

Workplace Instruction
Workplaces



Work on machines

Guidance for company instruction

Safe working on machines

Facts

When working on machines, serious injuries can occur, e.g. due to being crushed, cut or due to impacts. In order to avoid such injuries, the operating instructions for the machines as well as all internal compa-

ny instructions must be carefully read and understood by every employee. The regulations on setup works and the behavior in the event of malfunctions are particularly important.

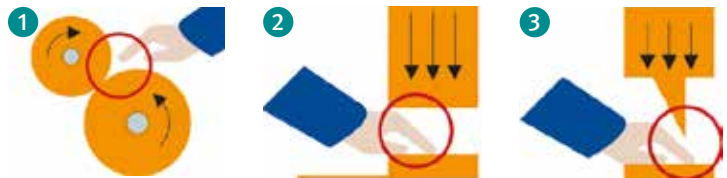


In the event of major safety-related defects, the machine must be shut down immediately if necessary.

What are the risks?

The most common mechanical danger points are:

- Draw-in points (e.g. rollers or cylinders) ①
- Pinch points (e.g. pressure bars) ②
- Cutting points (e.g. knives) ③
- Impact points (e.g. due to moving parts)



Other hazards are caused by:

- Splashing of liquids under high pressure
- Electrical energy
- Static electricity
- Hydraulic, pneumatic or thermal energy
- Risk of fire or explosion
- Noise
- Emission of dusts, gases, vapors or liquids
- High temperatures
- Incorrect assembly

Protective measures before starting to work

Instruction:

Employees are only allowed to operate the machines on which they have been instructed.

Wear personal protective equipment:

If personal protective equipment is required (e.g. safety shoes, hearing protection), it must be worn.

Wear suitable clothing: ④

When working on moving machine parts, employees with long hair must use a hair net if necessary. Close-fitting clothes must be worn. Rings, necklaces and bracelets must also be removed beforehand.



Check protective devices:

Existing protective devices must be checked regularly to ensure their proper function and effectiveness.

Observe warning devices:

Warning devices (e.g. start-up warning devices) must be observed on the machine.

4 WEAR SUITABLE CLOTHING



Do not wear your long hair down – use a hair net



No bracelets



No rings



No watches

Protective measures when working on machines

Protective measures during operation

Do not manipulate protective devices:

- The protective devices (e.g. safety switches) must not be bypassed or disabled.

Never reach into running machines:

- Never reach into moving machine parts during operation.

Protective measures for setup work and malfunctions

Never troubleshoot the machine while it is running.

- Wait for the machine to come to a standstill.

During setup work on the running machine:

- The existing protective measures must remain effective or suitable alternative measures must be provided, e.g. inching mode.
- The residual risks must be observed (see notes in the operating instructions).

Protective measures during maintenance and repair work

- Maintenance work and measures may only be carried out by qualified personnel. After the repair or maintenance work, the existing protective devices must be completely refitted and their function must be checked.
- Unauthorized, accidental or unexpected starting must be prevented **5** (e.g. lock the main switch, attach a sign “Maintenance work, do not switch on”).
- Dangerous movement due to stored energy must be prevented (e.g. by venting pressure vessels and pneumatic cylinders beforehand).



If safety-related defects are detected, the responsible superiors must be notified so that the defects can be removed by qualified personnel. In the event of major safety-related defects, the machine must be **shut down immediately** if necessary.



Lock the main switch when performing maintenance works.

