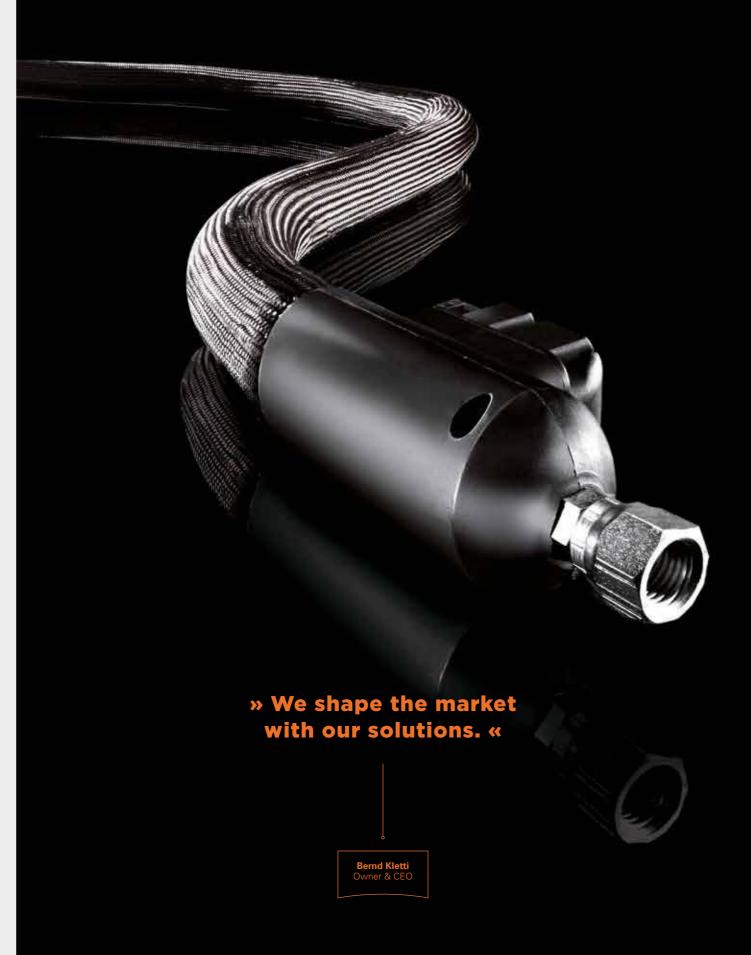
# Our skill for your success









## We are KLETTI

Reacting flexibly to a wide range of requirements, reliably ensuring the highest quality and standing passionately behind our own products: For us, it's a given. Because our aim is to contribute to the success of our customers with heating hose technology to meet professional demands. This is why our company's founder and owner, Bernd Kletti, puts his name to every single product that leaves our factory.

## Heating hose solutions made from our passion

Our passion for electrical heating systems is in our blood. As a family-run company, we have been living our passion for more than 25 years. We are based in Sandhausen near Heidelberg – and our products are used throughout the whole world.

We value and maintain professional, long-lasting and trusting relationships with our employees, customers, and systems partners. To create the highest quality results, we always will work to create the perfect solution.

### **People make** the difference

Every single KLETTI heating hose is created because the people working on it are passionate about the product. Every day, they put their heads and their hearts into ensuring that it has earned the name KLETTI: For example, because it is the best heating hose of its kind. Or the only one of its kind, the most innovative or the most economical. And if our customers want it, then it is also the fastest heating hose: the one which we skilfully produce immediately from a "hot" idea or an urgent requirement of our customer.





**KLETTI** spirit



And the "boss" is no exception here: Every-

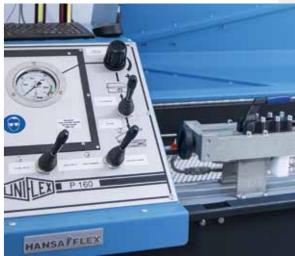
From planning to production to commissioning: deliveries as quickly as possible.



Since 1992

> KLETTI has been a reliable partner









thing that comes from KLETTI is made by hand. Because every single product is tailored to the requirements of our customers. And every single one of our employees ensures that everything is right, with their precision, care and commitment.

KLETTI heating hoses are teamwork. And the team also works in an emergency we carry out urgently awaited replacement

# Nothing is impossible

Whichever hot medium our customers need to transport: They'll find their products at KLETTI. Because we are hot on optimal solutions. Because our passion burns brightly for our products. Because we burn to find the maximum level of flexibility and performance. In short: Because we fulfil the requirements of our customers passionately.

We believe: In selected, high-quality materials, as a product can only be as good as its components. We work: Flexibly, precisely and quickly to exploit the full potential of our production department. And we always find: The best solution – always ensuring a perfect fit with your production environment.

