



AUTOMATION





A COMBINATION OF VARIOUS TECHNOLOGIES PROVIDES THE MOST FLEXIBLE, RELIABLE AND CONSISTENT SYSTEMS EVER SEEN. THE VACUUM TRANSFER OF MATERIAL IS SUPPORTED BY SHREDDERS, AUGERS, CONVEYOR BELTS, LAMINAR FLOW HOODS AND INVERTERS TO ENSURE THE BEST OUTCOME FOR YOUR FACILITY.

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

OUR CONSTANT INVESTMENT IN TECHNOLOGIES, AUTOMATION, TOOLING, PRODUCTION CAPABILITIES, STOCK AVAILABILITY, STAFF RECRUITMENT AND TRAINING, TOGETHER WITH THE ISO CERTIFIED QUALITY AND ENVIRONMENT MANAGEMENT SYSTEMS, ARE THE KEY-FACTORS OF IWT SUCCESS.

SINCE 2004 IWT HAS BEEN DESIGNING, DEVELOPING AND ENGINEERING BEDDING HANDLING SOLUTIONS FOR THE LABORATORY ANIMAL INDUSTRY.

TODAY, THANKS TO OVER A DECADE OF EXPERIENCE AND MORE THAN 300 BEDDING HANDLING SOLUTIONS INSTALLED IN THE MOST PRESTIGIOUS VIVARIA WORLDWIDE, IWT IS PROUD TO PROVIDE YOU WITH THE MOST COMPREHENSIVE PORTFOLIO OF BEDDING HANDLING SOLUTIONS IN THE MARKET.

IWT SYSTEMS ARE PERFECTLY INTEGRATED TO PROVIDE HIGH PERFORMANCE AND VALUE FOR MONEY.

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COMPACT SOLUTIONS



UP&DOWN



BDS+



SCREW
CONVEYOR

IWT SCREW CONVEYOR
WASTE DISPOSAL SYSTEM,
BDS+ WITH REMOTE LOADING AND
UP&DOWN ARE
THE PERFECT SOLUTIONS FOR
SMALL-MEDIUM SIZE FACILITIES

- **NUMBER AND SPECIES:**
UP TO 7000 CAGES/WEEK
(MAINLY RODENT)
- **DISTANCES INVOLVED:**
MAX 5M (16FT) FOR BOTH
CLEAN AND DIRTY SIDES
- **TECHNOLOGIES:**
MECHANICAL (DIRTY SIDE)
VACUUM (CLEAN SIDE)

Full flexibility
to process
different
cage sizes



Compact dimensions
with
minimal footprint!



UP = DISPENSING

DOWN = REFILLING

790 mm
(33.1")

1310 mm
(51.5")

1000 mm
(39.4")

