

IK 318 Safety & Environmental regulations at the Metallo sites

AUTHOR(S)	OWNER
Marijke Hoet	Sandra Hertigers
 Date: 19/3/19	 Date: 19/03/19
PREVENTION ADVISER	ENVIRONMENTAL COORDINATOR
Marijke Hoet/Sandra Hertigers	Luc Broeckhoven
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IK 318 Safety & Environmental regulations at the Metallo sites

1. Revision management

OVERVIEW OF CHANGES		
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IK 318 Safety & Environmental regulations at the Metallo sites

2. Table of contents

1. Revision management	2
2. Table of contents	3
3. Aim and brief summary	4
4. Potential safety risks and measures to be taken	4
5. Potential environmental risks and measures to be taken	4
6. General.....	5
6.1. Our basis for safety	6
6.2. Traffic within the factory	8
6.3. PPE (Personal Protective Equipment) and clothing	8
6.4. Measures in case of fire, incident or damage	9
7. Contract work	10
7.1. Contractor's personnel.....	10
7.2. Sanitary installations and refectories.....	11
7.3. Tools, machines and auxiliaries.....	11
7.4. Work location and environment	12
7.5. Waste	13
8. Regulations on the use of electrical energy.....	13
9. Permits	14
10. Regulations on working in the production departments	15
10.1. Working in the foundry	15
10.2. Working in the lead-tin area.....	15
10.3. Regulations for working in the electrolysis area	16
10.4. Regulations for working in dusty environments	16
11. Factory layout	18
12. Safety requirements compliance form	19
13. Relevant documents	20

	IK 318 Edition number: 8	Application date: 18/03/2019 Page4/20
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IK 318 Safety & Environmental regulations at the Metallo sites

3. Aim and brief summary

The aim of this Instruction Card (IC) is to inform contractors and transporters about the safety and environmental regulations that apply at Metallo Belgium NV's sites.

4. Potential safety risks and measures to be taken

Failure to comply with these instructions may give rise to dangerous situations, which may result in accidents at work.

5. Potential environmental risks and measures to be taken

Failure to comply with these instructions may give rise to dangerous situations, which may result in environmental incidents.

IK 318 Safety & Environmental regulations at the Metallo sites**6. General**

- It is forbidden to consume, have in one's possession or bring alcoholic beverages or drugs into the factory. Persons under the influence of alcohol, drugs or medicines are not permitted to enter the factory. All persons may be subject to an alcohol test.
- It is forbidden to bring any weapons or any other dangerous means of defence into the factory.
- For reasons of hygiene, smoking is only permitted in the provided smoking cabins that are placed at various locations on the site (wash hands and rinse mouth after smoking).
- Some activities are subject to special regulations that are described further in the following chapters:
 - 8: Regulations on the use of electrical energy
 - 9: Permits
 - 10: Regulations on working in the production departments
- It is forbidden to deliberately dirty or damage the companies' rooms, installations and sites.
- It is forbidden to steal material, raw materials or products. This may be monitored by personnel from the factory surveillance team. The Management Board is authorised to have tool boxes, lockers and vehicles inspected by G4S.
- No posters, flyers or notices may be applied anywhere. Likewise, it is forbidden to remove, tear or soil any of our company's notices.
- It is forbidden within the organisation to make any propaganda statements, contribute or collect membership fees, distribute flyers and hold speeches.
- It is forbidden to organise lotteries/games of chance or to participate in same or to trade on the factory premises without obtaining the express permission of the Management Board's representatives.
- It is forbidden to bring photographic or filming equipment into the company without the Management Board's written permission.
- Pregnant women are not allowed to enter the production halls. Contact the prevention service to find out exactly which locations/activities form a risk.
- Young people under the age of 18 may not be employed to work on the factory premises. Moreover, they may only enter the premises after they have obtained Metallo's express permission to do so. Appropriate measures will have to be taken to safeguard their health.

IK 318 Safety & Environmental regulations at the Metallo sites

6.1. Our basis for safety



IK 318 Safety & Environmental regulations at the Metallo sites

OUR BASIS FOR SAFETY

I THINK BEFORE I BEGIN



I take the potential risks into consideration before I start a task. Equipment and PPE are in order? Task and instructions are clear? Working environment is orderly without risks? All safety measures have been taken?

