ex zone plans are marked with e.g. EX-ZF-FL-005-A01 or EX-ZF-FL-005-EXZP01

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		Gesperrt	Externe Referenz	Externer Titel
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⊕			EX-ZF-ALG-001	Ex-Schutzdokument Oberflächenentwässerungssystem Kamyr
			EX-ZF-CHKL-001	Ex-Schutzdokument Tallölkeller, Behälter + Kocher
			EX-ZF-CHKL-002	Ex-Schutzdokument Strippergase
E - Holzpialz			EX-ZF-CHKL-003	Ex-Schutzdokument Stripper 2
PF - Papierfabrik			EX-ZF-CHKL-004	Ex-Schutzdokument NKG + Verbrennung
🕀 💽 WF - PF - Papierfabrik			EX-ZF-CHKL-005	Ex-Schutzdokument Vakuumpumpe EDA
🕀 🥳 PF - Allgemein			EX-ZF-CHKL-006	Ex-Schutzdokument GGE Reduktion
🕀 🥻 PF - Papiermaschine 6			EX-ZF-CHKL-007	Ex-Schutzdokument Kaustizierungsanlage_Laugenanalyser und
🕀 🍻 PF - Papiermaschine 7			EX-ZF-FL-001	Ex-Schutzdokument Hackschnitzeleintrag - ND Teil Kocher
🕀 🌆 PF - Papiermaschine 8			EX-ZF-FL-002	Ex-Schutzdokument Entspannungszyklone
PF - Flockentrocknung			EX-ZF-FL-003 EX-ZF-FL-004	Ex-Schutzdokument Schwachgas
KE - Kraft und Energie M - Allgemeiner Werksbereich			EX-ZF-FL-004 EX-ZF-FL-005	Ex-Schutzdokument Terpentin Ex-Schutzdokument Terpentin LKW-Verladung
			EX-ZF-FL-005-A01	LKW-Abfüllung Erstprüfung
			EX-ZF-FL-005-A02	LKW-Abfüllung Ergänzung Benutzerinformation
			EX-ZF-FL-005-EXZP01	Ex-Zonenplan Terpentinabfüllung
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