

SAFETY INFORMATION

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1 General

This user manual describes safe and appropriate Operation of the system. Compliance with all specified safety notes and instructions and all local accident prevention regulations and general safety provisions that are valid in the operational area of the machine is imperative.

Before beginning all work on the system, this user manual and particularly the chapter on "Safety" and the corresponding safety notes must be fully read. The contents must be understood.

This user manual is part of the system. These instructions should be kept in the immediate vicinity of the system and be accessible at any time for persons working on or with the system. The user manual must always be passed on with the system.

Explanation of Symbols

Important safety-related notes are marked with symbols in this user manual. It is compulsory that the notes provided on work safety are complied with and followed. Take particular care in these cases in order to avoid accidents, personal damage and damage to property.



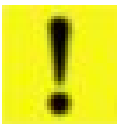
WARNING! Danger of injury or death!

This symbol identifies notes that may result in an impairment of health, injuries, permanent bodily harm or even death if they are not observed.



WARNING! Hazard of electric current!

This symbol points out a dangerous situation caused by electric currents. Failure to observe these safety notes can result in the risk of major injuries or death. The work to be performed may only be carried out by an inducted electrical specialist.



CAUTION! Damage to property!

This symbol identifies advice; non-compliance may result in damages, malfunctions and / or failure of the system.

Other valid documents

Components from other manufacturers may be installed in the system. These purchased parts have been subjected to risk assessment by the manufacturers. The constructions' conformity with the valid European and international regulations is declared by the manufacturers. The declaration of conformity from these manufacturers, as well as the operating, maintenance and repair instructions on the respective device components are to be considered part of the documentation for

this machine. The instructions on safety, setup and installation, operation, repair, dismantling and disposal of the components contained in the manufacturer's documentation must be fully followed by the system operating personnel.

Liability and Warranty

All details and notes in this user manual have been compiled under consideration of the valid regulations, current state of technology and our years of knowledge and experience. This user manual must be carefully read before beginning all work on and with the system.

The manufacturer cannot be held liable for any damage or malfunctions resulting from non-observance of these operating instructions. The text and visual presentations do not necessarily correspond with the scope of supply. Illustrations and graphics are not to scale. In the case of special designs, use of additional order options or due to the latest technological modifications, the actual scope of supply may differ from the details and information as well as the visual presentations described or shown here. Please contact the manufacturer in case of any questions. We reserve the right to technical modifications of our product as part of enhancing its usage properties and further development.

Copyrights

This user manual should be treated confidentially. It is exclusively intended for persons deployed to work on and with the system. All contained data, texts, drawings, pictures and other images are protected under applicable copyright law and further industrial property rights. Any misuse is liable to prosecution. Distribution to third parties as well as reproduction in any kind and form – also of extracts – as well as exploitation and/or notification of the contents are not permitted without prior written approval of the manufacturer. Violations shall give rise to damages. The originator reserves the right to make further claims. We reserve all rights to exercise our industrial property rights

Spare parts

Only use the manufacturer's original spare parts.



CAUTION!

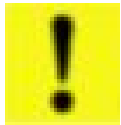
Wrong or faulty spare parts may result in damages, malfunctions or total failure of the system.

In the case of use of any unapproved spare parts, all guarantee, service, compensation for damages and liability claims against the manufacturer, his agents, traders or representatives are not applicable.

Disposal

Unless no other return or disposal agreement has been arranged, the individual components shall be recycled after having been properly disassembled.

- Scrapping of metallic material
- Recycling of plastic components
- Sorting and disposing of other components in accordance with material type.



CAUTION!

Waste from electronic and electrical equipment, electronic components, lubricants and other auxiliary materials are subject to hazardous waste treatment and must be disposed of by specialized companies only!

Safety

The system has been built in accordance with the generally accepted engineering standards valid at the time of development and manufacture and is deemed to be operationally safe. The system may be the source of hazards if it is used by staff who have not been professionally trained, or is used incorrectly or abnormally.

This chapter, "Safety", provides an overview of all significant safety aspects for optimum protection of persons as well as safe and trouble-free operation of the system.

Foreseeable correct use

Refer to separate instructions for the particular machine

Foreseeable Incorrect use

Refer to separate instructions for the particular machine

CAUTION!



Any usage beyond the intended use and/or different type of use of the system is forbidden and is not valid as the intended use.