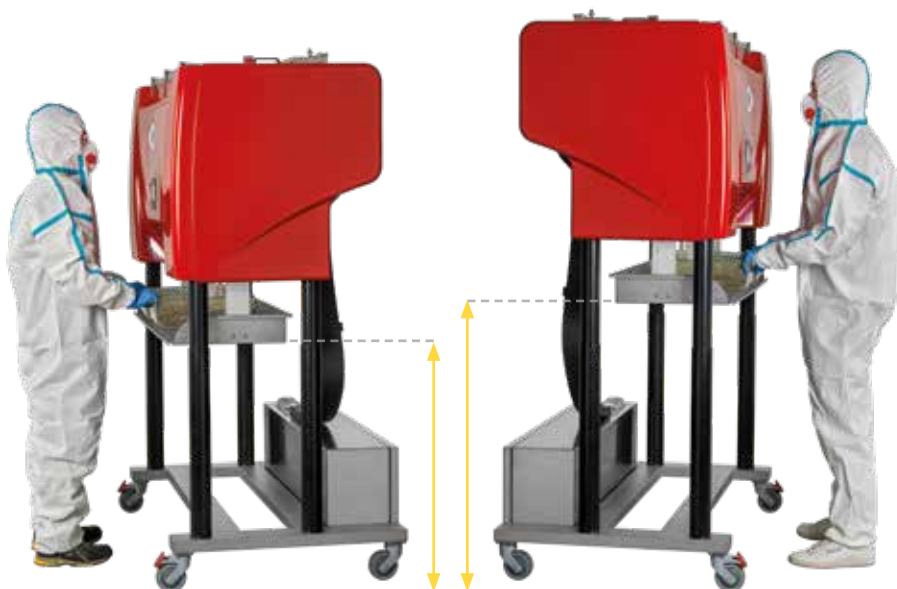


FLEXIBILITY TO PROCESS TWO DIFFERENT BEDDING MATERIALS INDEPENDENTLY

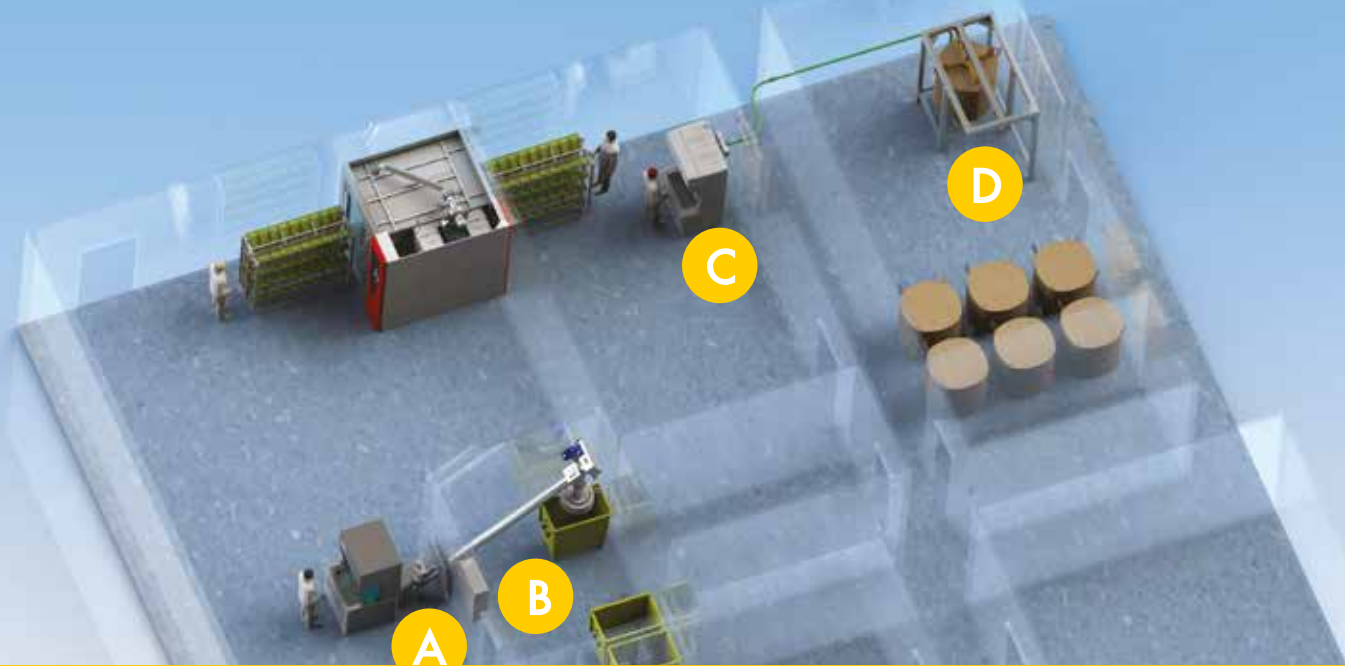
UP&DOWN

CLEAN SIDE SYSTEM

- Space-saving solution with light weight design and compact dimensions for minimal footprint and easy manoeuvrability
- Plug&Play system with no need for compressed air
- Electrical lifting system for bedding reservoir ensuring a low noise solution without bedding material quality loss
- Two independent dispensing points with horizontal augers for high dispensing accuracy and the flexibility to process two different bedding materials
- Full flexibility to process different cage sizes with a wide range of bedding types, including a set of selected environmental enrichments
- High-level operator ergonomics with the working table height fully adjustable
- Suction ring technology, double level filters (G4-F7) and efficient airflow for advanced operator protection during refilling and dispensing operations



Adjustable
working height
for advanced
operator
ergonomics



SCREW CONVEYOR AND BDS+ WITH REMOTE LOADING

UP TO 7,000 RODENT CAGES/WEEK • UP TO 5M (16FT)

- Proven solution for material disposal and dispensing
- Specifically designed for small-medium size lab animal facilities with the aim to increase operational efficiency
- Small footprint, ideal for renovations
- Enhanced working condition achieved through better efficiency
- Operator protection from dust and allergens: when bedding materials are dispensed or disposed, the integrated back draft hoods draws allergens and particles away from operators



BDS+: BACK-DRAFT HOOD

BDS+
is also available in
stand-alone version
for free flowing and
non-free flowing
materials