LOTO



I make sure that the machine or installation is secure, that there is no residual energy left in the installation and only apply the LOTO before I start working. I do not under any circumstances remove a LOTO lock or tag without following the procedure.

WORK PERMIT



If my work so requires, I only start working after I have obtained a valid work permit. I follow the instructions on this work permit. In case of any changes, I inform the supervisor.

WORKING AT HEIGHT



When I work at height (>2m; incl. pot edges regardless of the height), I protect myself and others against falling and falling objects. I use the appropriate (personal) protective equipment.

VROEM



When I drive a vehicle or I am on the premises as a pedestrian, I observe the VROEM rules (certificate, speed, right of way, make eye contact, wear a seat belt, no improper use).

LIFTING OPERATIONS



I only use approved equipment for lifting operations and only do this work when I am trained to do so. I never stand or walk under a suspended load.

CONFINED SPACE



If only enter a confined space when a manhole observer is present, the required air measurements have been conducted and the prescribed rescue equipment is available.

BRIDGING



I do not bridge critical safety equipment or safeguards unless absolutely necessary to guarantee the safety and following a supervisor's approval in accordance with the procedure.

ALCOHOL, DRUGS & SUBSTANCES



I am not under the influence of alcohol, drugs or substances when I am working. I do not consume alcohol, drugs or substances during work.

INTERVENTION IN CASE OF DANGER



I intervene when I observe a dangerous situation or action. I secure the situation (remove the danger, call attention to or immediately report to the supervisor) or address the person(s) involved about unsafe conduct.

**I OPT FOR
SAFETY!**

METALLO 
THE FURNACE OF INNOVATION

IK 318 Safety & Environmental regulations at the Metallo sites**6.2. Traffic within the factory**

- The traffic rules as determined in the 'General Rules on Road Traffic' apply on Metallo's premises as a standard principle.
- If applicable, the person in charge at Metallo will announce any special rules that may deviate from the traffic rules on the public road. The rules should be strictly observed.
- Access to the premises with a vehicle is only permitted via the entrance on the Nieuwe Dreef, provided a responsible party from Metallo has issued an authorisation. Authorisation is available for loading and unloading and for parking on the premises. The authorisation must always be visibly displayed behind the windscreen.
- The speed in the factory is limited to 20 km/h. The speed is limited to 12 km/h in the building/hall and on the materials plaza.
- A safety belt must be worn on the road network.
- The vehicle lights must be on at all times.
- Parking should be done according to the internal rules and as instructed by the persons in charge at Metallo.
- Traffic in the factory is only permitted for transporting materials.
- Pedestrians are not permitted to leave the footpaths without the permission of the person in charge at Metallo.

6.3. PPE (Personal Protective Equipment) and clothing

- It is compulsory to wear a helmet, glasses and work clothes or fluorescent jacket on the designated footpaths. It is also compulsory to wear safety shoes on leaving the footpaths. A PPE-free zone is present at the factory entrance. The point from which it is compulsory to wear PPE is indicated by signs on the ground.
- In some departments, it is necessary to use additional individual protection, such as a dust mask, face, hearing and extra eye protection, acid-proof clothing, gloves, special overalls with cap for working in the filters, etc. These special local regulations also apply to third parties. Each entrance door to a production or maintenance department bears a PPE matrix. This indicates the required PPE to be worn.
- Specific PPE required for performing the work is also indicated on the work permit. This had to be strictly observed.
- The employer provides its personnel with the required work clothes and protection equipment appropriate for the work to be performed. It is not permitted to wear short sleeves and shorts on the factory premises and in the production area. In certain zones, the work clothes must have retardant properties.
- The employer ensures that its persons performing the work wear the provided clothing and protective equipment and are familiar with their use.

