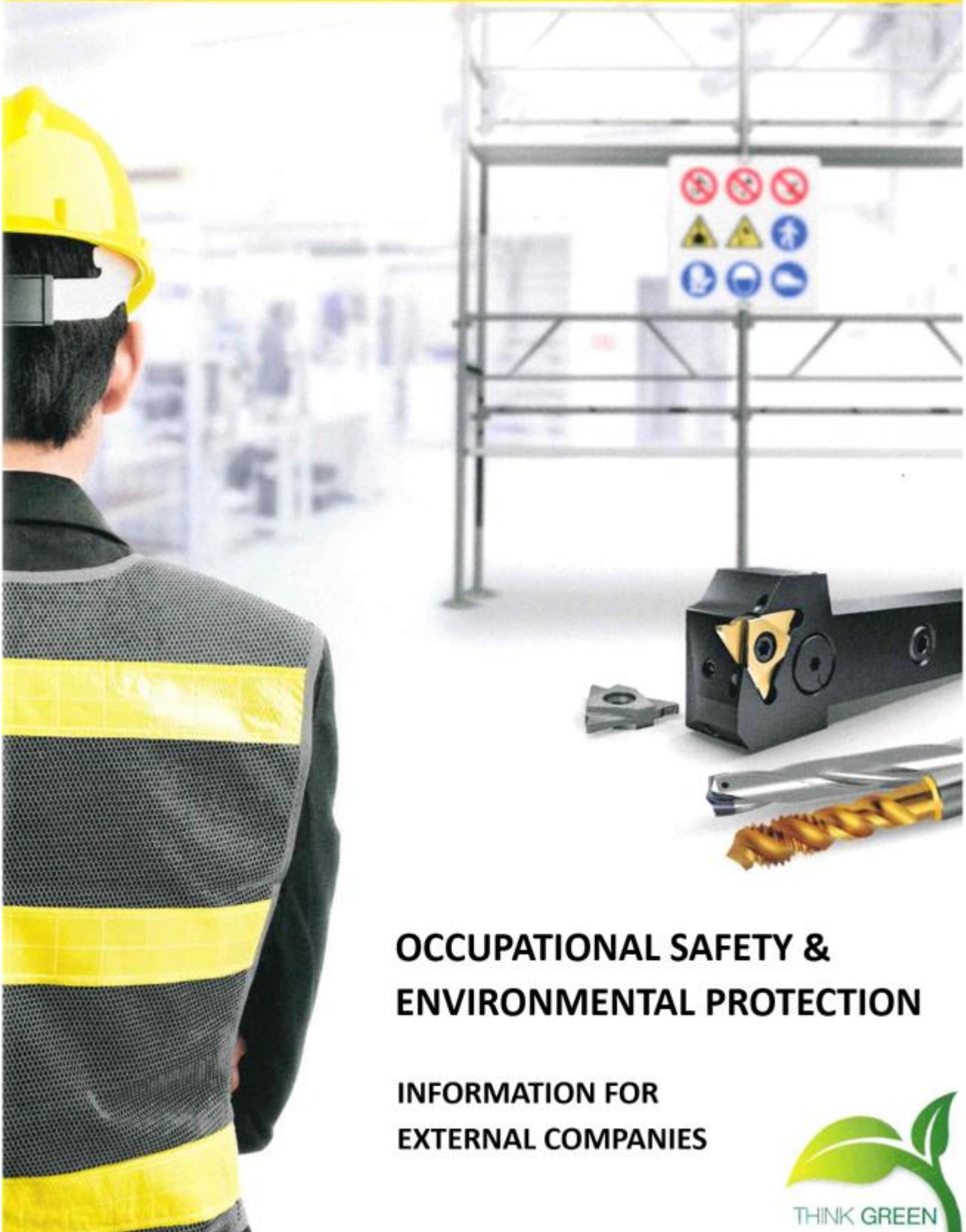


# GÜHRING-GRUPPE



## OCCUPATIONAL SAFETY & ENVIRONMENTAL PROTECTION

INFORMATION FOR  
EXTERNAL COMPANIES



## Contents

|   |   |    |
|---|---|----|
| 1 | In general.....                                 | 3  |
| 2 | Construction and assembly work.....             | 6  |
| 3 | Fire protection.....                            | 9  |
| 4 | Handling hazardous substances.....              | 10 |
| 5 | Electrical installations .....                  | 11 |
| 6 | Machines, tools, equipment.....                 | 12 |
| 7 | Conduct in case of danger (accident, fire)..... | 13 |

## Attachment index

- Attachment 1:** Example of emergency plan for accident / fire as well as chemicals and leaking liquids
- Attachment 2:** Permit for work involving increased risk of fire / hazardous areas (AN-VA-19-BRS-01-04 / AN-VA-19-EXS-01-01)
- Attachment 3:** Prevent fires (AN-VA-19-BRS-01-01)
- Attachment 4:** Escape and rescue plan
- Attachment 5:** Safety signs (prohibition, warning, mandatory and rescue signs)
- Attachment 6:** Additional information for carbide plants (G-ELIT Berlin / KF Kulmbach / KF Thurnau)
- Attachment 7:** G-ELIT alarm system ISOHEXAN
- Attachment 8:** Hazardous substance operating instruction carbide mixtures of carbide plants
- Attachment 9:** IT safety guideline for external service providers
- Attachment 10:** Poster “Working in secure areas”  
Computer centre as well as telco room
- Attachment 11:** Energy management
- Attachment 12:** Confirmation of external company form (AN-VA-19-UM-06-FFB-01-02)
- Attachment 13:** Confirmation of instructions by external company coordinator and the external company (AN-VA-19-UM-06-FFB-01-03)

# 1. In general

## 1.1 General information

This "Occupational safety and environmental protection information for external companies" forms an integral part of the contractual agreement and applies to all German plants of the Gühring Group, Gühring KG, Dr. Gühring KG, SL-Werkzeuge, Hollfelder-Gühring, G-Elit, KF Konrad Friedrichs and Stock. Please inform yourself about the regulations which are relevant for your work before starting to work on our premises. In accordance with the German Occupational Safety Act and DGUV (German Statutory Accident Insurance) directive 1 § 2 (1) you have to issue instructions and implement measures for the prevention of occupational accidents, occupational diseases and work-related health risks as well as for an effective first aid that comply with the provisions of the accident prevention regulations and the generally recognised safety technology and occupational health regulations. If other legal regulations, in particular occupational safety and environmental protection regulations, contain other requirements, these provisions remain unaffected.

All necessary documentation can be viewed with the respective occupational safety specialist.

Employees may only stay in those parts of the premises where they are working or where an explicit order leads them to.

Private objects not necessary for work may not be brought or operated on the premises. This includes among other things electric heating appliances, cameras/photographic equipment, playback or recording devices, radio and television sets or other dangerous or disturbing objects.

**Taking photographs** in the factory premises is **strictly prohibited**. The automatic fire extinguishing systems can be triggered by flashlight. Damage caused by taking photographs without permission are borne by the causer.

Files, drawings, documents, trace copies etc. may not be taken from the operating and business premises, copied or disclosed to unauthorised recipients without the permission of the management or of a person authorised by the management. To protect company and personal property, checks can be arranged to extend to items carried.

Any activity detrimental to operating peace, order and work purpose within the business must be refrained from.

You are obligated to keep confidential all trade and business secrets for the duration of your activity, as well as after it has ended.

Bringing and drinking alcohol or other intoxicating substances (drugs etc.) is prohibited. (see working rule number 7,9)

## **1.2 Sub-contractors**

If the contractor intends to use sub-contractors for his services, they have to be named in writing prior to or when awarding the contract and the use of these sub-contractors must be approved or rejected by the principal.

The contractor is fully liable for the commissioned services carried out by his sub-contractor.

The contractor has to convey the contents of this brochure to his sub-contractors and monitoring and enforcing compliance.

There must always be at least one employee on site who speaks and writes the local language.

## **1.3 Smoking ban**

Smoking on the premises is completely prohibited.

**Smoking is only permitted in the designated smoking areas.**

**This also applies for so-called E-cigarettes.**

## **1.4 Access control**

Entry to the business premises is via the gate (registration / deregistration with contact person).

## **1.5 Coordinating the work**

To avoid hazardous interaction the by us appointed project leader (contact person or if required coordinator) coordinates the work in accordance with the German Occupational Safety Act § 8 and DGUV (German Statutory Accident Insurance) directive 1 § 6 where appropriate taking into account concerns of plant safety, occupational safety and other specialist departments. This project leader (coordinator) is entitled to issue instructions. Measures ordered by this person must be adopted for the duration of the work. The contact person appointed by you must be present in our plant for the duration of the work. Prior to starting work / ending work he is obligated to clock in / clock out with our project leader.

## **1.6 Testing equipment**

If equipment has to be put in a trial operation without being able to apply the existing regulations for a standard operation then proceed in accordance with DGUV (German Statutory Accident Insurance) directive 1, § 21 and § 22.

## **1.7 Safety signs**

Compliance with safety signs in our plants is mandatory (see attachment 5).

## **1.8 Questions regarding occupational safety / environmental protection**

If there are uncertainties regarding occupational safety and environmental protection issues you can contact our occupational safety specialists. There accident prevention regulations and other safety-related rules can be viewed.

## **1.9 Order and cleanliness at the deployment / construction site**

Work areas have to be kept in an orderly, an in accordance with the work to be carried out condition (at least swept clean in halls and outdoor areas, vacuumed in offices, if work area not separated [dust protection wall]).

Work in traffic route areas must be cordoned off (warning tape, cones etc.) or signposted.

Material is stored in such a way that it poses no danger to persons and the environment (tripping, slipping...).

Larger material deliveries must be coordinated with the principal's project leader regarding scheduling, delivery location and storage location.

## **1.10 Building rubble and waste**

The disposal in the principal containers requires written approval. As a rule, every external company has to take its waste from the construction site.

Weighing slips must be submitted with the invoice.

## **1.11 Acceptance and Rapport**

Any work carried out necessitates an acceptance. The acceptance is carried out by the project leader or the principal's deputy. Possible defects are documented on the "Status sheet for house and building project defect list" (AN-U06-GBXX-00).

