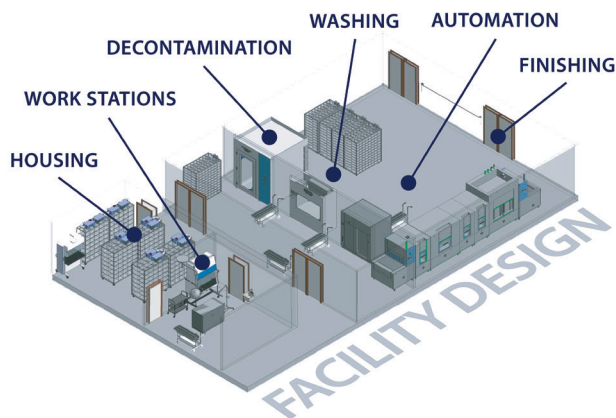


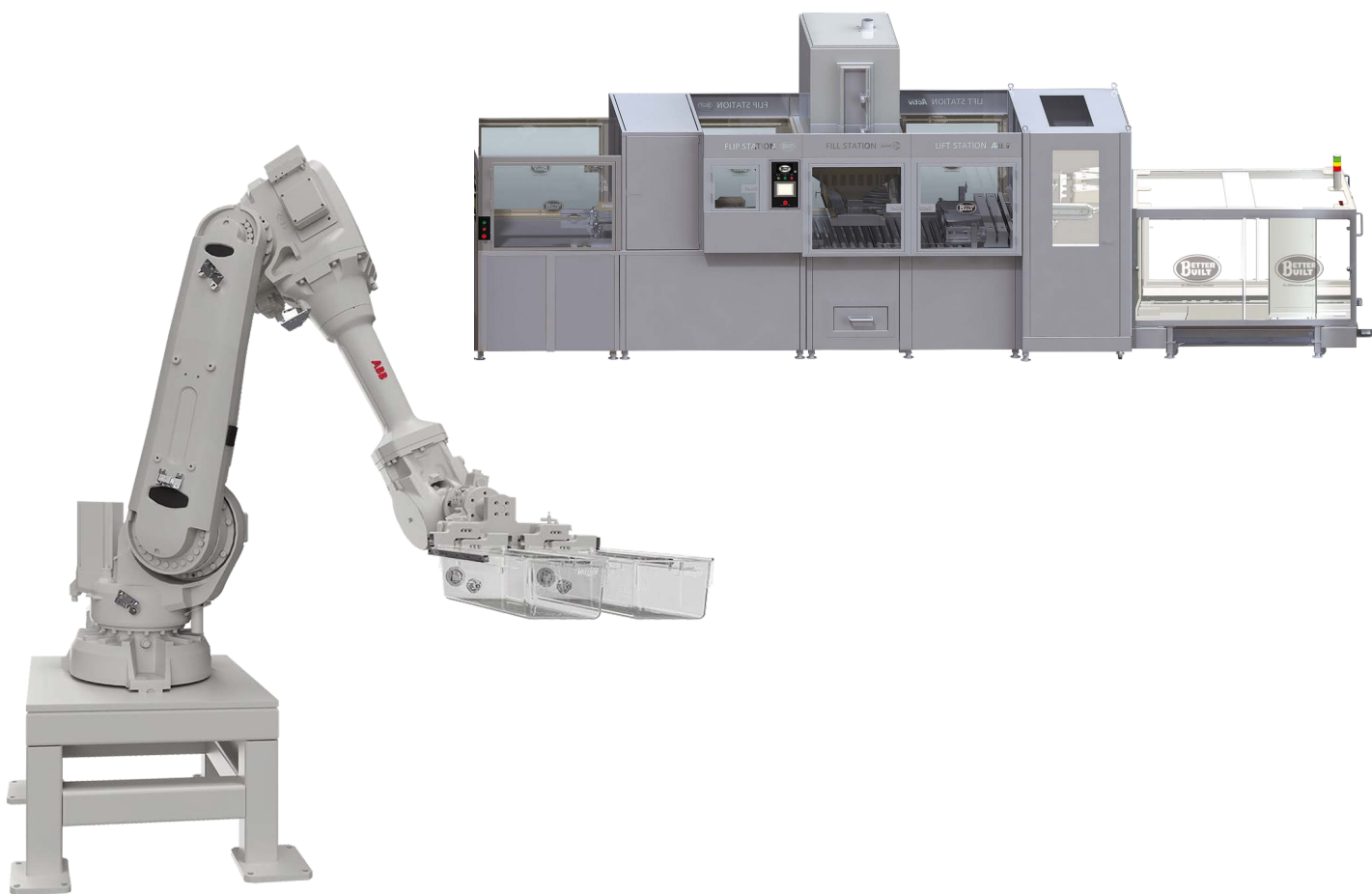
## Your trusted global partner providing critical solutions