IK 318 Safety & Environmental regulations at the Metallo sites**6.4. Measures in case of fire, incident or damage**

- In case of fire, incident, imminent danger or accident, the emergency number must be called immediately: telephone = 559 (014/609.559 external).
- In the event of an incident, no matter how small, the Metallo contact person must be informed as quickly as possible. He/she will assess whether additional measures have to be taken. By having a better knowledge of the risks associated with the plant, he/she will be able to assess the potential consequences of the incident (with respect to the victim as well as others). The incident will also have to be reported to the prevention service in writing. It suffices to provide the prevention service with a copy of the incident report that is sent to the relevant insurance company.
- If a staff member of an external company suffers an occupational accident with absence from work that occurred on the Metallo premises, the external company's prevention adviser should contact the Metallo prevention adviser with respect to the accident investigation.
- External company staff members can have their injuries attended by the medical service or at the First Aid station. Your company's stipulations on reporting accidents shall thereby continue to apply.
- Damage caused to Metallo's existing establishments have to be reported to the plant contact person immediately.
- Before starting welding work where any risk of fire exists, the Metallo contact person will have to be consulted before commencing with the work. A fire permit is required (see Chapter 8). A fire extinguisher will also have to be put in place.

IK 318 Safety & Environmental regulations at the Metallo sites**7. Contract work****7.1. Contractor's personnel**

- Upon acceptance of the work, the contractor shall contact the Metallo commissioning service. During this meeting, the scope of the work and the safety regulations with respect to the contract work will be discussed, e.g. the use of individual protection equipment, fall protection, LOTO, confined spaces, etc.
 - The names of the contractor's contact persons for Metallo and the work coordinators will also be passed on to the Metallo contact person.
 - A representative from our company is always designated as the contact person for execution of work by contractors. If necessary, this contact person will act as a go-between with our other services.
 - The contractor will designate a mandatory that has the required competence and authority, and that can represent it and the agent on safety matters at Metallo. The name of this mandatory will be made known to the Metallo contact person.
 - The contractor's personnel have to report themselves to G4S and subsequently to its Metallo contact person. Yellow ring binders are provided in the production departments. When working in a particular production department, workers have to register in this ring binder. On leaving the department, it is necessary to sign out again in the same ring binder.
 - The contractor or the mandatory will instruct everyone performing work about the safety regulations before the work commences. This instruction will have to be repeated periodically, if necessary. The contractor or the mandatory may use these safety regulations for this purpose as well as audio-visual and other resources that are available from Metallo's prevention service.
 - If the contractor works with subcontractors, he must inform the person in charge at Metallo accordingly. If not, they will be denied access to the plant. When working with subcontractors, the contractor will instruct them on the agreed safety measures.
 - If the contractor employs foreign workers or is a foreign company, the contractor has to register the relevant workers digitally via <http://www.limosabe.be>. This has to be done for each employee, self-employed person or trainee that comes to work temporarily for a Belgian employer and is employed by a non-Belgian employer. If applicable, these persons will also have to have an E101 secondment certificate.
-
- If the contractor employs personnel to work at Metallo that do not speak Dutch, the personnel will have to be accompanied by a person that acts as an 'interpreter' between the contractor's personnel and the contact person at Metallo. The 'interpreter' has to be able to speak the language of the personnel and be able to communicate with the contact person at Metallo (Dutch, English, French or German). This is to ensure that the necessary

IK 318 Safety & Environmental regulations at the Metallo sites

instructions are clearly conveyed. The name of the 'interpreter' has to be noted on the work permit.

- Anyone entering the Metallo premises has to report first to the security officer (Nieuwe Dreef entrance) on arrival. All persons must report themselves individually. The safety passport for contractors should be read and signed. (For entry with a vehicle, see 6.1 Traffic within the factory)

7.2. Sanitary installations and refectories

- Sanitary installations, refectories and lockers can be made available following agreement with the Metallo contact person.
- The Metallo contact person will show you the right location and facilities.
- The hours of use will have to be agreed.
- For health reasons, the following instructions apply in the sanitary building and other refectories:
 - Enter the sanitary building via the correct entrance:
 - First entrance (moisture absorbing mats): to be entered with normal shoes
 - Second entrance (brushing machine): to be entered with safety shoes
 - Put on shoe covers in the contractors' cloakroom and electrolysis refectory
 - Wash hands and face, if applicable, thoroughly before entering the refectory
 - Working jacket and PPE (helmet & glasses) are not permitted in the refectory.
- These instructions must be strictly observed. If not, entrance to or the use thereof will be denied.
- Food and drink are only allowed in the refectories and beverage rooms. It is NOT permitted to consume food on the premises and in the vehicles.
- It is forbidden to place clothing items, toiletries and personal materials anywhere other than the designated locations.