Reports must be countersigned by a responsible person of the principal. Reports without signature cannot be accepted as a basis for invoicing.

## **1.12 Commissioning, function test, training**

Systems and technical equipment in the building must be handed over ready for operation. Commissioning is to be documented in an acceptance record.

For technical equipment, training of the principal's employees is required.

The training must be documented (record with signatures of the participants).

### **1.13 Personal protective equipment (PPE)**

You and your employees are obligated to observe the respective mandatory signs and to wear the necessary personal protective equipment.

This is safety shoes at all locations and hearing protection in all marked areas etc..

In explosion-proof areas anti-static safety footwear (ESD) must be worn.

Personal protective equipment must be provided by the contractor / principal.

### **1.14 Factory traffic**

The road traffic regulations apply in our plants. Please pay attention to the traffic signs. On factory premises the max. 10 kph walking speed applies. Vehicles participating in the in-house traffic, as for example cranes, forklifts, mobile lifting devices may only be driven / operated by persons authorised by their company in writing. They must be appropriately trained and have proven their driving skills. The driving licence must be carried on the person and shown when checked. Being a passenger on vehicles without a seat is prohibited.

### **1.15 Concluding the work**

Following the conclusion of work to buildings, systems and machines a final inspection must be carried out. Here particular attention must be paid that affected safety-related equipment functions properly again.

All leftover parts - waste pieces (material, screws, rivets, bowls or drink bottles) – must be removed. Waste disposal must take place in accordance with the corresponding regulations, i.e. waste containing oil such as cleaning rags must be collected separately and treated and disposed as special waste.

## **2. Construction and assembly work**

### **2.1 Ladders and scaffolding**

Ladders and scaffolding must comply with the valid regulations and standards and may only be used for their intended purpose. Ladders must undergo an annual inspection and have an inspection tag attached.

The use of single ladders increases the hazard risk. At G-Elit single ladders may only be used with written permission. Please clarify this beforehand. Minimum requirement for the permission is securing the ladder against slipping and tipping over.

Modifications to scaffolding may only be carried out by an authorised company/institution. Only flawless scaffolding material may be used. All scaffolding and lifting platforms in excess of 1.00 m above floor level must have guard rails, intermediate rails and toe boards. Stability of mobile scaffolding must be ensured through a sufficient ratio of width: Height of maximum 1 : 3 outside and 1 : 4 inside.

It must not be moved while anybody is on it.

Rollers and stabilisers must be locked before use. Activities on scaffolding are prohibited while work is carried out underneath. In such case it should be discussed with the principal when such work can be carried out. Exceptions to the above prohibition are completely closed scaffolding surfaces. Scaffolding, ladders and lifting platforms on construction sites must bear the name clearly legible of the proprietor. Advertising posters require the written permission of the project leader and must be stable and must also withstand extreme weather conditions.

## **2.2 Floor conveyors and lifting equipment**

Forklifts and lifting platforms must have been tested and may only be used by trained and authorised employees (forklift licence, training etc.).

## **2.3 Roofing work**

Roofs without a weight-bearing roof cladding i.e. glass roofs, fibre cement corrugated roofs may only be walked on using running boards due to the risk of breaking through. Workers must be secured against falling off the roof edges i.e. on flat roofs, skylights, smoke and heat ventilation systems etc.. When using PPE on securants only tested and approved straps with fall arrest devices, fall impact absorbers etc, must be applied. Workers must be instructed on wearing PPE. To secure the work a second person must always be present that can provide assistance in an emergency. For prolonged work on the roof, technical protection measures such as railings / nets or protective scaffolds are to be preferred to PPE.

## **2.4 Excavation work**

Prior to starting excavation work the executing company must obtain information on the position of live electric cables, water, gas and oxygen pipelines etc. from the responsible utility company as well as internally from the responsible project leader (principal). Trenches must be dug in accordance with accident prevention regulations. For example, trenches from 1.25 m to 1.75 m must be sloped and deeper trenches require shoring. All trenches near transport routes must be secured with fixed barriers. Instructions from the project leader (principal) must be complied with.

## **2.5 Dangerous unaccompanied work**

As a rule, dangerous unaccompanied work is to be avoided. If however, due to a case of emergency or in an exception case dangerous work is carried out by one person alone then you have to ensure the monitoring through suitable measures such as, for example, multiple spot checks, notification system in accordance with DGUV (German Statutory Accident Insurance) directive 1, §8.

## **2.6 Working in tight spaces**

Work in containers or tight spaces must be coordinated with the responsible project leader (principal). An appropriate permit is required or possibly operating instructions. In tight spaces with increased electrical risk only herefore approved electrical equipment may be applied. Ventilation with oxygen is prohibited.

## **2.7 Working in the travel area of cranes**

When working in the travel area of cranes the responsible project leader (principal) must be informed of the type and scope of the work. Work may only start after the work area is secured (i.e. locking the main switch of the crane, mechanical end stops) in coordination with the responsible project leader.

## **2.8 Working on pressure equipment**

If safety-relevant work is to be carried out on pressure equipment such as, for example, press pressure vessels, sinter plants, then herefore named employees of the manufacturer are to be preferred.

As a rule, welding work may only be carried out with a valid welding certificate for pressure vessels. Following welding work a renewed acceptance is required by a ZÜS i.e. DEKRA, TÜV etc. in accordance with BetrSichV section 4 Pressure equipment.

The acceptance must be coordinated between the contractor and the operator.

Prior to execution the permit for work involving an increased fire risk must be completed in accordance with point 3.1.

## **2.9 Noise**

The UVV (accident prevention regulations) Noise (noise vibrations occupational safety regulations) apply when dealing with noise. Only low-noise equipment or procedures may be applied. If unavoidable noise pollution or noise hazards (>80 dB(A)) occur during the work, you (contractor) must inform us in good time so that suitable measures (i.e. suitable working hours and the use of personal protective equipment) can be determined.



### **3. Fire protection**

#### **3.1 Work involving an increased risk of fire (welding, brazing and soldering, flame cutting)**

If in the course of work to be carried out by you the handling of open fire (welding, brazing and soldering, flame cutting, parting-off (angle grinding) and similar or other work posing a fire risk) is necessary, the permit for work involving an increased fire risk (fire permit AN-VA-19-BRS-01-04) completed by the project / cost centre manager must be approved by the fire prevention officer / cost centre manager and the prescribed measures carried out prior to starting the work.

Fire extinguishers must always be close at hand for all work involving an increased risk of fire. The required, for this suitable and tested fire extinguishers (foam extinguishers or CO2 extinguishers) must be brought by the contractor. Powder extinguishers are only permissible when other extinguishers are unsuitable. The fire extinguishers are to be positioned in the working area, maximum distance 10 m. Prior to starting work, always check where the next fire extinguisher / telephone is located.

ASR A2.2 fire prevention measures, point 8(2) and 8(3) must be complied with.

Fire doors may only be held open to walk through or for the imminent transportation of material and equipment. Wedging or tying etc. is prohibited!

**It is paramount to observe the in-plant regulations!**

#### **3.2 Fire alarm system**

A fire alarm system is installed in many buildings. Prior to starting work the principal and facilities engineering department must be consulted whether a false alarm can be triggered by the work.

If necessary a detection line must be taken out of operation by an authorised employee of the principal. Following conclusion of the work, the detectors must be put into operation again. The procedure must be documented in the log book of the fire alarm system. The contractor must notify the project leader of the conclusion of the work

#### **3.3 Fire alarm**

If in the event of a fire breaking out attempts to extinguish the fire are unsuccessful, the fire brigade must be called from the next telephone – in accordance with the emergency plan.

Therefore, always check where the next reporting possibility is located prior to starting work.

### **3.4 Working in areas with risk of explosion**

Work involving an increased risk of fire in areas with risk of explosion require a special agreement. The safety measures for work in areas with risk of explosion must be separately coordinated with the project leader (coordinator) in cooperation with the fire prevention officer. It may only be carried out with written consent and an Ex-permit (AN-VA-19-EXS-01-01)

Areas with risk of explosion are expressly marked and exist in the carbide plants (Berlin / Kulmbach / Thurnau) i.e. in the hydrogen plant and the powder preparation areas (Ex-hazardous substances: Isohexane or acetone, carbide dust).

### **3.5 Wall breakthroughs – fire-resistant sealing**

Should during cable routing (electrical or other media transporting lines or pipes etc.) wall breakthroughs become necessary, you have to coordinate this with the principal (coordinator). Following the cable routing, the wall breakthroughs must be properly (according to the state of the art) closed up again.

With fire protection walls it has to be carried out with systems approved by the building authorities, so-called fire bulkheads. The installation of fire bulkheads must be carried out immediately or immediately commissioned if outsourced. Openings must be provisionally secured against fire breakthrough. The executing company bears the responsibility.

In case of queries please contact the responsible fire prevention officer or the occupational safety specialist.

## **4. Handling hazardous substances**

### **4.1 Hazard warnings**

The handling of hazardous substances is regulated by the Ordinance on Hazardous Substances. Attention should be paid to the respective hazard warnings and safety advice especially when storing, transferring, processing and disposing of. If you have further questions on this topic please contact the occupational safety specialist.

Additional applicable precautions for carbide plants are described in the attachments 6 to 7 "Additional instructions for carbide plants".

The operating instruction (attachment 6) corresponds with the update status of this brochure; in the case of a subsequent amendment you will be informed on site.

### **4.2 Sewerage system**

Hazardous substances and water-endangering substances (i.e. paint and lacquer residues, solvents, oil) must not in any circumstances enter the sewerage system. When handling these substances attention must be paid that leakages or spillages are immediately picked-up and disposed of correctly. The legal requirements regarding recycling and disposal must be complied with.

### **4.3 Activities involving asbestos**

When working on or with asbestos-containing materials the relevant regulations for the prevention of fine asbestos dust must be observed (GefStoffV, TRGS 517, TRGS 519, asbestos-containing dust DGUV information 240-012, ZH 1/600.1.2).

**The use of asbestos-containing materials is strictly prohibited.** Should in individual cases a substitution of asbestos-containing materials with asbestos-free materials not be possible, it has to be agreed with the responsible project leader (principal).

