

areas in different many hours per week, having different many workers allocated etc, and still having more or less the same requirement for throughput.

The robot and its gripper will also be designed to assist in achieving the requirements. The number of cages the gripper can handle at the same time, the robot cell layout and the actual speed of the robot movements are key details our system planners look at.

Having so many parameters to work with during the design phase gives DETACH the possibility to always meet the requirements, whether they are minimum floor print, maximum throughput, short working hours or other requirements that is in our clients focus.

The DETACH Systems as of today can be designed to handle up to 700 cages per hour.

DETACH has achieved Worldwide Leadership in the scientific research market by understanding our customer's requirements and by

providing the highest quality, most productive systems in the industry. Our integrated system of products, services, and technologies provides solutions for the customer by minimizing contamination risks, improving operational efficiencies, containing costs, and improving workplace environmental conditions.

DETACH is the first name in the laboratory animal research, improving operator health, and optimizing facility productivity. Our many years of experience provide an efficient operation that facilitates thorough cleaning, sanitization, and drying of your laboratory animal caging systems.

The DETACH System greatly improves work environment conditions by removing potentially harmful allergens and airborne contaminants and by reducing the risk of repetitive motion injuries.

Additional Systems and Support

In addition to the innovative solutions that the DETACH System delivers, DETACH also provides you with an extensive offering of complementary products, systems, and services that allow you to take advantage of our integrated approach.

DETACH DYNAJET Cage & Rack Washing System

Designed and manufactured at our UK manufacturing facility, our range of cage and rack washers are designed for high capacity, efficient cleaning, sanitization, and drying of cages, racks, debris pans, feeder bottles, and other miscellaneous items used in the care of laboratory animals.

Ymer Automated Cage CW and Bedding Processing System

Designed and manufactured in Sweden, DETACH provides a Cabinet Washer based automated system for the washing of cage bottoms, incl bedding management, used in the care of laboratory animals.

Frej and Freja Bottle Processing Systems

Designed and manufactured in Sweden, DETACH provides a range of

bottle processing equipment that is designed for semi automated or automated handling, de-capping, emptying, washing, filling and re-capping of feeder bottles and sipper tubes used in the care of laboratory animals.

DETACH Vacuum System for Bedding Management

Designed and manufactured in Sweden, DETACH provides a range of bedding management equipment that is designed for manual or automated handling of soiled and clean bedding used in the care of laboratory animals.

DETACH Service

Service and support is a very important part of the DETACH organization. Our personnel have built up strength and expert knowledge that has come from the continuous support of all our systems that are all over the world for over a decade.

DETACH operate excellent planned maintenance contracts covering all areas.

DETACH Automated Cage TW and Bedding Processing System



Cage washing and bedding management never stayed the same...

