



Geyser



High-pressure processes



Pure Technology.

Customised cleanliness

Efficient cleaning despite increasing requirements for the technical cleanliness of products? Our solutions help you as a user to master this challenge. Each system is individually designed, because different customers can have very different requirements.

Our consulting and engineering staff can rely on their experience from numerous completed projects. Cleaning trials with original components at our Technical Centre give you as the user the reassurance of a safe investment for your facility while also determining the exact parameters for cleaning chemicals, time and temperature.

BvL systems deliver reliable cleaning for your components and can be integrated seamlessly into your production line. They are easy to operate and comply with the strict guidelines of the automotive industry. They are also designed in compliance with the Machinery Directive 2006/42/EC, C standard EN 12921 and the German Accident Prevention Regulations (UW).

- Sturdy design & long service life
- Intuitive operation
- Easy access for easy maintenance
- Quality components from renowned suppliers
- Quality “Made in Germany”
- Specialist firm in line with the German Water Management Act (WHG), certified management systems





Variable pressure range can be adapted to different applications

Robot system for maximum flexibility

Can be combined with pre-cleaning, fine cleaning, drying and cooling



System type

Geyser **d** for deburring with linear guided high-pressure lances



Brief description

The Geyser uses a high-pressure water jet for cleaning and deburring. The pressure range from 100 to 3000 bar can be adjusted to match component, material and residual contamination requirements. We carry out extensive tests at our Technical Centre to determine the optimum parameters for each customer.

High-pressure cleaning – Geyser *c* (cleaning)

Persistent contaminants, such as swarf, welding residues, silicates, etc. can be released effortlessly through application of significant force.

High-pressure deburring – Geyser *d* (deburring)

Machining burrs, casting flakes and swarf can be removed reliably, even from workpieces with technically complex geometries. The high-pressure jet is directed at the critical points of the component so that even components with deep or small holes, blind holes and undercuts can be deburred with ease thanks to the high kinetic energy.



Smart Cleaning

Intelligent cleaning with **BvL** apps and digital networking.
Transparent process information for predictive system diagnostics and maintenance: efficient and automatic.



Media supply

- Cleaning medium cycled through circuit or passes through the waste water process
- Absolute reliability thanks to filter technology
- High-pressure processes in a wet cell



Advantages

- Robot technology (optional) provides maximum flexibility: for range of movement, conversion, as well as changing processing sequences and new geometries
- No thermal or mechanical strain on the components
- High efficiency thanks to short cycle times

Effective dimensions of the Geyser

Effective length, width and height as well as load capacity and pressure range are adapted specifically for each customer.

Example: Technical data

for the BvL demonstration system Geyser *d*

Effective length	mm	800
Effective width	mm	600
Effective height	mm	400
Load capacity	kg	50



Detail view

Multiple rotating nozzles in permanently installed nozzle system

The powerful professional.

GeyserVM high-pressure supply module

Pump unit:	frequency-controlled high-pressure pump; variable pressure range
Equipment enclosure:	integrated pre-pressure pump, filtration system and high-pressure pump
Circuit cooling:	high-pressure pump cooled via heat exchanger
Supply:	from the tank of the cleaning system or optionally with integrated storage tank
Housing:	complete stainless steel housing including floor pan
Control and operation:	Siemens Simatic with Siemens touch panel or integrated in the cleaning system control

GeyserAE high-pressure work unit

Process chamber:	high-pressure unit integrated into the wet cell
Water tools:	<ul style="list-style-type: none">■ selectively positioned nozzles, rotating multiple nozzles or individual lances■ tools can be changed for different applications
Component guiding:	<ul style="list-style-type: none">■ nozzle guided to the component or component guided to the water tool■ integrated, water-protected robot (optional)
Integration:	can be combined with pre-cleaning, subsequent fine cleaning, drying and cooling



High-pressure lances

Targeted deburring of oil and water channel holes



Workpiece holder cleaning as optional component

- The empty workpiece holder passes through a washing unit while the component is cleaned or deburred.



Robot-assisted high-pressure water tool

for large effective dimensions



- The deburred component is placed on the cleaned workpiece holder.
- This prevents the component from becoming contaminated again by residues on the workpiece holder.



The **Geyser** integrates perfectly into the modern component cleaning process chain of BvL. All interfaces are optimally coordinated. As a long-standing specialist for demanding requirements in parts cleaning, BvL offers standardised quality systems which can be individually adapted to create modular solutions which are customised to suit your tasks.

Everything from one source!



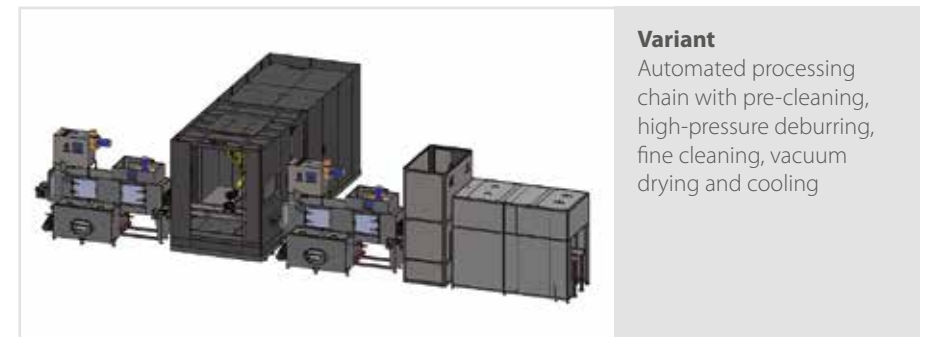
High-pressure processes in the process



Variant
High-pressure processes combined with pre-cleaning and subsequent fine cleaning



Variant
Vacuum drying added to the system



Variant
Automated processing chain with pre-cleaning, high-pressure deburring, fine cleaning, vacuum drying and cooling



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Pure technology.