## **5. Electrical installations**

### **5.1 Working near current carrying installations**

In any case where work is to be carried out near current carrying installations or equipment, the responsible project leader and the qualified electrician of the principal must be engaged. They decide on the appropriate measures.

Switching off the electric current must be applied for well in advance so appropriate arrangements with the production sites can be made in time. Switching the power off and on or assembly or disassembly of protectors may only be carried out by a qualified electrician or a person commissioned by the qualified electrician.

Unauthorised activities are prohibited on all electrical installations. Electrical equipment may only be used in conjunction with an FI circuit breaker, an approved building-site distribution board or via approved plug adapters. Attention must be paid that electrical equipment is in a proper working condition. Especially the statutory safety inspections must be carried out by the due date and it must be ensured the next inspection date is not exceeded.

### **5.2 Electrical connections**

Electrical connections to our plant network may only be carried out by our electrical department or by a person commissioned by a qualified electrician.

Electrical building-site distribution boards used by you must be built in compliance with VDE 0612 and in a proper working condition. The fault-current circuit breakers (FI) must be checked and documented by the contractor by activating the test device each working day.

### **5.3 Acceptance and release of electrical work**

Without acceptance by a qualified electrician or by a person of the principal commissioned by a qualified electrician, the electrical installation must not be released for use.

If an system is operated without release of a **qualified electrician** and it results in damage, the contractor or the installer remains fully liable without any time-limit.

## **6. Machines, tools, equipment**

### **6.1 Plant-owned installations**

The use of plant-owned installations, machines, materials etc, is only permitted if approved by the responsible principal who monitors the commission. Furthermore, it needs to be clarified with the respective operational superior.

### **6.2 Equipment of external companies**

Your tools, machines, vehicles and equipment must be designed and operated in accordance with the applicable regulations and standards. Particular attention must be paid the legally required inspections are carried out and documented (DGUV (German Statutory Accident Insurance) directive 3 – mobile installations, containers, ladders etc.). Electrical appliances may only be connected to the building installation subject to the use of fault-current circuit breakers - PRCD-S or without PRCD-S only to approved building-site distribution boards.



PRCD-S

### **6.3 Autogenic welding equipment**

Acetylene and oxygen cylinders must be secured against falling over. When withdrawing gas from horizontal acetylene cylinders, the cylinder valve must be positioned at least 40 cm higher than the cylinder base.

Oxygen fittings, pipelines and seals must not come into contact with grease, glycerine or oil (risk of explosion).

Mobile welding equipment must have return prevention according to regulations. Return prevention must be tested (annually).

### **6.4 Electric welders**

With electric welders attention must be paid to sufficient insulation on the primary and secondary side.

The earth cable must lead to the place of work so stray welding currents that destroy the earthing system of our machines and systems are avoided.

## **6.5 Grinding and cutting-off machines**

When working with grinding and cutting-off machines the principal's fire prevention officer has to be informed beforehand and the appropriate permission obtained as is the case for work involving an increased risk of fire and for working on heated bitumen boilers (see point 3.1).

## **6.6 Bitumen boilers**

The use of gas and otherwise heated bitumen boilers on the roof surfaces of the factory building as well as on the rest of the factory premises is strictly prohibited. When such work has to take place, the approval of the fire protection department must be obtained beforehand and it is imperative the fire permit is completed (see point 3.1).

## **6.7 Identification**

The affiliation of deployed employees to the respective external company must be clearly identifiable (i.e. through appropriate work clothing with name identification or a visible name tag).

Likewise tools, machines, vehicles and other equipment must be clearly identifiable as property of the external company.

## **7. Conduct in case of danger (accident, fire)**

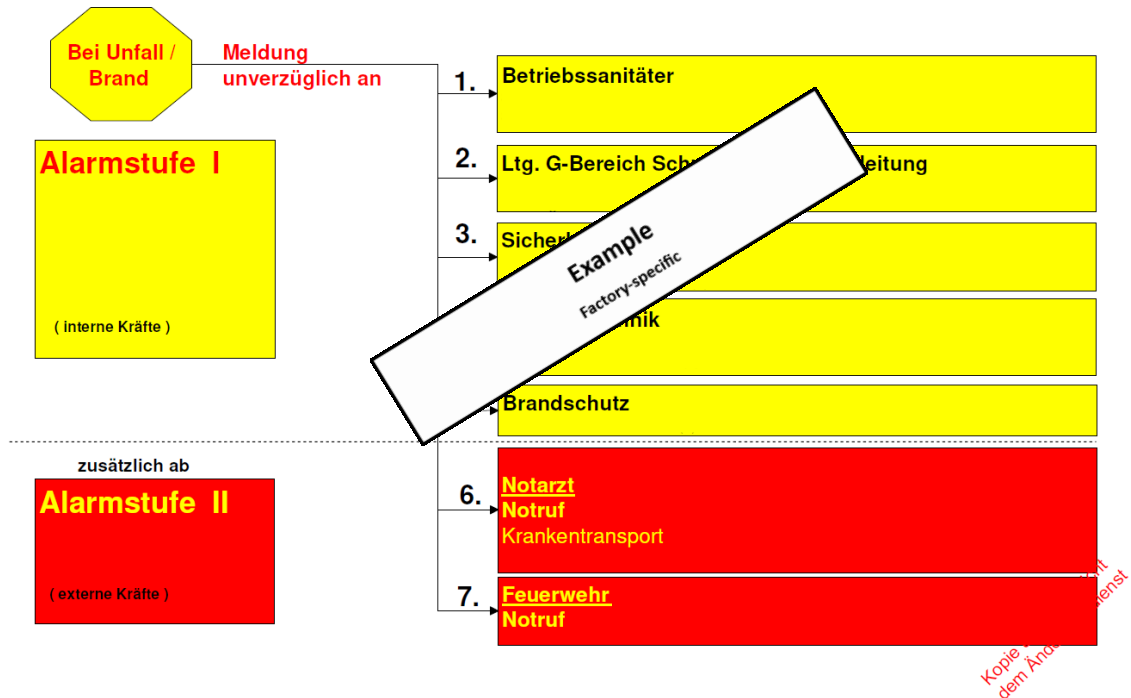
Should you or one of your employees be involved in an accident, our first-aiders / emergency response officers are of course available.

If necessary, alert external emergency responders as described in the emergency plan (see attachment / notices on-site).

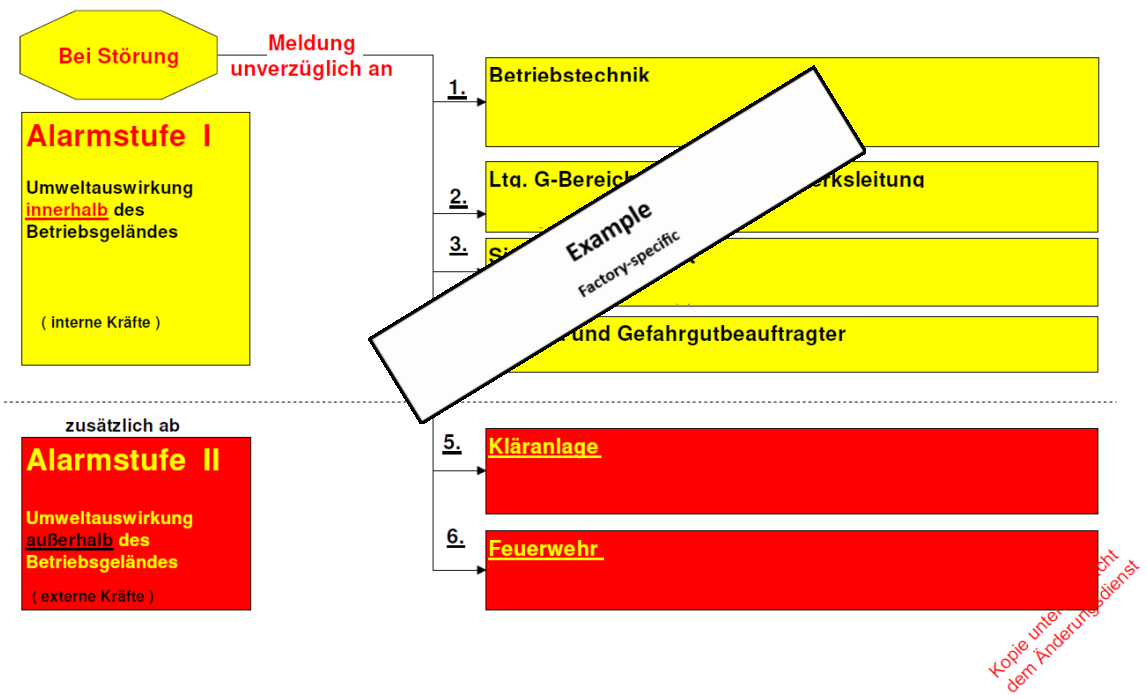
# Attachment 1:

## Example of emergency plan for accident / fire as well as chemicals and leaking liquids

|                       |                                     |   |
|-----------------------|-------------------------------------|---|
| <b>GUHRING GRUPPE</b> | <b>Alarmplan für Unfall / Brand</b> | AN-PAP-19-ABV-01-AL-01-A1-02<br>Seite 1 von 1 |
|-----------------------|-------------------------------------|---|



|                       |  |   |
|-----------------------|--|---|
| <b>GUHRING GRUPPE</b> | <b>Alarmplan für Chemikalien und auslaufende Flüssigkeiten</b> | AN-PAP-19-ABV-01-AL-01-A1-01<br>Seite 1 von 1 |
|-----------------------|--|---|






