

**BvL**  
Oberflächentechnik



That's **fine.**

No that's **precision.**



**Immersion cleaning systems**

## Cleaning solution for highest requirements in precision cleaning - tailored exactly to what's needed



**Atlantic**

The **Atlantic<sup>TR</sup>** multi-chamber immersion cleaning system can handle the most stringent requirements in terms of the smallest particles and film contaminations in precision and ultra-precision cleaning. Various different cleaning processes can be deployed in this multi-stage system. Its modular design allows it to be adapted flexibly and individually to your needs.

### Areas of application:

Suited to various tasks in high-precision industries with the highest cleanliness and capacity requirements: the automotive sector, including state-of-the-art powertrain technology (e-mobility); hydraulics and pneumatics; optics; electronics; aerospace; the coating industry; high-purity sectors; and the watch and jewelry industry.

### Flexible system:

#### Material flow at a glance:

Custom system design allows optimum integration into your production process, such as flexible positioning of loading and discharging stations (inline)

#### Scalable:

The system can be scaled up or down to suit the customer's requirements, allowing anything from ultra-small fine parts to large components with high batch weights to be cleaned

#### Everything from one source:

The immersion cleaning system can be combined with other water-based cleaning systems, taking the entire production process into account

# Your advantages – not just clean, exquisitely clean!

## Focus on your component:

- ✓ What your component requires in terms of cleanliness determines what series of cleaning procedures is chosen – for the best possible results
- ✓ For complex part geometries
- ✓ For high throughput rates
- ✓ Variable ultrasound cleaning for an efficient, deep action that is gentle on materials
- ✓ Interface communication and identification systems for tracking workpieces

## Environmentally and economically efficient:

- ✓ Cleaning basins in a cascade arrangement reduce water consumption
- ✓ Insulation provided by high-quality insulating material and machine housing
- ✓ Smart Cleaning technology



Usable  
length, width,  
and height  
as well as carrying  
capacity can all be  
individually  
adjusted

## Highest quality:

- ✓ Spacious viewing windows for monitoring operations in the machining area
- ✓ Rugged, high-quality design for a high degree of stability



## Cleaning technology

- Perfectly coordinated combination of different cleaning procedures in a multi-stage system
- Automated gantry transfer unit that can be programmed in a flexible sequence
- Components can be moved via vertical oscillation and/or swiveling/rotation (optional)



## Processing steps

The components are immersed into several basins with different treatment stages:

- Immersion cleaning, immersion degreasing, phosphating, spraying, injection cleaning, ultrasound (optional), rinsing, passivating, drying (optional)
- The treatment processes can be individually adjusted and are aligned with the cleanliness and drying result that needs to be achieved
- Variable number of treatment basins possible



## Options and extensions

- Ultrasonic cleaning with sweep function (frequency modulation) in single, dual, or multi-frequency
- Lifting motion for components inside the dip tank
- Rotating baskets
- Surface flooding in the individual baths
- Cascade guiding
- Filtration systems/oil separator
- Ambient air, vacuum, or infrared drying
- Various feed and removal systems
- Custom-designed component carriers
- Process reliability and quality control: RFID/barcode systems, connection to higher-level IT systems (e.g. OPC or customer's own systems), Libelle



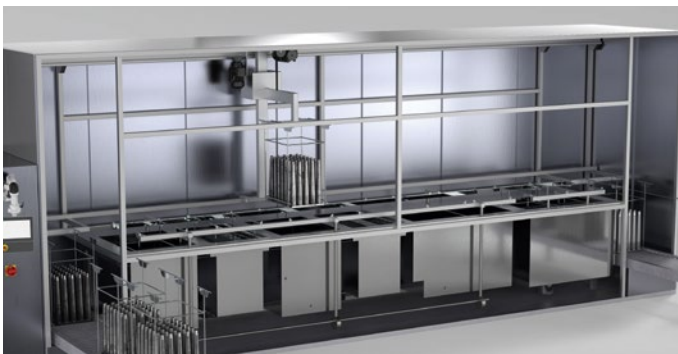
## Smart Cleaning

Smart Cleaning makes BvL cleaning systems "intelligent" and allows predictive maintenance. The various apps show any changes immediately. Sub-processes are self-regulating.

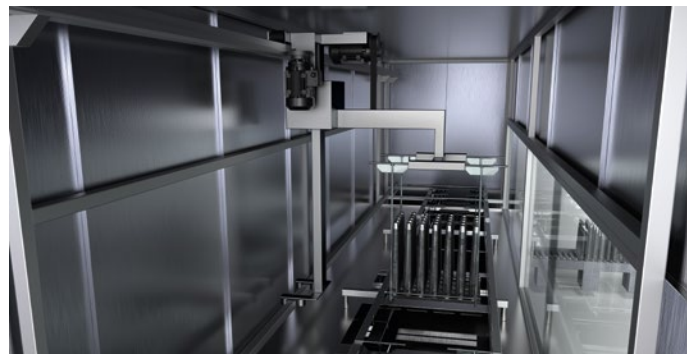
# Maximum precision, economic efficiency, and process reliability

We determine the ideal cleaning solution for you, tailored precisely to your needs. We carry out extensive cleaning trials at our in-house technical center using your original components in order to identify which processing technology is best for you. We also have a local presence internationally thanks to our strong sales and service network.

Our cleaning system will fit seamlessly into your production flow and will be perfectly coordinated with the conveyor technology that you use for your production. Your internal processes determine the design of the system.



The number of treatment stages can be freely selected and depends on the process steps required in order to achieve the specified degree of part cleanliness.



Goods are transported inside the system by a gantry transfer unit, which can be programmed in any sequence.



Variable loading and discharging stations for loading and unloading: can be positioned both at the sides and at the front (inline).



**!** Scan now to find out more.