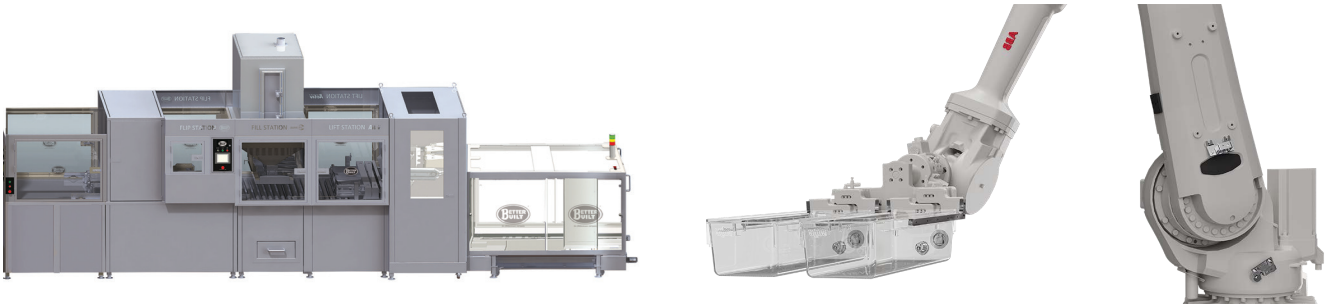
For over 50 years, Allentown has provided key solutions to the biomedical research community. Our high-quality equipment and advanced vivarium systems continue to define and exceed industry standards. Innovation, quality and service are at the heart of the customer experience.



# Automation Cage Wash

ACTIV & INFINITY





## Flexible and Tailored Automation Solutions

At Allentown, we understand that every laboratory animal research facility is as unique as the research it conducts. That's why the automation we offer are flexible solutions tailored to your research facility's specific needs, including processing of multiple types of cages, operating with rack washer or tunnel washer, providing partial or integral cage handling. Whether you're looking for a solution based on throughput size, ergonomics, streamlined operations or personnel safety, we'll help you choose the best solution to help you enhance your operations.

### Activ™ Automation System (IAS)

**A high-performance, fully-automated tunnel washer designed to manage the entire cage washing process, from scraping off soiled bedding to dispensing fresh bedding.**

This robust and effective design uses mechanical conveyance and fixed controlled movements through pneumatic systems to flip and scrap cages, etc. It handles partial cage (base only) wash process enhancing your tunnel washer performances.

### Infinity™ Robotics System

**Flexible cutting-edge systems designed to perform complex tasks with precision, able to handle multiple variants of cage sets, utilising our advanced programming and vision technology.**

These customised systems execute complex operations with precision, handling partial (base only) and integral cage (base, feeder and lid) in soiled and clean areas in combination with rack washers and tunnel washers.

## Key benefits of automation

**Address Labor and Retention Challenges** – Automation helps alleviate the strain caused by labor shortages and high staff turnover by streamlining routine and undesirable tasks, allowing staff to focus on higher-value work.

**Increase Personnel Safety and Allergen Exposure** – Promoting staff safety, automation reduces manual handling of potentially hazardous materials, including soiled cages and bedding to create a safer work environment with less exposure to LAA\* for staff.

**Improve Animal Welfare** – Consistent automated cage handling also greatly improve welfare by reducing contamination risk through aseptic cage handling.

**High and consistent throughput** – Automation allows streamlining your operations to ensure return of cages to the facility in time for maintaining the integrity of ongoing research. It will keep your washing area running steadily and uninterrupted all day long all to achieve your throughput requirements.

\* LAA – Laboratory Animal Allergen.