7.3. Tools, machines and auxiliaries

- Only appliances, machines or vehicles that are in good condition and which comply with the stipulations in the General Occupational Health and Safety Regulations and the Codex are to be used.
- If legally obliged, the certificates of these inspections will have to be presented to the contact person of Metallo's commissioning service. The prevention service may also request these certificates at any time. Failure to observe the statutory provisions regarding inspections may give cause to remove these machines from the plant immediately.
- These machines, appliances and vehicles may only be operated by authorised persons. They have to be certified medically fit and hold a certificate to operate these machines.

IK 318 Safety & Environmental regulations at the Metallo sites

- Metallo appliances, machines, tools and materials may only be used if Metallo has given its permission to do so. A Metallo vehicle may only be driven by a driver that has been trained by and via Metallo.
The user is obliged to ascertain in advance that the vehicle is in good condition, including the functioning thereof, and its suitability. Using the vehicle is also at the user's own risk and responsibility. During the entire time of use, the monitoring thereof will be transferred to the user. The user has to return the vehicle in the same state as it was received. All appliances, etc. that are not handed in at the end of the work or are damaged, will be replaced or repaired at the contractor's expense.
- Auxiliaries such as scaffolding, ladders, etc. must be erected such that all passageways, stairs and vertical cable ladders remain unobstructed and our equipment is accessible at all times.
- Scaffolding erected by the contractor must be constructed in accordance with the General Occupational Health and Safety Regulations and Codex regulations. Modification work will be at the contractor's expense.
- When machines or equipment are necessary for performing the contract that are 'subject to a permit obligation' under Belgian law, the contractor is responsible for obtaining the required permits. The contractor is also responsible for notifying the authorities of any work that has to be reported.
- With regard to hazardous substances and preparations that are brought into Metallo, the nature and quantities must always be reported to the prevention adviser and the environmental coordinator, and the SDS must always be available for inspection.

7.4. Work location and environment

- When the contractor performs work that presents a hazard or inconvenience for others such as working above passageways, working along the travel path of gantry cranes, performing welding work, excavation work, it is obliged to apply the necessary signage and barriers and to provide the required permits (see chapter 9).
- Openings in floors and walls must be sealed immediately. If this is not possible, the contractor will apply a sturdy barrier around the opening. It is forbidden to remove this barrier prematurely. A sign with the name and telephone number of the contractor's responsible person must be applied to the barrier.
- Pipelines, fixtures, weak structures, etc. may not be used for securing towing cables, hoists, etc.
- At the end of the daily assignment, all of the contractor's machines and appliances will be switched off and secured against misuse. Loose materials will be removed from the workplaces or secured in place. Measures should always be taken to prevent dangerous situations arising as a result of storm, heavy wind, vibrations, etc.
- In view of the specific risks in certain departments, the contractor's personnel are forbidden to enter any locations other than the ones that have been designated for them.

IK 318 Safety & Environmental regulations at the Metallo sites

- Prior to starting any work, the contractor's personnel will have to be informed, in consultation with the Metallo contact person, of:
 - the location of the medical service and its working hours
 - the location of the First Aid station
 - the location of the nearest emergency shower and eye-rinsing facility
 - the method for alerting and the escape routes
 - the collection and evacuation point in case of fire or disaster
 - the names of the contact persons and supervisor.

7.5. Waste

- Waste has to be collected separately. Please contact the person responsible for your work at Metallo for this purpose. This person will advise which waste should be removed and which waste may be put with Metallo's waste.
- Keeping the workplace clean and removing the waste should be an integral part of the tasks to be carried out and should at least be done at the end of every daily assignment. The waste should be deposited into specially provided containers. Please consult the responsible person at Metallo for the location of these containers.
- An instruction card 'IC 86: Waste containers' is in effect at Metallo for the removal of waste.
- The following information and the necessary processing certificates have to be provided to Metallo for waste that the contractor removes or has removed:
 - the nature of the waste materials
 - the quantities
 - the transporter
 - the processing location.
- Construction works: if well-point drainage is required or compressors are used, Metallo has to be informed of this on time, so that Metallo can apply for the necessary permits.
- Hazardous substances and preparations: if the quantities exceed the daily consumption, a permit is required. Metallo has to be informed of this in advance.