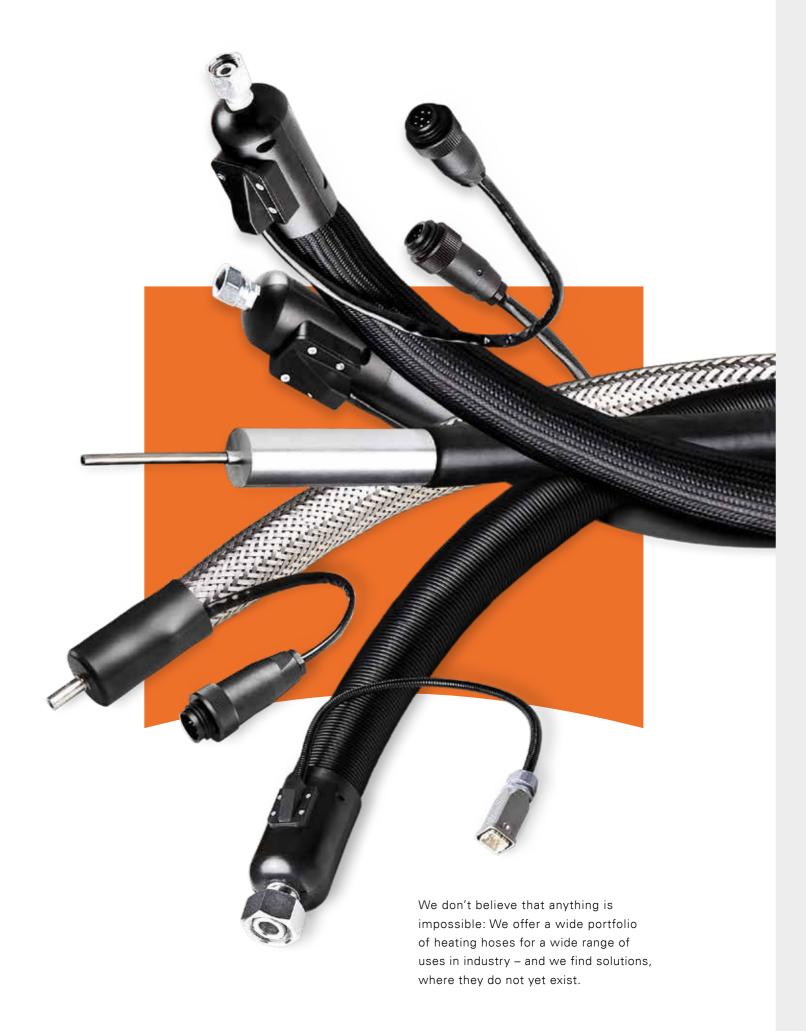
## We are there, where you need us

#### Uses

- Plant engineering
- Automobile industry
- Extrusion technology
- Labelling industry
- Emissions measurements
- Gas analysis
- Food industry
- Mechanical engineering
- Packaging industry

#### Application technology

- Analytical measuring
- Dosage technology
- Adhesive application technology
- Plastics technology
- Food engineering
- Medical engineering
- Measurement and control technology
- Foam technology
- Spray and varnishing technology



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# Only at KLETTI: Heating hoses with UL and CSA approval



in 🔳

Germany



Lots of our customers export products to the USA and Canada – they require UL approvals for the USA and CAN/CSA approvals for Canada in order to do this. These approvals also make it easier to access the market in many other countries as these standards enjoy a good reputation worldwide and act as a benchmark.

For this reason, KLETTI is the only supplier in Europe to offer heating hoses as standard with approval in line with the latest standards:

UL 499:2014/R:2017 for the U.S. CSA C22.2 No.88:2019 for Canada

## Certified quality management



Many can claim a lot. We can deliver: We repeatedly put all our processes and services to the test as standard. And have the results externally audited: We are certified in accordance with DIN ISO 9001.

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#### The right solution for every task.

Be it adhesive technology, process and environmental metrology, automotive, food and pharmaceutical engineering, heating hoses for indoors or outdoors, reliable material transportation and precise analysis: We know every industry and every application – there's no task too difficult for us. The challenges for KLETTI heating hoses are as diverse as our solutions.



» We are focussed, concentrated and specialised. «

> Steffen Exner CEO

## KLETTI heating hoses in adhesive technology

Material transportation within defined temperature paths, under high pressure and under high temperature: Whether for use with manual spray guns or industrial robots, in automobile or automation engineering, indoors or outdoors, splash-proof or with removable material hose: KLETTI heating hoses are compatible with leading manufacturers throughout the world and guarantee the smooth and correct production process of your systems.



## KLETTI heating hoses in automation engineering

Developed by us especially for use with industrial robots, in the automotive or packaging industry, for example: KLETTI heating hoses for robotic applications can be used for various adhesion procedures and processes. Irrespective of the liquid medium that requires transportation, our heating hoses are ready, even with ultraviscous fluids. These heated hoses are particularly flexible and each is a match for the extreme strain caused by the dynamic movements of the robot. This makes it the best choice, if short and rapid cycle times are required. Our heated hoses are also suitable for use with drag chains.