All types of claims against the manufacturer and/or his authorized representative due to damages caused by unintended use of the system are excluded.

Damage resulting from unintended use is the sole responsibility of the operator.

Intended use also refers to correct compliance with the operating conditions, as well as the details and instructions in this user manual.

The system may only be operated with the parts listed in the scope of supply.

Read the manual

Any person performing work on or with the system must have read and understood these instructions prior to commencing work on the system. This also applies if the person in question has already operated, or received training from the manufacturer on this type of system or a similar type.

Familiarity with the content of the user manual is one of the prerequisites for protecting personnel against hazards and for avoiding errors and hence for operating the system safely and without malfunction. We recommend that the operating company should obtain written confirmation from staff that they are familiar with the user manual.

Changes and Modifications to the System

To avoid hazards and to ensure optimal performance, no modifications, additions or conversions may be made to the system which has not been explicitly authorized by the manufacturer. All pictograms, signs and labelling found on the system must be kept in a good, legible condition and must not be removed. Damaged or illegible pictograms, signs and labelling must be replaced immediately.

Responsibility of the Operating Company

These instructions should be kept in the immediate vicinity of the system and be accessible at any time for persons working on or with the system.

The system may only be operated in a technically appropriate and operationally safe state. The system must be checked for intactness prior to each and any start.

All user manual instructions shall be observed fully and without limitation.

Along with the specified safety notes and instructions in this user manual, the local accident prevention regulations and general safety provisions that are valid in the operational area of the system, as well as valid environmental protection regulations, must be observed and complied with.

The operating company and the company's authorized personnel are responsible for fault-free operation of the system as well as for clear specifications on areas of responsibility for installation, operation, maintenance and cleaning of the system.

The operating company has to ensure that the supply of liquid carbon dioxide is interrupted if the supply of drive air is interrupted.

Requirements of personnel

Only authorized and instructed specialized personnel may work on and with the system. Members of personnel must have received an induction on possible risks. The term specialized personnel refers to persons who are capable of assessing their work and recognizing the possible risks involved due to their specialist training, knowledge and experience, as well as knowledge of the relevant regulations. If members of personnel do not have the necessary knowledge, training must be provided accordingly.

The areas of responsibility for work on and with the system (installation, operation, maintenance, repair) must be clearly specified and complied with so that areas of competency are clear from a safety point of view. Only such persons may work on and with the system that can be expected to perform their duties reliably. People who are under the influence of drugs, alcohol or medication that may affect their reactions may generally not work with the system. The valid age and specific job regulations for the site where the system is used must be observed when choosing personnel. The operator must ensure that unauthorized persons are kept at a sufficient distance from the machine. Any changes to the system that affect safety must be immediately reported by staff to the operating company.

Work Safety

Personal damages and damages to property when working with and on the system can be avoided by following the specified safety notes and instructions in this user manual. Non-observance of these notes may result in hazards for persons and damage or destruction of the system.

In the case of failure to comply with all specified safety notes and instructions in this user manual and all local accident prevention regulations and general safety provisions that are valid in the operational area, all liability claims and claims for compensation for damages against the manufacturer or a commissioned agent are excluded

Personal protection equipment

When working on or with the equipment, the following shall be worn:

(To be supplemented by customers internal regulations)

– Protective clothing

closely fitting work clothes (low tearing strength, no loose sleeves, no rings and other jewellery etc.)

– Safety shoes



to protect feet against heavy falling parts and slipping on flooring that is not skid resistant.

–**Protective goggles**

to protect eyes from flying parts and fluids.

Additional requirement for cleaning work:

– **Working gloves**

to protect against friction, abrasion, puncture and severe injuries of the hands as well as against contact with hot surfaces and substances hazardous to health.



Hazards Originating from the System

The system was subjected to risk assessment. The resulting construction and design of the system corresponds with the current state of technology. The system is operationally safe when used as intended. However, a residual risk always remains! If this is a partly completed machine, then it's safety is also reliant upon the system or equipment into which it is installed.

WARNING!

Pneumatic and hydraulic energy can cause major injuries. In the case of damage to individual components, highly pressurized mediums can escape and lead to physical and/or property damages!

- _ Depressurize the system before beginning any work
- Do not remove, modify or put safety installations out of operation.
- _ Pressure settings may not be changed beyond the values and tolerance ranges specified in the user manual.