8. Regulations on the use of electrical energy

- The electrical energy supplied by Metallo will be distributed through a three-phase AC network on 380 Volt in accordance with the General Regulations for Electrical Installations.
- The supply of electrical energy for the contractor at the construction site will be effected via connections options made available by Metallo in the form of a supply point or a

IK 318 Safety & Environmental regulations at the Metallo sites

three-phase 380 Volt (3P) AC power outlet or a single phase 220 Volt AC outlet; 2-pole + earthing.

- The contractor must advise of the electrical power it requires on time. Electrical consumers in excess of 25 kW have to be specified separately on the application.
- Metallo will set up the electrical power supply points in the vicinity of the construction site. In doing so, the local circumstances will be taken into account, whereby it should, however, be pointed out that the power supply points can be removed horizontally up to a maximum of 50 from the construction site. This means that connection cables will have to be longer than 50 metres.
- Only prefabricated construction power distributors, equipped with an automatic residual-current circuit breaker with high sensitivity, 30 mA, and a sufficiently long connection cable, see point 4, will be connected to the supply mains. The connection cable must comply with the General Regulations for Electrical Installations.
- The electrical machines and equipment used by the contractor must comply with the statutory rules and, if applicable, be explosion-proof.
- From the supply mains made available, the contractor is responsible for taking the safety measures prescribed by the General Regulations for Electrical Installations, continuously monitoring the implementation thereof and for the appropriate maintenance of its electrical installation.
- The contractor is prohibited from performing any kind of work or actions on the supply mains made available by Metallo. This also applies to fitting or exchanging fuses or reinserting a residual-current circuit breaker.
- The contractor must put forward any loading of Metallo's supply mains prior to commissioning. Any faults that occur during the operation must be reported immediately to the Electrical Foreman or his deputy at telephone number 605.
- Metallo is entitled to inspect the contractor's electrical installations, machines and equipment to check that they are in a good state of repair and in safe working order, without this imposing any obligations or responsibility on Metallo. Any defective equipment and connection lines will have to be either removed or repaired in accordance with the provisions of the rules of good workmanship. Metallo reserves the right to interrupt the electricity supply if the contractor remains in default.

9. Permits

A Hazard Identification & Risk Assessment of work performed by third parties is required for all work that is performed by third parties on Metallo business sites, irrespective of the duration of the work.

The Hazard Identification & Risk Assessment combined with the company-specific risks form the basis for drafting the permits that are required for performing work.

An LMRA (Last Minute Risk Analysis) has to be made before the work commences.

IK 318 Safety & Environmental regulations at the Metallo sites

The following permits are required at Metallo:

- a work permit for each work
- an excavation permit for each excavation activity
- a permit for work in close proximity to high voltage lines

You will receive a work permit from your contact person at Metallo together with a LOTO form (if applicable). All measures that are specified on the work permit must be strictly observed. If you have any questions, contact your Metallo contact person.

The work may only be started when everyone, including the department where the work is to be performed, has signed the work permit and all provided measures have been taken.

10. Regulations on working in the production departments**10.1. Working in the foundry**

- If you have to be at the back of the foundry, walk along the outside. The foundry is **NOT** as short-cut area.
- Always report to the foreman in advance when working in the foundry. And register in the yellow ring binder (see 7.1).
- Special attention should be paid to working with water in the foundry. If 1 litre of water lands in a bath of liquid copper, this will produce 10 cubic metres of vapour. This sudden volume increase goes hand in hand with an enormous bang, and if this occurs with a large volume of water it is a true explosion causing liquid copper to fly about. It is therefore forbidden to work with water in the foundry in the vicinity of the ovens, as well as on the platforms and work floor. If this is indeed necessary, the duty foreman should be consulted.
- Never walk under suspended loads (gantry cranes).
- Do not go into areas that are not designated to you.
- Do not stand in front of the furnace mouth.
- Respect the indicated signage. The necessary info will be provided via the work permit (Signs, light and sound signals, etc.).