DETACH

The Original - since 1996

DETACH AB

Sundbyvägen 24, SE-645 51 Strängnäs, Sweden

Telephone: +46 (0) 152 228 30, Telefax: +46 (0) 152 130 80

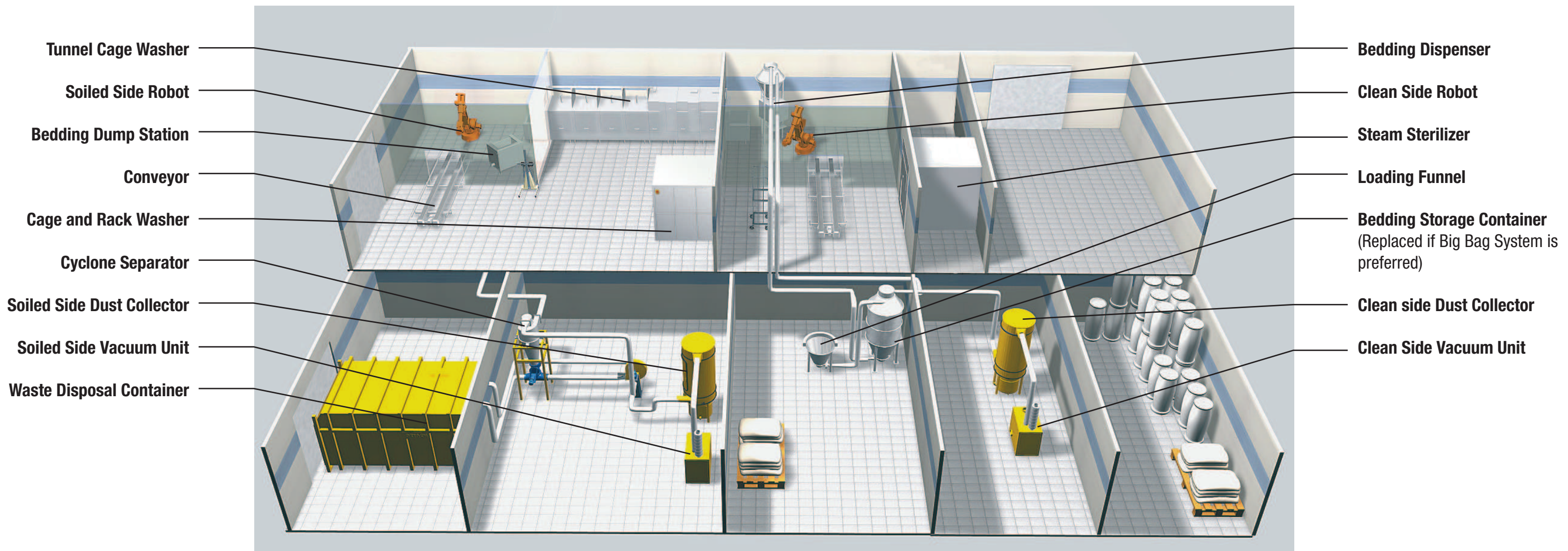
Mail: info@detach.com

www.detach.com

DETACH

The Original - since 1996

DETACH Automated Cage TW and Bedding Processing System



When we first introduced robotic handling to the scientific research market back in 1996, who could have thought we would be changing the view of cage cleaning and bedding management of a whole community?

The fact is, *we were pioneers*, and together with our first clients we created the future we see today. That is why we state, with pride: *The original – since 1996.*

After the introduction we have installed more than 70 robots to handle your cage washing and bedding processing, helping you take benefit of the superior environment and productivity the automated systems bring. In addition to this we have installed over 100 vacuum systems to simplify the bedding management in your facilities as well as improve the safety and allergen protection.

During this period DETACH has achieved worldwide leadership in automation of the cage washing and bedding processing by working very closely with our clients and understanding and adopting to their unique requirements. As we continue to develop our systems and meeting new demands we have looked at our experience as pioneers and, in combination with what you value the most when developing the best system solution for your needs, we have established The DETACH Commitment.

We bring you:

- **Dedication** DETACH specializes in bedding management, cage

washing and automation for the laboratory animal research market. All our focus is directed to this area.

- **Innovation** Animal care takes place within a multifaceted, dynamic environment where technical evolution is constant. An innovative and open minded approach is necessary as we face this evolution. DETACH takes pride in realizing new thoughts for improvement together with our clients.
- **Independency** DETACH is a dedicated engineering company with no commercial links to any caging manufacturer. This guarantees complete impartiality and we work with any manufacturers cages. This also ensures that over the entire 20 years plus lifetime of the system you will be able to take advantage of any technical or cost innovations that arise with regard to cage design from different caging manufacturers.
- **Experience & Knowledge** Experience is defined as “accumulated knowledge”. First DETACH System installed in 1996. As of today we have an installation base of 72 working robots in the US and Europe. More than a decade of experience and many millions of cages processed. **Knowledge accumulated!**

The DETACH System is the industry’s most advanced and proven method of managing your laboratory animal research wash facility. Designed for any types of cages, feeder bottles, and baskets, the DETACH System creates a safe, productive and environmentally smart workplace.

Experienced system planners from DETACH can assist you in customizing a configuration with a focus on the most efficient use of space within your wash area.

The operation is simple. Rodent cages with soiled bedding, for example, are stacked on pallets positioned within transport carts. These pallets are then placed on the soiled side conveyor, which automatically advances toward the soiled side robot. When the pallet is in its proper unload position, the robot locates and recognizes the next soiled cage, dumps out the waste bedding into the bedding dump station, places the cage on the tunnel washer conveyor belt, and communicates the required wash cycle to the tunnel washer’s control system. After the cage proceeds through the tunnel washer and is thoroughly cleaned, sanitized, and dried, the clean side robot removes the cage from the tunnel washer conveyor belt and places it under the bedding dispenser. The bedding dispenser fills the cage with a preset amount of clean, dry bedding. The robot then places the cage on the awaiting pallet which advances along the clean side conveyor. Finally, an operator removes the fully loaded transport cart containing clean, filled cages from the system.

Operational Benefits

The value that the DETACH System delivers to our customers is easy to understand:

- **Minimizes operator exposure to potentially harmful airborne allergens in the workplace. Reported reduction 99 %.**

- **Greatly reduces the risk of repetitive motion injuries.**
- **Protects laboratory animals by removing dust from workspace air and bedding.**
- **Reduces possibility of cross-contamination between clean and soiled sides.**
- **Creates a clean and quiet working environment.**
- **Maximizes efficiency of facility and staff.**

System Designs and Throughput

The DETACH System is carefully designed to accommodate the unique requirements of each client and facility. The DETACH Automated Cage TW and Bedding Processing System consists of:

- **Robotic Cage Handling System**
- **Bedding Disposal and Airborne Contaminant Removal System**
- **Bedding Dispensing System**
- **Automated Cage Tunnel Washing System**
- **Cage Logistics System**

There is a wide range of tunnel washers that can be selected to achieve the desired wash area layout and cage throughput. The tunnel washer can either be selected as continuous or indexing, it can also be manufactured extra wide and extra long.

Another part of the DETACH System is the inlet and outlet conveyors. These are also designed uniquely for every project in order to support the operational mode of each facility. I.e. facilities may run their wash