

# BOTTLE & CAGE AUTOMATIONS



# BOTTLE AND CAGE ROBOTICS





MODULARITY, FLEXIBILITY, ERGONOMICS, OPERATOR PROTECTION AND COST EFFECTIVENESS: THESE ARE THE KEY FACTORS THAT DRIVE OUR DESIGN, TO PROVIDE CUSTOMERS WITH CUTTING-EDGE AUTOMATED SOLUTIONS

IWT IS THE IDEAL PARTNER FOR YOUR FACILITY AND FOR THE OPTIMIZATION OF YOUR CLEANING WORKLOAD.

SINCE 1999 IWT HAS BEEN DESIGNING, DEVELOPING AND ENGINEERING AUTOMATION SOLUTIONS FOR THE LABORATORY ANIMAL INDUSTRY. TODAY, WITH OVER 100 ROBOTS INSTALLED IN THE MOST PRESTIGIOUS VIVARIUM WORLDWIDE, IWT IS PROUD TO PROVIDE YOU WITH THE MOST COMPREHENSIVE PORTFOLIO OF AUTOMATED SOLUTIONS ON THE MARKET. OUR TEAM OF SPECIALISTS AND ENGINEERS IS AVAILABLE TO SUPPORT YOU FROM PROJECT MANAGEMENT TO INSTALLATION, FROM COMMISIONING TO TRAINING AND MAINTENANCE.

#### OUR COMPLEMENTARY SERVICES INCLUDE:

- 3D DESIGN WE MODEL EVERY SINGLE COMPONENT, MAKING SURE YOUR UNIQUE SYSTEM EXCEEDS YOUR REUIREMENTS
- 3D SIMULATION OF ROBOTIC CELLS AND SOFTWARE
- INTEGRATION AND INTERNAL COMMISSIONING SYSTEMS
   ARE ASSEMBLED AND INTERNALLY TESTED TO ENSURE A 100%
   CUSTOMER APPROVAL RATE, WHICH RESULTS IN QUICKER
   INSTALLATOIN AND HANDOVERS
- THROUGHPUT AND ROI ANALYSIS TO SUPPORT THE CLIENTS IN BUDGET FUNDING AND PROJECT JUSTIFICATIONS





# FULLY AUTOMATED BOTTLE PROCESSING



BOTTLES REQUIRE FAST TURNOVER:
MODERN FACILITIES NEED EQUIPMENT
THAT FEATURE A SMALL FOOTPRINT,
HIGH THROUGHPUT, EXCEPTIONAL
WASHING PERFORMANCE AS WELL AS
OUTSTANDINGLY ERGONOMIC
WORKING CONDITIONS.

ALL THOSE CHALLANGES CAN BE OVERCOME WITH IWT POSEIDON SYSTEM.

# FULLY AUTOMATED BOTTLE PROCESSING

IWT trolleys and carts
have ergonomics
at the heart of
their design!







#### POSEIDON

- Complete bottle automation starting from logistic trolley presentation
- Up to 500 bottles and 500 caps individually washed per hour
- Green Power technology for outstanding results with low energy consumption
- Robotic cell smaller than 3.7sqm (40 sqf)
- Total flexibility to process bottles up to 700ml







- Poseidon takes the crates from transport trolley and loads the P-Line automated bottle washer
- Bottles are then:
  - de-capped and emptied
  - washed
  - filled and re-capped
- Poseidon collects the clean crates and reloads transport trolleys





# PARTIAL CAGE CHANGE



ARES



PEGASUS

IWT SOLUTIONS MEET ALL CUSTOMERS' NEEDS

ARES SYSTEM IS SPECIFICALLY DEVELOPED FOR THOSE FACILITIES PERFORMING PARTIAL CAGE CHANGE PROCEDURES AND LOOKING FOR AN AUTOMATED RACK WASHING SCENARIO.

PEGASUS SYSTEM IS CONCEIVED FOR FACILITIES PERFORMING PARTIAL CAGE CHANGE AND UTILIZING TUNNEL WASHERS.

### PARTIAL CAGE CHANGE





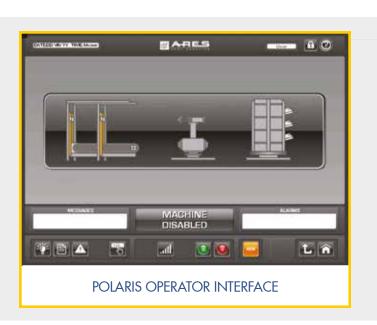


#### ARES

#### FOR PARTIAL CAGE CHANGE AND RACK WASHER

- For small-medium size vivaria, existing or new, processing from 2,000 to 6,000 cages per week
- all hazardous activities can be avoided; operators just have to handle logistics and manage the system through the graphic, user-friendly interface
- The unique gripper design, simulating human hands, can manage all the standard rodent cages available on the market
- Robots take care of dirty and clean side operations:
   Two possible setups (BB and ST) to balance throughput and space requirements with available budgets. Different robot dimensions (from small to medium) and robotic cell footprints, from 12sqm (130sqf) to 20sqm (215sqf) for the solution that better suits your needs





