



## System PowerJet

The modular all-rounder

### FEATURES AND STANDARDS

- High standardisation grade and use of standard parts
- High quality performance in production and assembly
- Can be extended and expanded at a later date
- Low operating costs at high availability

The LPW-PowerJet modular series is currently our most powerful system for meeting premium purity requirements in all high-tech branches. At the end of the 1990s the automotive industry and industry in general were investing in single-chamber immersion systems because these were seen as the standard for almost all applications regarding final cleaning tasks. Multi-chamber systems have since been added to these because they offer a much wider process scope. This applies particularly for the final cleaning of medical system devices or components for the semiconductor industry which usually takes place on wet benches/serial immersion bath systems. Chamber systems are by now far superior under consideration of all the relevant aspects. The bottom line is that these plants are extraordinarily flexible and extremely efficient systems that are designed to fulfil all criteria regarding residual purity and at the same time for high availability and low operating costs.

These systems are designed so that they can be integrated ideally into the production processes. Our modular PowerJet system also meets customer requirements for integration as a "quality gate" between the grey room and clean room environment. The unique features of this modular structure include the hermetically sealed treatment chambers, maximum flexibility with regard to throughput and the easily expandable configuration. The design of this system type allows integration of all known cleaning techniques and media processing techniques. With much higher filtration rates and minimised cross contaminations in comparison with all other known systems. We offer a high degree of flexibility with regard to the media-wetted materials (e.g. stainless steel or plastic). LPW also offers suitable automation and control systems. These range from simple automatic loading to complex connections to multi-stage upstream and downstream processes, also under the aspect of batch size 1 and batch tracking if required.

"ADAPTING TO THE TASK DOES NOT MEAN REALISING AN EXPENSIVE SPECIAL SOLUTION"

### // Available cleaning processes



Spray cleaning



Ultrasound systems



PowerJet cleaning technique



Cyclic nucleation (CNp)



Fast emptying

### // Available drying processes



Hot-air drying



Vacuum drying



IR drying system



CNp drying

### / Additional options (examples)



Filtration



Deionised/high purity water system

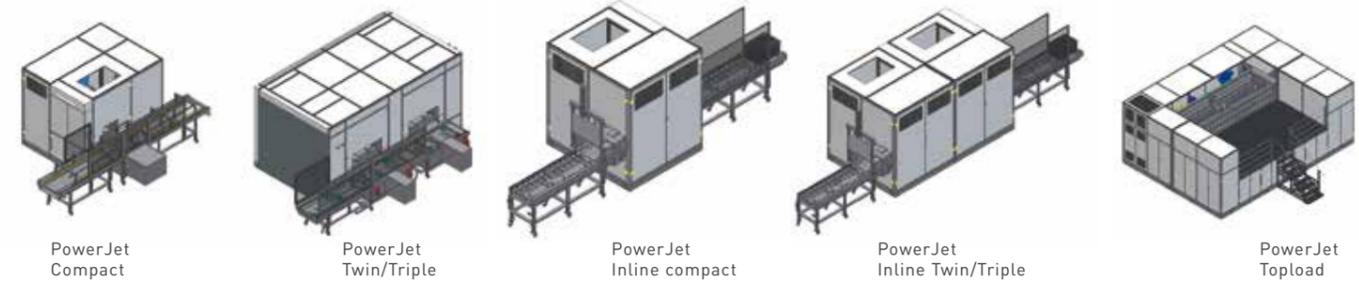


Automation

- » Flexible and extremely efficient system
- » Designed for high residual dirt requirements
- » High disposability at low operating costs



Variants



PowerJet Compact

PowerJet Twin/Triple

PowerJet Inline compact

PowerJet Inline Twin/Triple

PowerJet Topload

# Single/Multi flood washing system

PowerJet - the all-rounder

## GENERAL FEATURES

- » High-quality fine cleaning:
  - Components made of metal, plastic, glass or ceramic
  - Bulk goods or positioned single components
  - Fully or partially automated
  - Cleaning of residual dirt or surface tension
  - Process-reliable removal of chips and processing residues after mechanical processing
  - Use of all known wash-mechanical and wet chemical flooding and spraying techniques
  - Cleaning according to branch-specific purity requirements

670

530

960

## POSSIBLE FIELDS OF APPLICATION



### Premium aqueous fine cleaning

- » Components made of metal, plastic or ceramic
- » Bulk goods or positioned single components
- » Full or partly automated, i.e. diesel-injection components
- » Cleaning on residual dirt of surface tension

### Removal of coarse contaminants

- » Preparation for overhauling of a second-hand engine
- » Removal of contamination from usage before crack tests
- » Cleaning after lugging
- » Cleaning after grinding and polishing processes

### Cleaning before/after thermal deburring

- » Removal of tinder residues before final assembly or processing
- » Removal of oil / emulsion residues as TEM-preparation i.e. hydraulic components

### Fine cleaning of stainless steel/ aluminium components

- » Process-reliable removal of chippings and processing residues after mechanical treatment
- » Preparation for meter/ leak test operations i.e. extension components, engine/transmission production
- » Cleaning of residual dirt or surface tension

### Cleaning of engine- and transmission-components

- » Aluminium, steel and grey cast iron components
- » Process-reliable removal of chippings and treatment residues after the mechanical treatment
- » Preparation of the components for meter/ leak test operations
- » Cleaning of residual dirt or surface tension

### Cleaning before/after heat treatment (hardening)

- » Removal of organic residues (normally emulsion)
- » Cleaning of processed components before further assembly

- » In addition to tailor-made, customised designs, modular standard systems are also available:
  - 530 (batch size 530 x 320 x 200 mm)
  - 670 (batch size 670 x 480 x 300 mm)
  - 960 (batch size 1020 x 650 x 560 mm)
  - as well as all special sizes

- » With standing or lying media templates

- » Possible integration of all known cleaning techniques (e.g. spray/flood cleaning, ultrasound, cyclic nucleation, fast emptying, etc.)

- » Possible integration of all known drying techniques (e.g. hot-air, vacuum, CNP, IR, steam drying, etc.)

- » Possible integration of all known media processing techniques (e.g. full power filtration, bypass filtration)



More than cleaning

