Operation of hoses

1. General information

SIMON hoses and safety-related components must be used as intended.

Otherwise, there is an acute risk of injury, especially at high operating pressures, high operating temperatures, and with hazardous media. The exact suitability of the product must be clarified on a case-by-case basis. If in doubt, seek expert advice. For proper and safe use it is important to select the right type of hose. Please check the applications with your customers. Inform your customer about the limits of the product.

If no hose-specific standards apply, the specifications according to DIN, DIN EN ISO, TRBS, BetrSichV, DGRL, etc. apply.

2. Installation and use

- Use according to the manufacturer's instructions.
- Note accessibility.
- Do not hinder hoses in their position or movement.
- Not exceed max. allowable working pressure.
- Not exceed max. allowable working temperature.
- Do not bend beyond the permissible bending radius.
- Avoid torsion loadings or driving over hoses.
- Do not pull across rough surfaces and sharp edges.
- Do not apply excessive tension or pressure loadings.
- Note the special recommendations for steam and bitumen hoses.
- Drain and clean after use.

3. Storage

- Cool (15-25°C), dry, with little exposure to light and draughts.
- Free of tension and free of kinks.
- Protect against environmental influences in use of outdoor storing.
- Avoid contamination by chlorides, bromides, iodines, external or Flash rust.
- Limit stacking height to prevent deformation of the lower hoses
- Do not store directly next to radiators or heating pipes
- Fit protective caps to hoses to prevent the inside from ozone or contamination, especially when storing outdoors.

4. Lifetime

- Review the conditions of use.
- Optimize exchange cycles.
- Unfavorable conditions reduce the hose life.
- Product aging in the presence of multiple factors (max. working pressure, max. temperature, min. bending radius).

5. Checking and maintenance

- Continuous visual inspection of hose and fittings.
- Recurrent maintenance and inspections, e.g. per DIN EN ISO 6134, DIN EN 12115, etc.

6. Cleaning recommendation

To ensure that the hoses function safely, the following cleaning recommendations should be observed:

- Standard cleaning can be carried out with water, steam, commercially available disinfectants, or soapy water, but not with aggressive cleaning agents.
- cleaning after use or at regular intervals

Special instructions for SIMON food hoses

Cleaning before first use

Food hoses may have a slight inherent odor, which is unavoidable in production and can be eliminated by appropriate cleaning. We therefore recommend the following cleaning procedure before first use:

- Fill the hose with hot water
- Storage in the hose for at least 10 hours

After first rinse, the following cleaning cycles should be performed:

• Water	+90°C max. 20 minutes
• Steam	2 x +130°C max. 20 minutes
• sodium hydroxide	2 % at room temperature max. 30 minutes
• Hydrogen peroxide (H_2O_2)	0.15 % at room temperature max. 30 minutes
• Nitric acid (HNO_3)	0.5 % at room temperature max. 30 minutes

In all cases, intermediate and final rinsing with drinking water must be carried out!
If the hose still emits odors, several cleaning processes should be used in succession

Standard cleaning

After use or at regular intervals, the hose should be treated with a commercially available cleaning and disinfectant. For detailed information and to select suitable detergents and disinfectants, please contact the manufacturer.

7. Use of tar spraying and bitumen hoses

Please keep in mind our recommendations regarding the storage and maintenance of hoses.

Handling
Hot bitumen hoses must not be bent behind the fittings. Therefore place all bends in the middle of the hose and lay them in a much larger curve.

Do not close hot!
Hot hoses must not be closed because a negative pressure is created when they cool down. At a temperature decrease from 200 °C to 0 °C in a closed hose line a vacuum of over 0.4 bar will be formed and the layers can be separated.

Do not clean with a blowtorch!
The couplings and the hose lines must not be warmed up with the blowtorch. This can damage the hose. Due to the goodthermal insulation of the thick rubber hose wall, the hot bitumen remains hot until the end and can therefore leak completely.

Security monitoring
Hot bitumen hoses must not be used under any circumstances if the outer rubber layer have been separated, if the pressurebearing fabric inserts are visible, or if the hose kinks. The hose have to be repaired immediately (shorten until the cut shows dry and firmly connected fabric layers again). Installation may only be carried out by authorized specialists. A pressure test is essential after repair.

8. Disposal

Proper disposal of old hoses and fittings in accordance with applicable regulations. Where possible, dispose of materials separately.