10.2. Working in the lead-tin area

- There are hot surfaces and materials everywhere.
- Special attention should be paid to working with water in the lead-tin area. If 1 litre of water lands in a bath of liquid metal, this will produce 10 cubic metres of vapour. This sudden volume increase goes hand in hand with an enormous bang, and if this occurs with a large volume of water it is a true explosion causing liquid metal to fly about. It is therefore forbidden to work with water in the vicinity of the pots. If this is indeed necessary, the duty foreman should be consulted.

IK 318 Safety & Environmental regulations at the Metallo sites

- Never walk under suspended loads (gantry crane!).
- Do not go into areas that are not designated to you.
- Respect the indicated signage. The necessary info will be provided via the work permit (Signs, light and sound signals, etc.).

10.3. Regulations for working in the electrolysis area

- Never walk under suspended loads (gantry crane!).
- Do not go into areas that are not designated to you.
- Everything in the electrolysis area can be acidic.
- Certain locations in the electrolysis area are forbidden for people with a pacemaker. Please inform the person in charge at Metallo.
- Nothing may be placed on the baths or connecting rods because of the danger of a short circuit and damage to the baths.
- People should stay away from all taps. If necessary, have them opened or closed by the foreman.
- Find out where the nearest emergency shower and eye-rinsing facility is before starting the work.
- A bottle of 'diphoterine' should be picked up from the department before starting the work. This is a solution for the treatment of burns caused by coming into contact with chemical substances. It encapsulates the chemical substance so to speak. Also use diphoterine in case of contact with the eyes (rinse thoroughly with water afterwards).
- Eye damage has to be reported to the contact person **immediately**. **Always** consult a doctor (even if you think that the damage is limited)
- When it is necessary to work in tubs or baths, the applicable safety regulations have to be observed and the LOTO procedure must always be applied
- Remove clothing that has been contaminated with acid or base substances immediately and rinse the skin with lots of water.
- Where necessary, individual protective equipment should be worn against dust, acids and bases
- Respect the indicated signage. The necessary info will be provided via the work permit (Signs, light and sound signals, etc.).

10.4. Regulations for working in dusty environments

- Dust and heavy metals can seriously damage the health in the long term. Therefore, appropriate respiratory protection should be used when working in a dusty environment.
- It is compulsory to wear respiratory protection (P3) in the following areas and situations:
 - Foundry
 - N hall (Dust Hall)
 - Electrolysis (partially)
 - Soldering hall (lead/tin)

	IK 318 Edition number: 8	Application date: 18/03/2019 Page17/20
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IK 318 Safety & Environmental regulations at the Metallo sites

- Sampling (partially)
- Dusty work in other departments
- The wearing of respiratory protection should be discussed with the Metallo contact person before commencing with the work.

11. Factory layout



	IK 318 Edition number: 8	Application date: 18/03/2019 Page 19/20
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IK 318 Safety & Environmental regulations at the Metallo sites

12. Safety requirements compliance form

I, the undersigned,

Authorised representative of the company:

Name:,

Address:,

Declare to have received the 'Safety & environmental regulations at the Metallo sites' file concerning the work to be performed.

I undertake to provide this information to the employees present from the abovementioned company and its designated subcontractors, to make the necessary arrangements and to supervise compliance with the safety requirements.

The undersigned company indemnifies Metallo against third parties for any direct consequences of the failure to comply with the safety requirements as well as, in case of gross negligence or intent, against any indirect consequences thereof.

The information set out in this form does not detract from the undersigned's general obligations to ascertain the state of affairs on the spot and to take any additional safety measures that could be useful or necessary.

Please place a handwritten 'agreed and signed' before your signature.

DATE:

SIGNATURE:

(agreed and signed)

Dit document is eveneens opvraagbaar in het Frans, Engels of Duits.

This document can also be requested in French, English or German.

Ce document peut-être demandé en Français, Anglais ou Allemand.

Dieses Dokument können sie auch in Deutsch, Französisch oder English bekommen.

IK 318 Safety & Environmental regulations at the Metallo sites

13. Relevant documents

Nil.