## Attachment 2:

### Permit for work involving increased risk of fire / hazardous areas (AN-VA-19-BRS-01-04)

|    | <p><b>QM-Anlage</b><br/>Abschnitt 19<br/><b>Feuererlaubnisschein</b></p>  | <p><b>AN-VA-19-BRS</b><br/><b>- 01-04</b><br/>Rev.: 2<br/>Seite 1 von 3</p> |                          |
|---|---|---|--------------------------|
| <p>Beauftragter (Firma oder Abt.): .....</p> <p>Arbeitsort (Firma, Gebäude, Geschoss, Raum): .....</p> <p><input type="checkbox"/> Brennen/Schweißen <input type="checkbox"/> Schleifen/Trennen <input type="checkbox"/> Löten <input type="checkbox"/> Schrumpfen/Heißkleben <input type="checkbox"/> Dacharbeiten.....</p> <p><input type="checkbox"/> Sonstiges: .....</p> <p>Arbeitsauftrag/ Ansprechpartner intern: .....</p> <p>Auszuführen von: .....</p> <p>Arbeitsbeginn: ..... Arbeitsende: .....</p> <p>BMA: abgeschaltete Gruppe/ Linie Nr: .....</p> |   |   |                          |
| Notrufnummer: ( 0 ) 112   | Nächstes Telefon / Druck.....   | .....   |                          |
| <b>Maßnahmen vor Arbeitsbeginn</b>  |   |   |                          |
| Thema   | Aktion  | Erforderlich  | Erledigt                 |
| Arbeitsbereich  | Festlegen des Gefahrenbereiches, Abschließen (liegender Gitterrostebenen) ..... m, Sicherung darunter   | <input type="checkbox"/>  | <input type="checkbox"/> |
|   | Sicherheitseinweisung durch .....<br>.....  | <input type="checkbox"/>  | <input type="checkbox"/> |
|   | Entfernen brennbarer ..... (Flüssigkeiten, Feststoffe)  | <input type="checkbox"/>  | <input type="checkbox"/> |
|   | oder Abdecken mit ..... (Matten)  | <input type="checkbox"/>  | <input type="checkbox"/> |
|   | Spülen/Reinigen von ..... (Behältern/Apparaten)   | <input type="checkbox"/>  | <input type="checkbox"/> |
|   | Abdecken/Verschließen von Öffnungen, Ritzen, Fugen  | <input type="checkbox"/>  | <input type="checkbox"/> |
|   | Eine zusätzliche mechanische Belüftung ist notwendig  | <input type="checkbox"/>  | <input type="checkbox"/> |
| Bereitstellen von Löschmitteln  | <input type="checkbox"/> CO <sub>2</sub> , <input type="checkbox"/> Pulver- <input type="checkbox"/> Schaum- <input type="checkbox"/> Wasser-Löcher <input type="checkbox"/> großer, mobiler Schaumlöcher bereitstellen | <input type="checkbox"/>  | <input type="checkbox"/> |
|   | <input type="checkbox"/> Wandhydrant, Schlauch unter Druck an Arbeitsbereich  | <input type="checkbox"/>  | <input type="checkbox"/> |
| Anlagentechnik  | Bei Abschalten von BMA von ausgewiesenen Personen, In f an/Abstimmung mit Brandschutzbeauftragten Ersatzmaßnahme(n) festlegen! Schaum- und CO <sub>2</sub> - Löschanlage beachten !                                     | <input type="checkbox"/>  | <input type="checkbox"/> |
| Brandwache  | Einweisen der Brandwache  | <input type="checkbox"/>  | <input type="checkbox"/> |
| Sonstiges   |   | <input type="checkbox"/>  | <input type="checkbox"/> |
| <b>Maßnahmen während der Arbeit</b>   |   |   |                          |
| Thema   | Aktion  | Erforderlich  | Erledigt                 |
| Brandwache  | Ständige Kontrolle des Gefahrenbereiches (auch während Arbeitspausen)   | <input type="checkbox"/>  | <input type="checkbox"/> |
| Unterbrechung   | Sicherung der Arbeitsmittel durch den Ausführenden (Ventile an Gasflaschen schließen, E-Geräte stromlos schalten)   | <input type="checkbox"/>  | <input type="checkbox"/> |
| Belüftung   | Eine zusätzliche mechanische Belüftung ist notwendig  | <input type="checkbox"/>  | <input type="checkbox"/> |
|   | Ständiges normales Lüften ist notwendig   | <input type="checkbox"/>  | <input type="checkbox"/> |

