

Years ago, solvent-based systems were quite common. However, due to more stringent use and disposal guidelines, larger-scale and more critical part cleaning applications now utilize a water-based detergent process. This process meets the cleaning requirements by reducing manufacturing debris in parts prior to being assembled into the final products. Global Filter can help users meet these quality requirements.

## **Filtration Technologies**

In order to improve the cleanliness of the parts and the cost-effectiveness of the process, most parts washers include filtration technologies. The selection of the correct filtration technology is critical to reduce rejected parts, re-work, nozzle-plugging, and scrap. In addition, filtration will extend the overall life of the wash and rinse fluids, reduce labor hours, and minimize disposal costs.

The proper filtration technology is decided by the required level of cleanliness (usually dictated by how/where the part will be used). The cleaning process consists of a series of stations, each having its own dedicated fluid tank. One or more wash stages are followed by one or more rinse stages. Each consecutive wash or rinse stage requires finer filtration. The wash/rinse solution is pumped from the holding tank (from a low position port), through a filter vessel and back to the same tank (to a port located higher & on the opposite side from the suction). This closed loop system arrangement ensures constant agitation/turnover of the fluid while removing the contaminants. The ultimate cleanliness of the parts is limited to the cleanliness of the final rinse stage. For this reason, the final rinse stage requires the highest level of filtration.

In addition to solid contaminants, oil can also be an issue in parts cleaning applications. Although oil is not a solid, free oil can be significantly reduced by properly selected filtration. Global Filter has vast experience in part cleaning, and has seen success in removing free oil by using one of our polypropylene microfiber products.

## **Parts Cleaning Process**

WASH STAGE 1 (Broad Particle Distribution)

Tank (W1) → pump → coarse bag or cartridge filter → back to Tank (W1)

# WASH STAGE 2 (Broad To Narrow Particle Distribution)

Tank (W2) → pump → finer bag or cartridge filter → back to Tank (W2)

### RINSE STAGE 1 (Narrow Particle Distribution)

Tank (R1) → pump → finer bag or cartridge filter → back to Tank (R1)

## RINSE STAGE 2 (Narrow Particle Distribution)

Tank (R2) → pump → polishing/final bag or cartridge filter → back to Tank (R2)

### **Our Products Used in the Parts Cleaning Process**

Visit our website for product details:

- Single & Multi-Round Bag Vessels
- Band-Clamp Cartridge Vessels
- Liquid Filter Bags
- Meltblown PP Cartridges
- HFB Series Pleated Cartridges
- PP & PPE Series Pleated Polypropylene Cartridges



Global Filter designs innovative and efficient filtration solutions. Our high-quality filters combined with our technical expertise allow us to offer you solutions that take the guess work out of your process. Our solutions optimize the service life of filters, reducing waste to positively impact the environment, while increasing your productivity. Consistent, cost-effective and high-quality filters allow you to achieve a consistent, high-quality product while adding to your bottom line.

# **Our Filtration Solutions Are:**



#### Safer

Our products meet US and EU standards for purity and safe use with food and beverages



## Healthier

We develop products that improve the quality of life for humans and animals



#### **More Productive**

Our solutions allow you to produce more product at a lower cost, improving your bottom line

# **Advantages To Working With Us:**

- Access to an extensive network of filtration professionals from all over the world who have experience with thousands of unique processes and applications
- Manufacturing facilities in North America and Europe
- Products designed to maximize your productivity, product quality and bottom line
- Ability to quickly adjust to your changing needs
- Technical support from initial conversations to implementation and beyond
- Shortest lead times and highest value in the industry