<h2>ALL-BASES</h2> <p>Best solution for highest throughput</p>	<h2>ALL-IN</h2> <p>Best solution for applications focused on reducing LAA and improving aseptic process</p>	<h2>ALL-FLEX</h2> <p>Best solution for maximum flexibility and optimal operations</p>
<p>Systems on dirty and clean areas to manage the cage base only</p> <ul style="list-style-type: none"> <li>■ Dirty side Pick, Dump, Scrape, Place</li> <li>■ Clean side Pick, Fill, Stack</li> </ul> 	<p>Systems on dirty and clean areas to manage cage base + lid +/- feeder</p> <ul style="list-style-type: none"> <li>■ Dirty side Pick, Disassemble, Dump, Scrape, Place</li> <li>■ Clean side Pick, Fill, Reassemble, Place</li> </ul> 	<p>Systems on dirty and clean areas can manage both Partial and Integral cage wash process</p> 
<h3>Rack Washer</h3>		
<ul style="list-style-type: none"> <li>■ Automatic Dump Station (ADS) - Scrape only</li> <li>■ Infinity Robotic Solution</li> </ul>	<ul style="list-style-type: none"> <li>■ Infinity Robotic Solution</li> </ul>	<ul style="list-style-type: none"> <li>■ Infinity Robotic Solution</li> </ul>
<h3>Rack washer work flow</h3>		
<ul style="list-style-type: none"> <li>■ ADS: dedicated pallet (80 cage bases)</li> <li>■ Infinity: Skate board (72 cage bases)</li> </ul>	<ul style="list-style-type: none"> <li>■ Transport rack (40 full cages)</li> </ul>	<ul style="list-style-type: none"> <li>■ Skate board (72 cage bases)</li> <li>■ Transport rack (40 full cages)</li> </ul>
<h3>Tunnel Washer</h3>		
<ul style="list-style-type: none"> <li>■ Activ Automation System</li> <li>■ Infinity Robotic System</li> </ul>	<ul style="list-style-type: none"> <li>■ Infinity Robotic System</li> </ul>	<p>Infinity Robotic System</p>
<h3>Tunnel washer work flow</h3>		
<ul style="list-style-type: none"> <li>■ Activ fishbone cart (various cage base quantities)</li> <li>■ Infinity : Skate board (80 cage bases)</li> </ul>	<ul style="list-style-type: none"> <li>■ Transport rack (40 or 80 full cages)</li> </ul>	<ul style="list-style-type: none"> <li>■ Skate board (80 cage bases)</li> <li>■ Transport rack (40 or 80 full cages)</li> </ul>

## Key benefits of Activ System

- Tunnel washer
- Partial cage handling

**Throughput and streamlining operation** – Handling 4 cages at a time, this solution allows for high throughput in facilities that required 24/7 processing to meet the demands of high-capacity facilities.

**Flexible** – The Activ IAS system is highly customisable and easily upgradeable. Its modular design allows for the processing of various laboratory animal research items, from rodent cages to miscellaneous accessories like cage filter tops and bottle baskets. Operators can also switch to manual mode if needed. This adaptability ensures that the system can evolve with changing needs.

**Safety** – The Activ IAS system prioritises operator safety, eliminating the need for safety cells. The system is enclosed in a negative-pressure chamber including dust collection systems, so operators can work alongside the unit without a face mask, remaining totally protected from LAA even during the bedding emptying and filling processes. The Activ system also allows for safe manual interaction without the need to shut down operations.

## Key benefits of ADS

- Stand-alone unit
- Partial cage handling

**Streamlining operation** – This Automated Dump Station (ADS) enhances facility efficiency by reducing manual labor and ensuring consistent, reliable results.

**Enhanced Operator Safety and well-being** – The unit limits exposure to hazardous allergens, therefore minimises risks in the workplace, creating a safer, healthier environment that boosts employee well-being and retention.

**Cost-effective automation solution** – With this stand-alone system, you can streamline your cage-washing operations without a full automation overhaul. The ADS offers a cost effective way to improve efficiency in a critical area and helps your facility meet evolving compliance standards while laying the foundation for future upgrades, all within budget.

## Key benefits of Infinity System

- Rack washer and Tunnel Washer
- Integral, Partial, Fully comprehensive

**Throughput and streamlining operation** – For high throughput in facilities that required 24/7 processing with multiple cage variants, and that wish to eliminate all cage handling by operators.

**Flexible** – The Infinity Robotic System is highly adaptable and can handle all types of rodent cages at the same time, without human intervention and without having to separate the different cage types or components. The system will automatically detect what cage variant is loaded and adapt its configuration accordingly. The programme can be reconfigured to evolve as needs change.

**Safety** – The Infinity Robotic System is installed in a safety cell where operators load/unload transportation racks from outside, completely eliminating exposure to LAA during bedding dumping and filling operations. By opting for the integral cage handling, operators don't handle the cage at all and are never exposed to an open cage outside an animal transfer station or safety cell, making your facility low-allergen workplace and the safest animal research facility.