# Attachment 2:

## Permit for carrying out work in Ex area (AN-VA-19-EXS-01-01)

|   | <div style="display: flex; justify-content: space-between; align-items: center;">  <div style="text-align: center;"> <b>QM-Anlage</b><br/>                 Abschnitt 19<br/>                 Erlaubnisschein zur Durchführung von Arbeiten im<br/>                 Bereichen mit explosionsfähiger Atmosphäre             </div>  </div> | <b>AN-VA-19-EXS<br/>-01-01</b><br><br>Rev.: 1<br>Seite 1 von 3 |                          |          |                |   |                          |                          |                                     |   |                          |                                      |                          |                          |                             |                          |                          |                             |                          |                          |                          |                          |   |  |                          |                          |                                      |                          |                          |  |                          |                          |                            |                          |                          |   |  |                          |                          |                                |   |                          |                          |                |  |                          |                          |            |                          |                          |                          |           |  |                          |                          |   |  |
|--|--|--|--------------------------|----------|----------------|---|--------------------------|--------------------------|-------------------------------------|---|--------------------------|--------------------------------------|--------------------------|--------------------------|-----------------------------|--------------------------|--------------------------|-----------------------------|--------------------------|--------------------------|--------------------------|--------------------------|---|--|--------------------------|--------------------------|--------------------------------------|--------------------------|--------------------------|--|--------------------------|--------------------------|----------------------------|--------------------------|--------------------------|---|--|--------------------------|--------------------------|--------------------------------|---|--------------------------|--------------------------|----------------|--|--------------------------|--------------------------|------------|--------------------------|--------------------------|--------------------------|-----------|--|--------------------------|--------------------------|---|--|
| Beauftragter (Firma oder Abt.): .....<br>Arbeitsort (Firma, Gebäude, Geschoss, Raum): .....<br><input type="checkbox"/> Brennen/Schweißen / <input type="checkbox"/> Schleifen/Trennen <input type="checkbox"/> Lötten <input type="checkbox"/> Schrumpfen/Heißkleben <input type="checkbox"/> Dacharbeiten<br><b>nur in Verbindung mit dem Feuererlaubnisschein (AN-VA-19-BRS-01-04)</b><br><input type="checkbox"/> Instandhaltung <input type="checkbox"/> Elektroarbeiten <input type="checkbox"/> Reparatur <input type="checkbox"/> Reinigungsarbeiten <input type="checkbox"/> Umbau<br><input type="checkbox"/> Sonstiges .....<br>Arbeitsauftrag/ Ansprechpartner intern: .....<br>Auszuführen von: .....<br>Arbeitsbeginn: .....<br>Arbeitsende: .....<br>BMA: abgeschaltete Gruppe/ Linie Nr.: .....  |  |  |                          |          |                |   |                          |                          |                                     |   |                          |                                      |                          |                          |                             |                          |                          |                             |                          |                          |                          |                          |   |  |                          |                          |                                      |                          |                          |  |                          |                          |                            |                          |                          |   |  |                          |                          |                                |   |                          |                          |                |  |                          |                          |            |                          |                          |                          |           |  |                          |                          |   |  |
| <b>Notrufnummer: ( 0 ) 112      Nächstes Telefon / Druckknopfmelder:</b>   |  | .....  |                          |          |                |   |                          |                          |                                     |   |                          |                                      |                          |                          |                             |                          |                          |                             |                          |                          |                          |                          |   |  |                          |                          |                                      |                          |                          |  |                          |                          |                            |                          |                          |   |  |                          |                          |                                |   |                          |                          |                |  |                          |                          |            |                          |                          |                          |           |  |                          |                          |   |  |
| <b>Maßnahmen vor Arbeitsbeginn</b>   |  |  |                          |          |                |   |                          |                          |                                     |   |                          |                                      |                          |                          |                             |                          |                          |                             |                          |                          |                          |                          |   |  |                          |                          |                                      |                          |                          |  |                          |                          |                            |                          |                          |   |  |                          |                          |                                |   |                          |                          |                |  |                          |                          |            |                          |                          |                          |           |  |                          |                          |   |  |
| <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #00ff00; color: green;"> <th style="width: 20%;">Thema</th> <th style="width: 50%;">Aktion</th> <th style="width: 10%;">Erforderlich</th> <th style="width: 10%;">Erledigt</th> </tr> </thead> <tbody> <tr> <td rowspan="10" style="text-align: center; vertical-align: middle;">Arbeitsbereich</td> <td>Sicherheitseinweisung durch Auftraggeber</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Anlage / -teil außer Betrieb nehmen</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Rohrleitungen abtrennen / abschotten</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>bewegliche Apparate sichern</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Elektrische Anlagen sichern</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Umkleidungen / Isolation</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Raumluft / Arbeitsbereich messen &lt; 20% UEG</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Abdichten von Öffnungen / Durchlässe</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Abdecken feuergefährdender Gegenstände</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Ggf. Absperrung einrichten</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td colspan="2">Entfernung gefährlicher Stoffe: Staubablagerungen Umkreis 5m, Gase, Flüssigkeiten</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Bereitstellen von Löschmitteln</td> <td> <input type="checkbox"/> CO<sub>2</sub>, <input type="checkbox"/> Pulver- <input type="checkbox"/> Schaum- <input type="checkbox"/> Wasser-Löschler <input type="checkbox"/> großer, mobiler Schaumlöschler bereitstellen<br/> <input type="checkbox"/> Wandhydrant, Schlauch unter Druck an Arbeitsbereich                 </td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Anlagentechnik</td> <td>Bei Abschalten von BMA von eingewiesenen Personen, Info an/Abstimmung mit Brandschutzbeauftragten<br/>Ersatzmaßnahme(n) festlegen! Schaum- und CO<sub>2</sub>- Löschanlage beachten !</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Brandwache</td> <td>Einweisen der Brandwache</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Sonstiges</td> <td></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> </tbody> </table> | Thema  | Aktion   | Erforderlich             | Erledigt | Arbeitsbereich | Sicherheitseinweisung durch Auftraggeber                              | <input type="checkbox"/> | <input type="checkbox"/> | Anlage / -teil außer Betrieb nehmen | <input type="checkbox"/>  | <input type="checkbox"/> | Rohrleitungen abtrennen / abschotten | <input type="checkbox"/> | <input type="checkbox"/> | bewegliche Apparate sichern | <input type="checkbox"/> | <input type="checkbox"/> | Elektrische Anlagen sichern | <input type="checkbox"/> | <input type="checkbox"/> | Umkleidungen / Isolation | <input type="checkbox"/> | <input type="checkbox"/>                            | Raumluft / Arbeitsbereich messen < 20% UEG | <input type="checkbox"/> | <input type="checkbox"/> | Abdichten von Öffnungen / Durchlässe | <input type="checkbox"/> | <input type="checkbox"/> | Abdecken feuergefährdender Gegenstände | <input type="checkbox"/> | <input type="checkbox"/> | Ggf. Absperrung einrichten | <input type="checkbox"/> | <input type="checkbox"/> | Entfernung gefährlicher Stoffe: Staubablagerungen Umkreis 5m, Gase, Flüssigkeiten |  | <input type="checkbox"/> | <input type="checkbox"/> | Bereitstellen von Löschmitteln | <input type="checkbox"/> CO <sub>2</sub> , <input type="checkbox"/> Pulver- <input type="checkbox"/> Schaum- <input type="checkbox"/> Wasser-Löschler <input type="checkbox"/> großer, mobiler Schaumlöschler bereitstellen<br><input type="checkbox"/> Wandhydrant, Schlauch unter Druck an Arbeitsbereich | <input type="checkbox"/> | <input type="checkbox"/> | Anlagentechnik | Bei Abschalten von BMA von eingewiesenen Personen, Info an/Abstimmung mit Brandschutzbeauftragten<br>Ersatzmaßnahme(n) festlegen! Schaum- und CO <sub>2</sub> - Löschanlage beachten ! | <input type="checkbox"/> | <input type="checkbox"/> | Brandwache | Einweisen der Brandwache | <input type="checkbox"/> | <input type="checkbox"/> | Sonstiges |  | <input type="checkbox"/> | <input type="checkbox"/> | <div style="position: relative; height: 100%;"> <div style="position: absolute; top: 50%; left: 50%; transform: translate(-50%, -50%); opacity: 0.5; font-size: 2em; pointer-events: none;">                         Example<br/>Factory-specific                     </div> </div> |  |
| Thema  | Aktion   | Erforderlich   | Erledigt                 |          |                |   |                          |                          |                                     |   |                          |                                      |                          |                          |                             |                          |                          |                             |                          |                          |                          |                          |   |  |                          |                          |                                      |                          |                          |  |                          |                          |                            |                          |                          |   |  |                          |                          |                                |   |                          |                          |                |  |                          |                          |            |                          |                          |                          |           |  |                          |                          |   |  |
| Arbeitsbereich   | Sicherheitseinweisung durch Auftraggeber   | <input type="checkbox"/>                                       | <input type="checkbox"/> |          |                |   |                          |                          |                                     |   |                          |                                      |                          |                          |                             |                          |                          |                             |                          |                          |                          |                          |   |  |                          |                          |                                      |                          |                          |  |                          |                          |                            |                          |                          |   |  |                          |                          |                                |   |                          |                          |                |  |                          |                          |            |                          |                          |                          |           |  |                          |                          |   |  |
|  | Anlage / -teil außer Betrieb nehmen  | <input type="checkbox"/>                                       | <input type="checkbox"/> |          |                |   |                          |                          |                                     |   |                          |                                      |                          |                          |                             |                          |                          |                             |                          |                          |                          |                          |   |  |                          |                          |                                      |                          |                          |  |                          |                          |                            |                          |                          |   |  |                          |                          |                                |   |                          |                          |                |  |                          |                          |            |                          |                          |                          |           |  |                          |                          |   |  |
|  | Rohrleitungen abtrennen / abschotten   | <input type="checkbox"/>                                       | <input type="checkbox"/> |          |                |   |                          |                          |                                     |   |                          |                                      |                          |                          |                             |                          |                          |                             |                          |                          |                          |                          |   |  |                          |                          |                                      |                          |                          |  |                          |                          |                            |                          |                          |   |  |                          |                          |                                |   |                          |                          |                |  |                          |                          |            |                          |                          |                          |           |  |                          |                          |   |  |
|  | bewegliche Apparate sichern  | <input type="checkbox"/>                                       | <input type="checkbox"/> |          |                |   |                          |                          |                                     |   |                          |                                      |                          |                          |                             |                          |                          |                             |                          |                          |                          |                          |   |  |                          |                          |                                      |                          |                          |  |                          |                          |                            |                          |                          |   |  |                          |                          |                                |   |                          |                          |                |  |                          |                          |            |                          |                          |                          |           |  |                          |                          |   |  |
|  | Elektrische Anlagen sichern  | <input type="checkbox"/>                                       | <input type="checkbox"/> |          |                |   |                          |                          |                                     |   |                          |                                      |                          |                          |                             |                          |                          |                             |                          |                          |                          |                          |   |  |                          |                          |                                      |                          |                          |  |                          |                          |                            |                          |                          |   |  |                          |                          |                                |   |                          |                          |                |  |                          |                          |            |                          |                          |                          |           |  |                          |                          |   |  |
|  | Umkleidungen / Isolation   | <input type="checkbox"/>                                       | <input type="checkbox"/> |          |                |   |                          |                          |                                     |   |                          |                                      |                          |                          |                             |                          |                          |                             |                          |                          |                          |                          |   |  |                          |                          |                                      |                          |                          |  |                          |                          |                            |                          |                          |   |  |                          |                          |                                |   |                          |                          |                |  |                          |                          |            |                          |                          |                          |           |  |                          |                          |   |  |
|  | Raumluft / Arbeitsbereich messen < 20% UEG   | <input type="checkbox"/>                                       | <input type="checkbox"/> |          |                |   |                          |                          |                                     |   |                          |                                      |                          |                          |                             |                          |                          |                             |                          |                          |                          |                          |   |  |                          |                          |                                      |                          |                          |  |                          |                          |                            |                          |                          |   |  |                          |                          |                                |   |                          |                          |                |  |                          |                          |            |                          |                          |                          |           |  |                          |                          |   |  |
|  | Abdichten von Öffnungen / Durchlässe   | <input type="checkbox"/>                                       | <input type="checkbox"/> |          |                |   |                          |                          |                                     |   |                          |                                      |                          |                          |                             |                          |                          |                             |                          |                          |                          |                          |   |  |                          |                          |                                      |                          |                          |  |                          |                          |                            |                          |                          |   |  |                          |                          |                                |   |                          |                          |                |  |                          |                          |            |                          |                          |                          |           |  |                          |                          |   |  |
|  | Abdecken feuergefährdender Gegenstände   | <input type="checkbox"/>                                       | <input type="checkbox"/> |          |                |   |                          |                          |                                     |   |                          |                                      |                          |                          |                             |                          |                          |                             |                          |                          |                          |                          |   |  |                          |                          |                                      |                          |                          |  |                          |                          |                            |                          |                          |   |  |                          |                          |                                |   |                          |                          |                |  |                          |                          |            |                          |                          |                          |           |  |                          |                          |   |  |
|  | Ggf. Absperrung einrichten   | <input type="checkbox"/>                                       | <input type="checkbox"/> |          |                |   |                          |                          |                                     |   |                          |                                      |                          |                          |                             |                          |                          |                             |                          |                          |                          |                          |   |  |                          |                          |                                      |                          |                          |  |                          |                          |                            |                          |                          |   |  |                          |                          |                                |   |                          |                          |                |  |                          |                          |            |                          |                          |                          |           |  |                          |                          |   |  |
| Entfernung gefährlicher Stoffe: Staubablagerungen Umkreis 5m, Gase, Flüssigkeiten  |  | <input type="checkbox"/>                                       | <input type="checkbox"/> |          |                |   |                          |                          |                                     |   |                          |                                      |                          |                          |                             |                          |                          |                             |                          |                          |                          |                          |   |  |                          |                          |                                      |                          |                          |  |                          |                          |                            |                          |                          |   |  |                          |                          |                                |   |                          |                          |                |  |                          |                          |            |                          |                          |                          |           |  |                          |                          |   |  |
| Bereitstellen von Löschmitteln   | <input type="checkbox"/> CO <sub>2</sub> , <input type="checkbox"/> Pulver- <input type="checkbox"/> Schaum- <input type="checkbox"/> Wasser-Löschler <input type="checkbox"/> großer, mobiler Schaumlöschler bereitstellen<br><input type="checkbox"/> Wandhydrant, Schlauch unter Druck an Arbeitsbereich  | <input type="checkbox"/>                                       | <input type="checkbox"/> |          |                |   |                          |                          |                                     |   |                          |                                      |                          |                          |                             |                          |                          |                             |                          |                          |                          |                          |   |  |                          |                          |                                      |                          |                          |  |                          |                          |                            |                          |                          |   |  |                          |                          |                                |   |                          |                          |                |  |                          |                          |            |                          |                          |                          |           |  |                          |                          |   |  |
| Anlagentechnik   | Bei Abschalten von BMA von eingewiesenen Personen, Info an/Abstimmung mit Brandschutzbeauftragten<br>Ersatzmaßnahme(n) festlegen! Schaum- und CO <sub>2</sub> - Löschanlage beachten !   | <input type="checkbox"/>                                       | <input type="checkbox"/> |          |                |   |                          |                          |                                     |   |                          |                                      |                          |                          |                             |                          |                          |                             |                          |                          |                          |                          |   |  |                          |                          |                                      |                          |                          |  |                          |                          |                            |                          |                          |   |  |                          |                          |                                |   |                          |                          |                |  |                          |                          |            |                          |                          |                          |           |  |                          |                          |   |  |
| Brandwache   | Einweisen der Brandwache   | <input type="checkbox"/>                                       | <input type="checkbox"/> |          |                |   |                          |                          |                                     |   |                          |                                      |                          |                          |                             |                          |                          |                             |                          |                          |                          |                          |   |  |                          |                          |                                      |                          |                          |  |                          |                          |                            |                          |                          |   |  |                          |                          |                                |   |                          |                          |                |  |                          |                          |            |                          |                          |                          |           |  |                          |                          |   |  |
| Sonstiges  |  | <input type="checkbox"/>                                       | <input type="checkbox"/> |          |                |   |                          |                          |                                     |   |                          |                                      |                          |                          |                             |                          |                          |                             |                          |                          |                          |                          |   |  |                          |                          |                                      |                          |                          |  |                          |                          |                            |                          |                          |   |  |                          |                          |                                |   |                          |                          |                |  |                          |                          |            |                          |                          |                          |           |  |                          |                          |   |  |
| <b>Maßnahmen während der Arbeit</b>  |  |  |                          |          |                |   |                          |                          |                                     |   |                          |                                      |                          |                          |                             |                          |                          |                             |                          |                          |                          |                          |   |  |                          |                          |                                      |                          |                          |  |                          |                          |                            |                          |                          |   |  |                          |                          |                                |   |                          |                          |                |  |                          |                          |            |                          |                          |                          |           |  |                          |                          |   |  |
| <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #00ff00; color: green;"> <th style="width: 20%;">Thema</th> <th style="width: 50%;">Aktion</th> <th style="width: 10%;">Erforderlich</th> <th style="width: 10%;">Erledigt</th> </tr> </thead> <tbody> <tr> <td>Brandwache</td> <td>Ständige Kontrolle des Gefahrenbereiches (auch während Arbeitspausen)</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Unterbrechung</td> <td>Sicherung der Arbeitsmittel durch den Ausführenden (Ventile an Gasflaschen schließen, E-Geräte stromlos schalten)</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td rowspan="4" style="text-align: center; vertical-align: middle;">Arbeitsmittel</td> <td>Gaswarngeräte benutzen</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Atemschutz benutzen</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Schutzkleidung tragen</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Ex-geschütztes Werkzeug und Betriebsmittel benutzen</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> </tbody> </table>  | Thema  | Aktion   | Erforderlich             | Erledigt | Brandwache     | Ständige Kontrolle des Gefahrenbereiches (auch während Arbeitspausen) | <input type="checkbox"/> | <input type="checkbox"/> | Unterbrechung                       | Sicherung der Arbeitsmittel durch den Ausführenden (Ventile an Gasflaschen schließen, E-Geräte stromlos schalten) | <input type="checkbox"/> | <input type="checkbox"/>             | Arbeitsmittel            | Gaswarngeräte benutzen   | <input type="checkbox"/>    | <input type="checkbox"/> | Atemschutz benutzen      | <input type="checkbox"/>    | <input type="checkbox"/> | Schutzkleidung tragen    | <input type="checkbox"/> | <input type="checkbox"/> | Ex-geschütztes Werkzeug und Betriebsmittel benutzen | <input type="checkbox"/>                   | <input type="checkbox"/> |                          |                                      |                          |                          |  |                          |                          |                            |                          |                          |   |  |                          |                          |                                |   |                          |                          |                |  |                          |                          |            |                          |                          |                          |           |  |                          |                          |   |  |
| Thema  | Aktion   | Erforderlich   | Erledigt                 |          |                |   |                          |                          |                                     |   |                          |                                      |                          |                          |                             |                          |                          |                             |                          |                          |                          |                          |   |  |                          |                          |                                      |                          |                          |  |                          |                          |                            |                          |                          |   |  |                          |                          |                                |   |                          |                          |                |  |                          |                          |            |                          |                          |                          |           |  |                          |                          |   |  |
| Brandwache   | Ständige Kontrolle des Gefahrenbereiches (auch während Arbeitspausen)  | <input type="checkbox"/>                                       | <input type="checkbox"/> |          |                |   |                          |                          |                                     |   |                          |                                      |                          |                          |                             |                          |                          |                             |                          |                          |                          |                          |   |  |                          |                          |                                      |                          |                          |  |                          |                          |                            |                          |                          |   |  |                          |                          |                                |   |                          |                          |                |  |                          |                          |            |                          |                          |                          |           |  |                          |                          |   |  |
| Unterbrechung  | Sicherung der Arbeitsmittel durch den Ausführenden (Ventile an Gasflaschen schließen, E-Geräte stromlos schalten)  | <input type="checkbox"/>                                       | <input type="checkbox"/> |          |                |   |                          |                          |                                     |   |                          |                                      |                          |                          |                             |                          |                          |                             |                          |                          |                          |                          |   |  |                          |                          |                                      |                          |                          |  |                          |                          |                            |                          |                          |   |  |                          |                          |                                |   |                          |                          |                |  |                          |                          |            |                          |                          |                          |           |  |                          |                          |   |  |
| Arbeitsmittel  | Gaswarngeräte benutzen   | <input type="checkbox"/>                                       | <input type="checkbox"/> |          |                |   |                          |                          |                                     |   |                          |                                      |                          |                          |                             |                          |                          |                             |                          |                          |                          |                          |   |  |                          |                          |                                      |                          |                          |  |                          |                          |                            |                          |                          |   |  |                          |                          |                                |   |                          |                          |                |  |                          |                          |            |                          |                          |                          |           |  |                          |                          |   |  |
|  | Atemschutz benutzen  | <input type="checkbox"/>                                       | <input type="checkbox"/> |          |                |   |                          |                          |                                     |   |                          |                                      |                          |                          |                             |                          |                          |                             |                          |                          |                          |                          |   |  |                          |                          |                                      |                          |                          |  |                          |                          |                            |                          |                          |   |  |                          |                          |                                |   |                          |                          |                |  |                          |                          |            |                          |                          |                          |           |  |                          |                          |   |  |
|  | Schutzkleidung tragen  | <input type="checkbox"/>                                       | <input type="checkbox"/> |          |                |   |                          |                          |                                     |   |                          |                                      |                          |                          |                             |                          |                          |                             |                          |                          |                          |                          |   |  |                          |                          |                                      |                          |                          |  |                          |                          |                            |                          |                          |   |  |                          |                          |                                |   |                          |                          |                |  |                          |                          |            |                          |                          |                          |           |  |                          |                          |   |  |
|  | Ex-geschütztes Werkzeug und Betriebsmittel benutzen  | <input type="checkbox"/>                                       | <input type="checkbox"/> |          |                |   |                          |                          |                                     |   |                          |                                      |                          |                          |                             |                          |                          |                             |                          |                          |                          |                          |   |  |                          |                          |                                      |                          |                          |  |                          |                          |                            |                          |                          |   |  |                          |                          |                                |   |                          |                          |                |  |                          |                          |            |                          |                          |                          |           |  |                          |                          |   |  |



