



Innovative system solutions for industrial parts cleaning

02 **PURIMA**[®] Innovative system solutions for industrial parts cleaning

PURIMA® WE LIVE CLEANING TECHNOLOGY

PURIMA[®] is the industrial parts cleaning specialist. For over 25 years our passion has been developing and manufacturing innovative and custom system solutions, while working closely with our customers.

Every day, our equipment is used by customers around the world in a range of industries, especially in the automotive, space and aerospace, rail and traffic engineering fields and also metals and plastics. We work together with our customers to ensure the required cleanliness standards are met using the right process from our own in-house technology range.

People make machinery

Our professionals are there to assist our clients with advice, assistance and expertise: They are our greatest asset - highly qualified experts working consistently to implement the highest quality PURIMA® technical solutions. Innovative cleaning technologies such as ultrasonic, spray cleaning, pressure flooding, injection flooding or high pressure water cleaning form the basis of our developments.

Global – International

To help meet the requirements of global customer base, we have selected the DENIOS Group as a partner. This means we have access to a wide network of branches in Europe, the USA and Asia. This new focus and direction has led to a change to our 25 year old company name from RPE Pape Anlagentechnik GmbH & Co. KG to PURIMA GmbH & Co. KG.













ROTOTRONIC® THE SPECIALIST AMONG CLEANING APPLIANCES

Aqueous cleaning equipment such as Rototronic[®] is able to carry out all the movements and angular positioning required to clean components with a complex geometry. In Rototronic[®], all the traditional processes can be combined into a multi-step procedure. Multidimensional angular positioning and rotation within and above the process baths guarantee that the most stringent cleanliness requirements can be met. A Rototronic[®] is custom designed for processing individual parts and bulk goods in parts-specific retainers.

- Exact angular positioning of the components
- ✓ Rotation within and above the process baths
- ✓ Oscillation
- Integration into customer specific logistics, infrastructure and production lines
- Adapted to components, cycle times and quantity
- Heavy weights and large dimensions can be handled









FLOWTRONIC® A CONTINUOUS CLEANING CHAIN REACTION







Aqueous cleaning equipment like Flowtronic[®] is designed to handle high numbers of series parts while ensuring the highest levels of cleaning quality. In multi-stage continuous cleaning equipment, cleaning processes such as ultrasonic, spray cleaning, drying or high pressure water jet technology can be combined.

Our Flowtronic[®] V excels in the optimal handling of complex parts, enabling multiple changes of position in the dip and spray processes, above or below the surface of the bath.

Flowtronic[®] H transports parts horizontally. Different spray and drying processes are combined in this piece of equipment.

 Consistent cleanliness requirements with high levels of material throughput

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- ✓ Flexible parts retainer arrangements
- Seamless process integration
- Separation of zones
- Minimal carry-over and extension of bath life
- Multiple options for combining cleaning technologies
- Optimisation of costs with targeted medium treatment





HIGH PRESSURE EQUIPMENT ENERGY- GETTING TO THE HEART OF THE MATTER

PURIMA® high pressure cleaning equipment uses just water without the addition of chemicals and with the maximum mechanical energy. This cleaning technology is used in our proven equipment or robot-assisted high pressure booths. Depending on customer requirements surfaces can be decoated, weld seams cleaned, residues removed or components deburred. Component geometry and parts quantities determine the design of the final process and handling technology used.

- Environmentally friendly, chemical-free
- Stepless pressure adjustment up to 4000 bar
- Can be used for individual parts cleaning and continuous cleaning technologies
- Able to handle complex geometries, contour paths
- Does not attack the surface















MODULAR EQUIPMENT CLEANING À LA CARTE





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If your product range is very varied or changes, your cleaning processes need to be flexible too. Cleaning requirements can change from tool to tool or depending on customer contract. For this reason, PURIMA® provides modular equipment to cover a broad range of tasks. Various types of ultrasonic, spray cleaning or drying baths can be linked together to form a modular cleaning unit. This is how we create custom cleaning solutions for our clients.

