## **Product lines**

comprex<sup>®</sup> cleans industrial systems of all kinds, such as product lines, filling systems and much more.

#### Applications

- > Food and beverages
- > Consumer goods
- > Pharmacy
- > Pulp and paper
- > And much more.



### Hammann / comprex® Engineering Stationary comprex<sup>®</sup> systems

The stationary comprex® technology enables regular, preventative cleaning of your systems. This prevents deposits and ensures hygiene.

#### Your advantages

- > 70 97 % water savings (depending on product)
- > Up to 80 % less downtime
- > Avoiding/reducing use of chemicals
- > Reduction/avoidance of heating costs



## How our comprex<sup>®</sup> process works

The patented comprex<sup>®</sup> cleaning process is based on the controlled addition of water and compressed air into pipework.

This creates packets of air and water blocks that flow through the pipework at high velocity.

They generate enormous turbulence with strong shear and drag forces, whereby they manage to mobilise and reliably discharge existing deposits. The result: clean pipes and clean water - efficient, gentle and economical.







>>

What can you do? Utilise our expertise in pipe cleaning.

We will be happy to assist you. +49 6346 3004-78

Continuously pursuing the next innovation.



Hammann GmbH | comprex Zweibrücker Straße 13 D-76855 Anweiler am Trifels www.comprex.de/en info@comprex.de





Cleaning industrial plants

#### comprex<sup>®</sup> Industry

## Our industry solutions at a glance

With our patented comprex® process, we can successfully clean sophisticated pipe systems with stringent hygiene requirements. We are active in various sectors from metal, plastics and coating industry up to the highly regulated pharmaceutical, food and chemical branches and are committed to ensuring smooth production processes.



## **Pipelines**

Are deposits narrowing the cross-section of your pipes and impairing flow, pump performance and energy consumption? We can help with comprex®.

>

#### Anwendungen

- > Process water and demineralized water pipes
- > Cooling water lines
- > Emulsion lines
- Product lines Raw, process and river water pipes Sewage pressure pipes > New installations



## Cooling and temperature control systems / heat exchangers

Corrosion caused by well water or the entry of microorganisms requires regular cleaning of your cooling water pipes. Contamination or deposits in heat exchangers, also known as fouling, create additional contact resistance and impair the function of the heat exchanger.

### Applications

- > Main circuits Recooling systems
- > Secondary circuits > Heat exchangers



Liquid cooling produces deposits and biofilms in the cooling channels. This results in reduced cooling capacity. Removing these deposits increases the performance of the cooling system, saves energy and keeps cycle times stable.

#### Applications

- Production machines
- > Injection moulding machines and Injection moulds
- > For own use comprex® ToolClean







## **Extinguishing systems**

comprex<sup>®</sup>.



## **Cooling lubricant systems**

Water-miscible and non-water-miscible cooling lubricants (MWF) are used for cooling and lubrication in the machining or grinding process. Abrasion, dirt ingress or biological processes cause deposits to form in the cooling lubricant systems.

#### Applications

- Centralized and decentralized cooling lubricants systems
- > Machining centers





# Heating systems and heating installations

Deposits impair the performance of your heating circuits. They narrow the cross-section of the pipes and reduce heat transfer. When mobilized, they clog fittings. With comprex<sup>®</sup> we provide a remedy.

Functioning extinguishing systems are an essential part of fire protection. Deposits can impair their function. They narrow the cross-section of the pipes. Mobilized particles from deposits clog nozzles. We create safety with