# Attachment 3:

## Prevent fires (AN-VA-19-BRS-01-01)

# Brände verhüten



Keine offene Flamme: Feuer, offene Zündquelle und Rauchen verboten

## Verhalten im Brandfall Verhalten bei Alarmierung

1. Ruhe bewahren  
Brand melden



Handfeuermelder betätigen



Notruf (0) 112

2. In Sicherheit  
bringen



Alle Personen warnen /  
Maßnahmen



Türen schließen/ nicht verschließen



Gekennzeichneten  
Fluchtwege folgen



Aufzug nicht benutzen



Sammelstelle aufsuchen  
Auf Anweisungen achten

Example  
Factory-specific

3. Löschversuch  
unternehmen



Feuerlöscher benutzen



Mittel und Geräte zur  
Brandbekämpfung benutzen

4. Feuersalarm

Bei Alarm ist das Gebäude  
umgehend zu verlassen.

5. Ende Feuersalarm

- a) Der Alarm darf nur von der  
Feuerwehr ausgeschaltet werden.
- b) Erst nach Aufforderung des  
leitenden Einsatzleiters der  
Feuerwehr darf das Gebäude  
wieder betreten werden.

# Attachment 4:

## Escape and rescue plan

# FLUCHT- UND RETTUNGSPLAN

**Standort**

**Übersichtsplan**

**Verhalten im Brandfall**  
Ruhe bewahren

1. Brand melden  
 Telefon: 112  
 Wie ist die Situation?  
 Wo ist der Brand?  
 Welche Gefahr besteht?  
 Woher ist der Brand entstanden?  
 Brandursache benennen
2. In Sicherheit bringen  
 Gebührendes Verhalten  
 Türen schließen  
 Aufschließen  
 Treppenhängehaken  
 Treppenhängehaken  
 Keine Aufzüge benutzen  
 Auf Bewachung achten
3. Lösversuch unternehmen  
 Feuerlöscher  
 Feuerlöscher benutzen  
 Ruhe und Geduld zur  
 Brandbekämpfung bewahren

**Verhalten bei Unfällen**  
Ruhe bewahren

1. Unfall melden  
 Telefon: 112  
 Wie ist die Situation?  
 Wo ist der Unfall?  
 Welche Art von Verletzung?  
 Woher ist der Unfall entstanden?
2. Erste Hilfe  
 Absperrung des Unfallortes  
 Versorgung der Verletzten  
 Anweisungen beachten
3. Weitere Maßnahmen  
 Rettungsdienste anrufen  
 Schutzausgänge anfragen

**Legende**

|                  |                 |
|------------------|-----------------|
| Standort         | Richtungspfeile |
| Feuerlöscher     | Sammelstelle    |
| Druckknopfmelder | Defibrillator   |
| Nistweg          | Fluchtweg       |
| Erste Hilfe      |                 |

|                           |                 |
|---------------------------|-----------------|
| Objekt:                   | Gühring KG      |
| Geschoss:                 | 1. Obergeschoss |
| Plannummer:               | A/B - 1. OG     |
| Datum der Planerstellung: | 01.05.2020      |
| Planersteller:            | Zlatko Müller   |

## Attachment 5:

### Safety signs (prohibition, warning, mandatory and rescue signs)

#### Prohibition signs



No access for unauthorised persons



No pedestrians



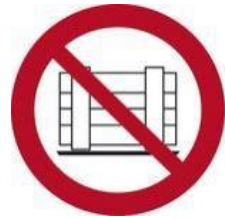
Do not drink



No smoking



No open flame



No set down or storage

#### Warning signs



Danger acid



Danger flammable materials



Danger explosive atmosphere



Danger explosive materials



Danger toxic substances



Caution laser beams



Warning magnetic field



Warning of dangerous electrical voltage



Warning of radioactive substances or ionising radiation

## Attachment 5:

### Safety signs (prohibition, warning, mandatory and rescue signs)

#### Mandatory signs



Wear eye protection



Wear respiratory protection



Wear head protection



Wear hearing protection



Wear hand protection



Wear foot protection

#### Rescue signs



Emergency exit



Escape route / emergency exit



Escape route / emergency exit



First aid



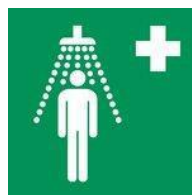
Direction to first aid



Emergency phone



Stretcher



Emergency shower



Eye wash unit

## **Attachment 6:**

### **Additional information for carbide plants (G-ELIT Berlin / KF Kulmbach / KF Thurnau)**

Some additional regulations apply in carbide plants due to other materials and other apparatuses.

