



High-pressure deburring

Our trade fair innovation: Integrated high-pressure cleaning



- For removing cutting burrs, casting flashes and swarf
- For workpieces with a **technically demanding geometry**, e.g. deep or small boreholes and hard-to-reach undercuts
- For optimising the functional and ergonomic quality of the component
- For **series production** of workpieces in medium and large quantities
- For **high output rates** and short cycle times
- A highly flexible system which can react to changes in the geometry or the processing sequence of the workpieces
- Compact design adapted to container size
- Modular system to cover the entire processing chain of component cleaning



Deburring technology

- Robot-assisted component handling
- Stationary high-pressure water tools: multiple rotating nozzles or individual lances
- The burr is removed through the high kinetic energy of the water jet
- Frequency-controlled pump: adapted to the requirements of component, material and residual contamination



Media guiding

- Cleaning medium used in a cycle
- Absolute reliability of filter technology



Advantages

- Robot technology allows maximum flexibility: for range of movement, conversion, changing processing sequences and new geometries
- No thermal or mechanical strain on the components
- Increased product quality through high, reproducible deburring results
- High level of efficiency through short cycle times



We offer you the opportunity to carry out thorough tests at our Technology Centre.



The Geyser is suitable for workpieces which have to conform to the highest safety and cleanliness requirements. The high-pressure water jet is directed at the critical points of the component. The high kinetic energy deforms the burr, causing it to break and come away from the component. Swarf, burrs and other contaminations are removed reliably even in hard-to-reach deburring locations, e.g. deep or small boreholes, blind holes and undercuts.



Technical information

Brief description

The **Geyser d** is a high-pressure deburring system. A high-pressure water jet with multiple rotating nozzles or individual lances is used for deburring. The spray-water protected robot ensures efficient and safe component handling. The water tools and the robot are housed in the processing chamber. The high-pressure pump, the storage container, the filter system and the booster pump are installed in the unit chamber with separate access.

Basic system

Handling: robot assisted component guiding

Water tools: two tools as a standard –

multiple rotating nozzles and individual lance

Optional: other water tools possible
Robots: water-resistant Fanuc robots

Pump unit: frequency controlled Hammelmann pump

Housing: stainless steel

Control and operation: Siemens Simatic with Siemens touch panel

Bath monitoring: Libelle Fluid Control

System types	Pressure range	Name
high-pressure cleaning	100 – 200 bar	Geyser c (cleaning)
high-pressure deburring	250 – 1000 bar	Geyser d (deburring)
high-pressure paint	2000 – 3000 bar	Geyser p (paint stripping)

Standard sizes	Unit	
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Effective length	mm	800
Effective width	mm	600
Effective height	mm	400
Load capacity	kg	50
other technical data and on-site services on request		

High-pressure deburring in the process



High-pressure deburring combined with pre-cleaning and subsequent fine cleaning



Supplementing the system with vacuum drying



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

Everything from one source!

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















1. Pre-cleaning

2. Deburring

3. Fine cleaning

4. Drying

5. Cooling



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