PURIMA[®] modular equipment also offers excellent flexibility for daily handling tasks. Modules can be used independently of each other. Handling tooling and additional accessories are available to build numerous combinations- from individual modules to automated equipment with multiple baths.

- ✓ Freely combinable cleaning technologies
- Modular design
- Components can be used independently
- Optimised for small series and individual applications
- ✓ Configurable regardless of industry
- Can be extended at any time





MEDIA TREATMENT NOT TO BE UNDERESTIMATED

Regardless of which cleaning technology our customers eventually choose, the performance required can only be ensured if the media used in the equipment has the highest levels of cleanliness and cleansing action. Our media treatment systems are therefore of great importance, playing a key role in ensuring final cleaning quality.

PURIMA[®] has individually designed filter and treatment solutions for various requirements. We have a special treatment technology to suit every type and severity of cleaning media contamination. We help our customers choose the

best one for their requirements. The equipment selected must be economical and suited to the purpose to increase bath life and minimise disposal costs.

- ✔ Oil separator
- ✓ Bag or cartridge filter
- Band filter
- Metal edge filter
- ✓ Membrane filtration
- Chemical-physical waste water treatment















RINSING AND TEST RIGS WHERE EVERYTHING COMES TOGETHER



Rinsing and test rigs can be used for fluid, climate control and servo components where there are very high cleanliness requirements. This systems technology enables various process steps to be combined through customer specific adaptation of the components. In this way, complex tubular or pipe parts in different materials, eg rubber - metal joints, can be treated both internally and externally. This flexible technology with numerous options for configuration ensures effective cleaning and testing of a wide range of parts.

- ✓ Internal and external cleaning
- ✓ Rinsing with change of flow direction
- ✓ Pulsing
- Blowing out
- Through flow testing
- Pressure testing
- Vacuum drying
- Heating
- Application of corrosion protection







PURIMAT SMALL BUT POWERFUL

Cleaning requirements for components in production industries vary greatly. Not every company needs a large scale plant capable of cleaning high numbers of parts in short cycles. It's precisely for these customers that PURIMA® has created versions of the standard equipment in a range of sizes. Each one is optimised for cleaning smaller quantities of parts. The equipment doesn't just give professional cleaning results- it also has a convincing environmentally-friendly energy balance. The Purimat can be equipped with one of the following cleaning technologies:

- Brush cleaning for light contamination
- Spray cleaning for medium to heavy contamination
- ✓ Ultrasonic cleaning for stubborn dirt





LABORATORY AND TECHNICAL CENTRE CLEANLINESS CAN BE MEASURED



Before our engineers can begin to design a piece of equipment, in-depth analyses are needed to determine the specific technology to be used. In our in-house laboratory process engineers develop custom cleaning chemicals. These not only meet the highest standards for cleaning action and environmental sustainability - economy is also an important requirement. At the PURI-MA® Technical Centre, sample cleaning trials are conducted for every customer to determine the optimum combination of mechanical, temperature, chemical and time factors. With every project completed we are adding to our decades of experience.

- Determination of cleanliness class
- Specification of process technology
- In-depth, customer-specific requirements are determined
- Continuous support and process optimisation

VENTILATION TECHNOLOGY PROBLEMS VANISH INTO THIN AIR

Whether industrial, chemical or pharmaceutical, day-to-day production processes create emissions when handling hazardous substances. We need to protect ourselves and the environment from these emissions. Pollutants in the air impose a range of demands on workplace ventilation technology. For each work environment in a trade, industry or laboratory setting we will design a suitable ventilation technology solution.

Using effective ventilation and venting or effective extraction of the hazardous substance at the point of creation, we can ensure that the legal thresholds are easily observed.

- Extraction benches for workshop processes
- ✓ Hazardous materials workstations
- Multi-task workstations
- ✓ Individual extraction equipment
- Complete industrial systems
- ✓ Air washers
- Clean rooms
- ATEX approval













PURIMA INDIVIDUAL. PERSONAL. COMPETENT.



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