Only carbide plant employees are permitted to handle carbide powder and carbide formed components. Should in the execution of the order carbide powder or carbide formed components impede or possibly be damaged, the principal's contact person (coordinator) must be informed for the prevention of danger.

Carbide dust is not to be swept or whirled up, but only to be picked up with heretofore designed vacuums with class H filters. If there is a possibility of you coming into contact with carbide dust deposits you can obtain the operating instruction "Carbide mixture" from our contact person / coordinator. Should hands be contaminated with carbide dust they must be thoroughly cleaned before food intake or smoking.

Gases and flammable liquids are not dangerous as long as they are enclosed in heretofore intended technical installations. Depending on the type the following dangers can arise from accidental escape of gas or leakage of flammable liquids:

- Dangers through excessive pressure (direct impact of a gas jet or whip effect),
- Risk of freezing through cryogenic gases,
- Risk of suffocation through oxygen deficiency,
- Danger of poisoning,
- Fire and explosion risk.

There is a risk of fire when gas installations or gas containers are heated by an outside fire. This also applies to cryogenic liquefied gas enclosed in pipelines.

To prevent these dangers, the contractor's employees are prohibited to activate fittings, switches etc.. If it is required due to the work order, it must be verifiably agreed with the coordinator. When a hazard is detected, the principal's contact person must immediately be informed and if necessary measures arranged that must be taken in the event of accidents or fire.

The emergency plan as well as escape and rescue plans can be found in all departments – please inform yourself prior to starting work.

Please also pay attention to the operating instructions on the notice board.

Inform yourself in advance regarding the conduct in potentially explosive atmospheres.

## Attachment 7:











### G-ELIT alarm system ISOHEXAN

Location: **Powder preparation G-Elit** – alarm signaling

- \* Entrance to main hallway
  - \* Entrance to powder storage
  - \* Weighing room / control room
  - \* Attritor room with spray tower
- 
- Warning light illuminates at 30% LEL (lower explosion limit), when the value falls the light automatically goes out – Attention pre-alarm at 40% - see below.
  - Siren sounds at 40% LEL – self-holding – must be cancelled in the control room in the powder preparation department.
  - **When siren sounds** there is an increased danger of explosion – room should not be entered, however, under no circumstances must the room be entered with forklifts or other equipment that could trigger electric sparks, as for example, mobile phones.
  - **If the siren sounds** an employee is already in the powder preparation area with an electric forklift then he must stop using it immediately. Contrary to an old requirement it is not to be switched-off!

## Attachment 8:

### Hazardous substance operating instruction carbide mixtures of carbide plants

|  |  |  |
|--|--|--|
| <b>G-Elit / Bereich Hartstoffe</b><br>Arbeitsbereich: alle Kostenstellen<br>Erstellt von: Andreas Hoff (SIFA)<br>Freigabe: Hr. Jürgen Voss (Werkleitung)   | <b>BETRIEBSANWEISUNG (BA)</b><br>GEM. § 14 GEFSTOFFV<br><b>Arbeitsplatz:</b> siehe Kst. und Tätigkeiten<br><b>Tätigkeit:</b> Tätigkeiten/Kontakt mit HM-Pulver/Staub, HM-Knetmasse oder nicht gesinterten HM-Teilen  | <br><b>BA : 1004 / 11</b><br>Stand: <u>15.02.2023</u><br>(Ohne Unterschrift gültig)         |
| <b>Gefahrstoffbezeichnung</b>  |  |  |
| <b>Hartmetall ungesintert (Pulver, Granulat, Staub und Stücke)</b>   |  |  |
| <b>Gefahren für Mensch und Umwelt</b>  |  |  |
| <br>   | <ul style="list-style-type: none"><li>- Hartmetalle in ungesintert Form können, wenn das Bindemittel Cobalt ist, beim Einatmen Krebs erzeugen (H350i), eine Allergie oder Atembeschwerden verursachen (H334) und lebensgefährlich sein (H330)</li><li>- sie sind beim Verschlucken gesundheitsschädlich (H302)</li><li>- sie verursachen schwere Augenreizung (H319)</li><li>- sie können allergische Hautreaktionen verursachen (H317)</li><li>- sie können vermutlich die Fruchtbarkeit beeinträchtigen (H360Df)</li><li>- Die Gefahr der Staubexplosion ist nicht auszuschließen</li><li>- Bei Brand entsteht Kohlenstoffmonoxid (hochentzündlich) und Kohlenstoffdioxid (ist schwerer als Luft, erstickend in hohen Konzentrationen) und Cobalttoxid</li></ul>   |   |
| <b>Schutzmaßnahmen / Verhaltensregeln</b>  |  |  |
| <br>   | <ul style="list-style-type: none"><li>- Vor Arbeitsbeginn Hautschutz (Strangpressen, Strangpressen, Strangpressen) verwenden, oder z.B. bei Feuchte (Strangpressen, Strangpressen, Strangpressen) Schutzhandschuhe tragen</li><li>- Das Essen, Trinken und Rauchen ist in den Bereichen, in denen dieses Material verwendet, gelagert oder abtransportiert ist, verboten.</li><li>- Mitarbeiter, die ihre Hände mit diesem Material beenden, wie auch vor dem Essen, Trinken oder Rauchen, lassen sich die Hände, gegebenenfalls auch das Gesicht, gründlich waschen, danach bei Bedarf Hautpflege verwenden (siehe Hautschutzplan)</li><li>- Die Arbeitskleidung ist gemäß Belastung zu stellen und zu wechseln, sie dient dem Schutz vor Verschmutzungen und ist getrennt von üblicher Kleidung aufzubewahren</li><li>- Staubentwicklung und Staubablagerung vermeiden (nicht kehren, nur saugen und feucht wischen), bei höherer Staubentwicklung, z.B. bei Umfüll- und Reinigungsarbeiten Atemschutzmaske P3 tragen (siehe auch Atemschutzplan)</li><li>- Rauchen und Umgang mit offenem Feuer ist nicht erlaubt, Zündquellen fernhalten</li><li>- Jugendarbeitsschutz- und Mutterschutzgesetz beachten, der besondere Schutz Jugendlicher bis zum Beschäftigungsverbot von werdenden Müttern ist im Vorfeld zu besprechen, weitere Hinweise finden sie im Sicherheitsdatenblatt</li></ul> | <br> |
| <b>Verhalten im Gefahrfall</b>   |  |  |
|   | <ul style="list-style-type: none"><li>- Vorgesetzten informieren</li><li>- Im Brandfall mit Löschsand löschen – nicht mit Wasser</li><li>- Gesonderte Schulung zur Brandbekämpfung beachten</li></ul>  | <b>Notruf (0) 112</b>  |
| <b>Erste Hilfe</b>   |  |  |
|   | <ul style="list-style-type: none"><li>- Ersthelfer und Vorgesetzten verständigen</li><li>- Bei Beschwerden im Bereich der oberen Atemwege sofort Frischluftzufuhr, Arzt hinzuziehen</li><li>- Bei Augenkontakt etwa 10 Minuten Auge mit Wasser oder 1 Flasche Augenspüllösung spülen, unverletztes Auge dabei schützen, bei Bedarf steriler Verband und zum Augenarzt</li><li>- Nach Verschlucken Mund ausspülen, kein Erbrechen herbeiführen, sofort Arzt hinzuziehen</li></ul>   | <b>Notruf (0) 112</b>  |
| <b>Instandhaltung und sachgerechte Entsorgung</b>  |  |  |
| <p>Bei Instandhaltungsarbeiten, wo Ablagerungen von HM-Staub oder –Pulver vorkommen, ist diese BA zu beachten. Staubsauger und Volkmann-Absaugungen sind mindestens jährlich von Sachkundigem zu prüfen und zu warten. Die wöchentliche Prüfung der Hauptfilter erfolgt durch die Mitarbeiter, jegliche Mängel sind dem Kst.-leiter zu melden, der die Instandsetzung veranlasst.<br/>Die Entsorgung von HM-Pulver entfällt, da HM-Rücklauf wieder aufbereitet erneut eingesetzt wird.</p> |  |  |

## **Anttachment 9:**

### **IT safety guideline for external service providers**

#### **1. Hard- and software management**

##### **1.1 User management**

When granting rights to you or your employees the principal grants only a small and clearly described group of persons access and ensures a restrictive allocation of rights. The award of access rights must be applied for in writing with the IT department by the project leader of the principal. The principal reserves the right to withdraw the issued use permission and access rights again.

Lending, passing on or similar of user rights, user identification etc. is strictly prohibited. The PIN / password must be kept confidential.

##### **1.2 Hard- and software of the principal**

The use of the principal's hard- and/or software by you or your employees is only permitted following approval by the principal. Related requests must be submitted to the IT department of the principal.

This also includes the utilisation and processing of the principal's data necessary for completing the order.

Equipment provided must be handled correctly and protected against loss. In the event of loss of user identifications, IT equipment or other granted rights provided for the completion of the task the principal must be notified without delay.

##### **1.3 Hard- and software of the service provider**

When the principal's data is processed on your IT equipment you must guarantee the principal's data is separated from the data of other customers.

Your equipment applied with the principal must meet, be designed and operated according to the applicable regulations and standards. Particular attention must be paid that the legally required inspections are carried out and documented.

The hard- and software applied by you must correspond to the current state of the art.

It must be ensured that IT equipment you use and bring with you has a current version of virus protection software and regular updates are carried out.