Tailor-made logistics
to fit any standard cage
type and washer
chamber dimension
to maximize
throughput reducing
storage footprint



#### PARTIAL CAGE CHANGE







#### PEGASUS

#### FOR PARTIAL CAGE CHANGE AND TUNNEL WASHER

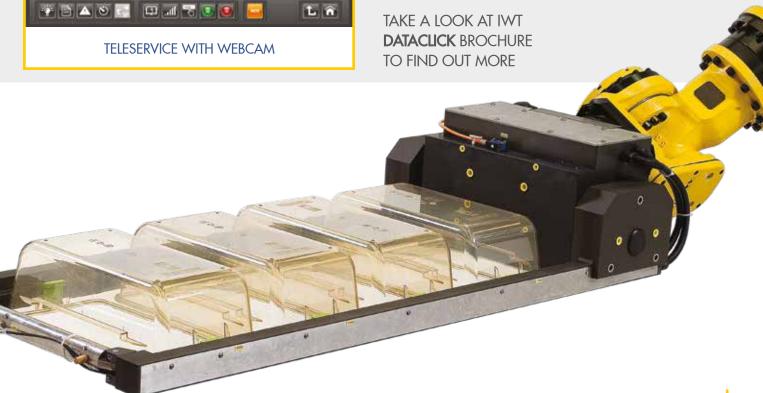
- For existing or new medium-large size vivaria, processing from 4,000 to over 12,000 cages/week
- Combined with IWT ARCADIA Tunnel Washer, it takes care of the entire Dirty and Clean side process guaranteeing full system autonomy
- The Dirty side Pegasus only, integrated with new or existing tunnel washer regardless the manufacturer, is a really cost-effective solution
- Capable of processing all most common type of standard rodent cages available on the market.
   Miscellaneous baskets allow the washing of IVC tops and various items in an automatic way
- Eliminates the requirement for operators to undertake the most unpleasant and repetitive tasks reducing allergen exposure and enhancing operator ergonomics







User-friendly interface featuring remote connectivity for monitoring and controlling





# INTEGRAL CAGE CHANGE



APOLLO



COSMOS

IWT SOLUTIONS ARE UNIQUE IN THE MARKET AND MEET ALL CUSTOMERS' NEEDS

APOLLO IS A PATENTED AUTOMATION SYSTEM DESIGNED FOR THOSE VIVARIA PERFORMING AN INTEGRAL CAGE CHANGE PROCEDURE AND UTILIZING A RACK WASHER.

COSMOS IS A PATENTED FULL AUTOMATION SYSTEM FOR TUNNEL WASHER APPLICATION IN THOSE FACILITIES WHERE INTEGRAL CAGE CHANGE IS PERFORMED.

## **INTEGRAL CAGE CHANGE**









INTEGRAL CAGE HANDLING

Apollo is the first
automated system
in the industry
to process IVC Cages
in their integral setup:
cage Base, wire
Bar lid and top

#### APOLLO

#### FOR INTEGRAL CAGE CHANGE AND RACK WASHER

- For existing or new small-medium size vivaria, processing from 2,000 to 5,000 integral cages per week
- Apollo prevents operators' exposure to allergens and avoids non-ergonomic daily operations
- Available in hybrid configuration to handle both integral cages or cage bases only





- Designed to automate the soil side of the washing area where the most hazardous tasks are performed. An automatic gripped change system allows the robot to handle different cage sizes
- Available in two standard configurations BB and ST with footprint is comparable to the space normally needed to perform manual operations (from 12sqm (130sqf) to 20sqm (215sqf)



### **INTEGRAL CAGE CHANGE**









INTEGRAL CAGE HANDLING

#### COSMOS

#### FOR INTEGRAL CAGE CHANGE AND TUNNEL WASHER

- For existing or new medium-large size animal facilities, processing from 4,000 to over 10,000 integral cages per week
- The system can manage IVC cages in their integral setup covering all the tasks needed both on soil and clean sides of the washing area; operators have just to feed the system with transport trolleys and recollect clean ones as output
- Designed to handle IVC latch-free cages
- Cosmos allows to automatically process also stacks or cage bases, for total flexibility
- Robotic cell footprint: around 25sqm (270sqf)
- Top level allergen containment
- Full process monitored via user-friendly interface



Different scraping solutions available for heavy soil







WASHING PRESENTATION PALLET







manufactured by IWT s.r.l. +39 0332.96701 info@iwtsrl.it

> COMPANY WITH QUALITY SYSTEM CERTIFIED BY DNV ISO 9001

COMPANY WITH ENVIRONMENTAL SYSTEM CERTIFIED BY DNV ISO 14001

> AZIENDA CON SISTEMA DI GESTIONE CERTIFICATO DA DNV UNI/PdR 125

Sister Companies

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