## KLETTI heating hoses in extrusion technology

Large nominal widths and withstanding high pressures – and all this at very high temperatures: With KLETTI heating hoses, you have a clear advantage over a rigid, heated pipe system. This is because our heating hoses detect vibrations and, with hose lengths of between 500 and 1.000 mm, they make it possible to create flexible connections with particularly small bending radii, even in confined spaces!

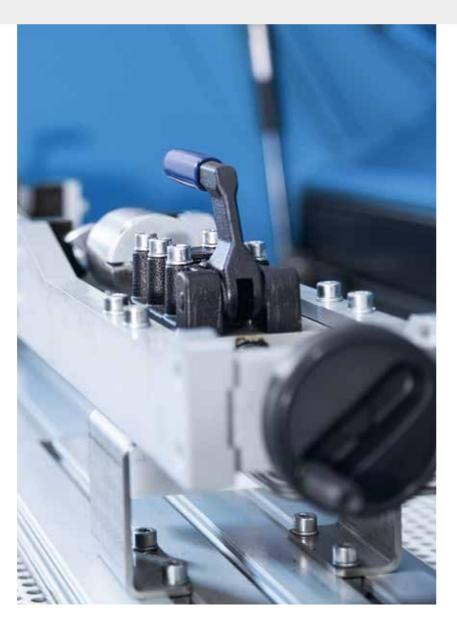


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18.000

our customers are supplied with

by us every year



## We are as flexible as our products

Market requirements change, our customers' processes change – and we change, too. Because KLETTI heating hoses adapt to their environment, not vice versa.

We accompany you from the very beginning on your journey to achieve your plan and provide you with advice and our knowledge whenever you need it.

#### **KLETTI** heating hoses in analytical measuring

Our analysis heating hoses are used wherever gaseous media require transportation over short and extended distances within defined temperature paths. For example, from the sampling point to the gas processing system and analyser.

The dew point is reliably avoided, ruling out any corruption of the measurements and clogging of the hose through dirt particles. If required, we can also provide you with our analysis heating hose with stainless steel nozzles and flexibly heatable sampling line.



#### **KLETTI** heating hoses in food and pharmaceutical engineering

Fatty and fat-free, fluid and pasty: The IP65-protected KLETTI heating hose is dustproof and protected against hose water from any angle. It has a washable outer coating and end caps made of silicone. The high-quality PTFE core has FDA approval. We supply the IP65 heating hose with stainless steel fittings from V4A, for example with Tri-Clamp connections or hygienic couplings. Other connections are available on request.



Here is a selection of our "favourite heating hoses" - developed and invented by us to satisfy your requirements. You can find all our available standard products on our website:

www.kletti-gmbh.com



» Efficient production requires the coordination of smooth processes. «

Michael Keil Head of Production

# Our product variety - Your advantage

When Bernd Kletti set forth more than 25 years ago with just one employee and three available heating hoses, he was sure: This was just the beginning. And so it was, as more and more customers quickly became aware of the particular quality of KLETTI products, provided valuable inspiration and suggestions,

registered their requirements for individual solutions and other standard products. And KLETTI delivered. The range of products grew over the years. As well as heating hoses, there were also unheated hoses, accessories and temperature controllers in the range.

#### **Insulating sleeve**

Insulated without transition: The flexible insulation sleeve made of 100 % silicone elastomer is used at straight and angled clamping ring connection points. It provides the necessary insulation and at the same time serves as mechanical protection, as well as protection against contact with the connection point. Our insulation sleeves for straight and 90° connectors of different clamping ring sizes offer very good thermal and electrical insulation, excellent chemical resistance, temperature resistance of the material between –60 °C and 200 °C as well as easy handling and installation. The insulation sleeves can also be heated on request.



Adapter cables for KLETTI standard temperature controllers

Whether it is Nordson® series 3000®, DuraBlue®, TC®, Pureflow®, Robatech® or other versions: With the help of our adapter cables, you connect heating hoses of any kind to our KLETTI standard temperature controllers in a matter of seconds. Because all KLETTI standard temperature controllers for wall mounting are equipped with appropriate sensor inputs for a wide variety of heating hose versions.

Single channel adapter cables are used exclusively to operate heating hoses without additional components. Two channel adapter cables are used to operate the heating hose and e.g. a handgun, an application head or a heated filter or similar.



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# The hot line to KLETTI

#### **KLETTI GmbH**

Gottlieb-Daimler-Straße 10 | D-69207 Sandhausen Telephone +49 6224 76996-0 | Fax +49 6224 76996-10

Questions and inquiries about the topic of heating hoses:

sales@kletti-gmbh.com

All topics related to purchasing and procurement:

purchase@kletti-gmbh.com

All topics related to service and complaints:

service@kletti-gmbh.com

Questions about order confirmations, scheduling and postponement:

production.planning@kletti-gmbh.com

All topics related to technology and development:

engineering@kletti-gmbh.com

www.kletti-gmbh.com