You must ensure the software used is provided with current security patches and updates.



## **2. Service provision**

### **2.1 The use of the Internet and communications infrastructure**

All accesses to the internet and the communication infrastructure are logged by the principal's IT department for diagnostic and security purposes.

If you are granted access to the internet and e-mail, the use of these services is exclusively permitted for business purposes.

### **2.2 Network**

Access to the network is only possible upon prior request and approval by the principal's IT department.

### **2.3 Remote maintenance**

Local access to the network of the principal is always preferable. Remote access is only possible upon prior request and approval by the principal's IT department.

VPN access is created only time-limited and only for named users. The use of collection users or the passing on of access data is strictly forbidden. VPN access is awarded following request and approval by the principal's IT department. You / your employees have to sign a separate non-disclosure agreement before the access data for VPN is issued. Accesses are logged by the principal's IT department for diagnostic and security purposes.

### **2.4 Conclusion of service provision**

If you or your employees have been issued IT equipment, data carriers, user ID's or system logons by the principal to provide the service they must be immediately returned to the principal or authorisations blocked upon termination of the employment contract or in the event of staff changes. Notification and information obligations must be fulfilled by you.

Data of the principal made available to you or you have generated through your work to provide the service must be returned to the principal or deleted upon termination of the employment contract.

## **3. Dealing with technical disruptions**

The project leader of the principal must be informed of disruptions or IT security incidents. Incidents must be reported immediately.

#### **4. Access to areas with sensitive IT Infrastructure**

The access to areas with sensitive IT infrastructure, i.e. server rooms, is only permitted to authorised personal. Activities in sensitive areas with IT infrastructure are only allowed under supervision.

You are responsible for all the work carried out and for the possible consequences. You are only authorised to undertake activities in the framework of the work order.

Only equipment necessary to undertake activities in the framework of the work order can be taken in the areas. Third-party equipment may only be included in the power circuit if agreed with the principal's project leader.

Attachment 10 of this directive shall additionally apply for activities in the computer centre as well as in the telco room at the Albstadt Herderstraße and Albstadt Hahnstraße locations.

## **Reference document**

### **§ 5 BDSG (Federal Data Protection Act) – data confidentiality**

Persons employed in data processing shall not process or use personal data without authorisation (data confidentiality). On taking up their duties such persons, in so far they work for private bodies, shall be required to give an undertaking to maintain such confidentiality. This undertaking shall continue to be valid after termination of their activity.

### **§ 43 paragraph 2 BDSG – penalty provisions**

An offence is committed by any person who intentionally or negligently.

1. unauthorised collects or processes personal data that is not generally accessible,
2. unauthorised holds personal data that is not generally accessible for retrieval by means of automated procedure,
3. unauthorised retrieves or obtains for himself or a third party from automated processing or non-automated files personal data that is not generally accessible,
4. communicates personal data that is not generally accessible surreptitiously obtained by incorrect information,
5. uses the communicated data for other purposes contrary to § 16 paragraph 4 sentence 1, § 28 paragraph 5 sentence 1, also in conjunction with § 29 paragraph 4, § 39 paragraph 1 sentence 1 or § 40 paragraph 1,
  - a. contrary to § 28 paragraph 3b makes the conclusion of the contract dependent on the consent of the person concerned,
  - b. contrary to § 28 paragraph 4 sentence 1 processes or uses data for the purposes of advertising or market or opinion research,
6. contrary to § 30 paragraph 1 sentence 2, § 30 a paragraph 3 sentence 3 or § 40 paragraph 2 sentence 3 combines a there mentioned characteristic to an identifiable individual or
7. contrary to § 42a sentence 1 does not provide a correct, complete or timely notification.

### **§ 44 BDSG – Criminal law**

- (1) Anyone wilfully committing an offence specified in § 43 (2) of this Act in exchange of payment or with the intention of enriching himself or another person or of harming another person shall be liable to imprisonment for up to two years or to a fine.
- (2) Such offences shall be prosecuted only if a complaint is filed. Complaints may be filed by the data subject, the Federal Commissioner for Data Protection and the supervisory authority.

### **(DSGVO) General Data Protection Regulation**

The General Data Protection Regulation must be complied with.

# Attachment 10:

Poster "Working in secure areas" computer centre as well as telco room (AN-VA-19-BRS-01-12)

AN-VA-19-BRS-01-12 Rev.1

# GÜHRING-GRUPPE

Vor dem Betreten des gesicherten Bereiches bitte beachten:



RAUCHEN VERBOTEN



FOTOGRAFIEREN UND FILMEN VERBOTEN



ESSEN UND TRINKEN VERBOTEN



BEI ALARM RAUM SOFORT VERLASSEN



NOT-AUS DARF NICHT BETÄTIGT WERDEN



TÜRE BEI ARBEITEN OFFEN LASSEN



NUR DREI PERSONEN GLEICHZEITIG IM RAUM

Externe Dienstleister dürfen die Räumlichkeiten nur in Begleitung eines befähigten Gühring-Mitarbeiters betreten.

1. Dem verantwortlichen Gühring-Mitarbeiter ist Folge zu leisten
2. Nur notwendige Geräte dürfen mit in die Räumlichkeiten genommen werden
3. Abstellen/Lagern von Gegenständen im Fluchtweg ist strengstens untersagt
4. Nach verlassen der Räumlichkeiten ist die Türe zu verschließen
5. Auffälligkeiten unverzüglich dem verantwortlichen Gühring-Mitarbeiter melden



Die aufgeführten Verbots- und Gebotszeichen gelten eingeschränkt auch für Besucher. In Absprache mit Werksleitung/Bereichsleitung vor Ort.

Ihre Sicherheit und Gesundheit ist uns wichtig!

Kopieren ist nicht zulässig

## **Attachment 11:**

### **Energy management**

All German Guhring Group locations operate an energy management system.

They are required to responsibly manage energy provided by us and utilise it as energy-efficient as possible. Avoid wastage i.e. by timely turning off lights, heating, water, compressed air or tools.


Services or work on buildings, machines or installations that may have an impact on energy consumption must be agreed with the principal prior to the order being awarded so the impact on energy efficiency can be assessed. The aim is to reduce energy consumption as far as this is economically viable. Service providers or external companies that through their action have an impact on energy consumption of the principal must only use trained personnel to do this.

Changes to energy management systems in the area of energy supply (energy input, low-voltage main distribution board and further sub or main distributions) require agreement and approval of the principal.

Should you have suggestions how we can increase our energy efficiency we will be glad to hear from you. If you have any questions please contact your contact person responsible for the project.

## Attachment 12:

### Confirmation of external company form (AN-VA-19-UM-06-FFB-01-02)

|   |   |  |
|---|---|--|
|  | <p style="text-align: center;"><b>EM-Attachment</b><br/>Section 19<br/>Confirmation by external company</p> | <p style="text-align: center;"><b>AN-VA-19-UM-06</b><br/><b>-FFB-01-02</b><br/>Rev.: 2<br/>Page 1 of 1</p> |
|---|---|--|

Recipient:

Gühring KG  
Zentraleinkauf  
Herderstraße 50-54  
72458 Albstadt

Company

\_\_\_\_\_

Name

\_\_\_\_\_

Address

\_\_\_\_\_

Telephon

\_\_\_\_\_

represented by

confirms the receipt of the brochure:

|  |
|--|
| <b>Occupational safety and environmental protection notices<br/>for external companies</b> |
|--|

\_\_\_\_\_

Place

Date

Signature

The company

\_\_\_\_\_

Name

Is committed to comply with the regulations and notices described in the above mentioned brochure and especially to instruct the employees that perform tasks at Gühring KG, Dr. Gühring KG, SL-Werkzeuge, Hollfelder-Gühring, G-Elit, KF Konrad Friedrichs and Stock, on the contents of the brochure prior to starting work and on an annual basis.

When subcontracting to a third party the contractor commissioned by the Principal has the obligation to ensure compliance with the requirements in "AN-VA-19-UM-06-FFB-01-01 Occupational safety and environmental protection notices for external companies"!

The brochure **Occupational safety and environmental protection notices for external companis** is an also applicable component of the work contract.

## Attachment 13:

### Confirmation of instructions by external company coordinator and the external company (AN-VA-19-UM-06-FFB-01-03)

|                          |   |  |
|--------------------------|---|--|
| <b>GUHRING<br/>GROUP</b> | <b>EM-Attachment</b><br>Section 19<br>Confirmation of instruction by the external company<br>coordinator and the external company | <b>AN-VA-19-UM-06<br/>-FFB-01-03</b><br>Rev.: 2<br>Page 1 of 1 |
|--------------------------|---|--|

#### Confirmation of instruction by the external company coordinator and the external company

Name and address of external company:

---



---



---

Order number (if available):

---

#### Basically all applicable occupational safety regulations and DGUV (German Statutory

|   | Attach<br>ment | Description   |
|---|----------------|---|
| X | 1              | Alarm plans – sample for accident / fire as well as for chemicals and leaking liquids     |
|   | 2              | Permit for work involving risk of fire / explosion protected area                         |
|   |                |   |
| X | 3              | Preventing fires  |
|   | 4              | Escape and rescue plan  |
|   | 5              | Safety signs (prohibited, warning, mandatory, rescue signs)                               |
|   | 6              | Additional instructions carbide plants  |
| X | 7              | G-ELIT alarm system ISOHEXAN  |
|   | 8              | Hazardous material operating instruction carbide mixture in carbide plants                |
|   | 9              | IT safety guideline for external service providers  |
| X | 10             | Poster "Working in secured areas"<br>Computer centre as well as telephone conference room |
| X | 11             | Energy management   |
| X | 12             | External company confirmation of form   |

#### Accident Insurance) regulations must be complied with for commissioned work at all times.

(i.e. working at heights, on roofs, set-up lifting platforms in accordance with DGUV regulation 38 §9 Fall protection)

**Note:** Column 1 – Indicating the respective attachments by the coordinator (Guhring)

|       |  |  |
|-------|--|--|
| <hr/> | <hr/>  | <hr/>  |
| Date  | Signature coordinator<br>Instructing principal | Name in block letters<br>Signature commissioned external company |