SHREDDER



ON-BOARD VACUUM PUMP

SCREW CONVEYOR

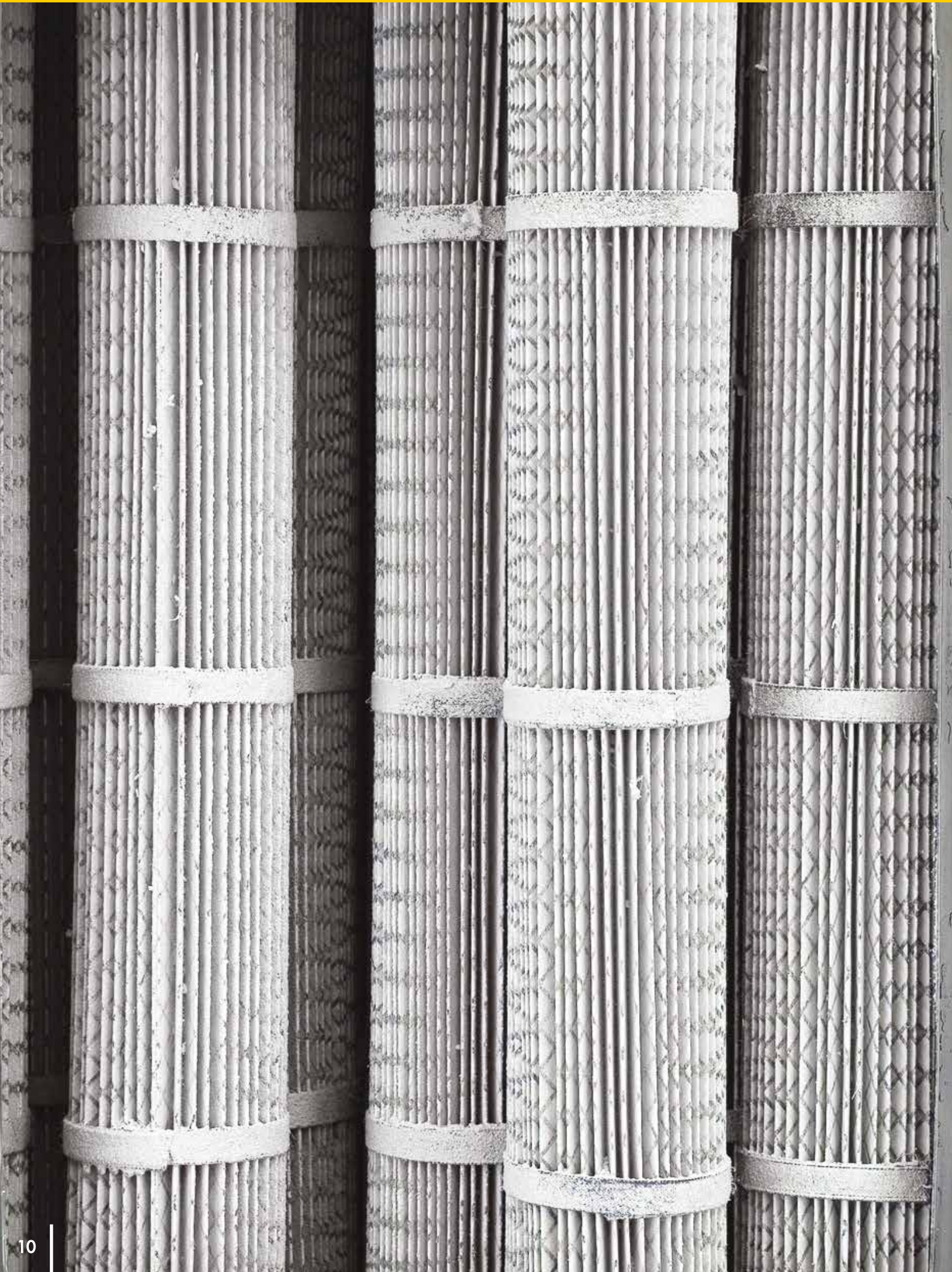
DIRTY SIDE SYSTEM

- Ideal for all standard types of bedding (corn, wood or cellulose based), all the most common enrichments and nesting materials (wooden blocks, cardboard tubes etc)
- A combined action of conveyor belt and S/S auger delivers the macerated waste to the collection point
- The waste is automatically bagged or discharged in a dumpster preventing operators from repetitive heavy lifting

BDS+ WITH REMOTE LOADING

CLEAN SIDE SYSTEM

- Pure vacuum technology to convey the bedding from a remote loading hopper located in a storage room nearby
- No storage of bags next to the unit resulting in space and flow optimization in busy washing areas
- Combined with large bulk bedding bags, offers outstanding efficiency and significant savings, due to reduced bedding and labour costs



CENTRALIZED SOLUTIONS



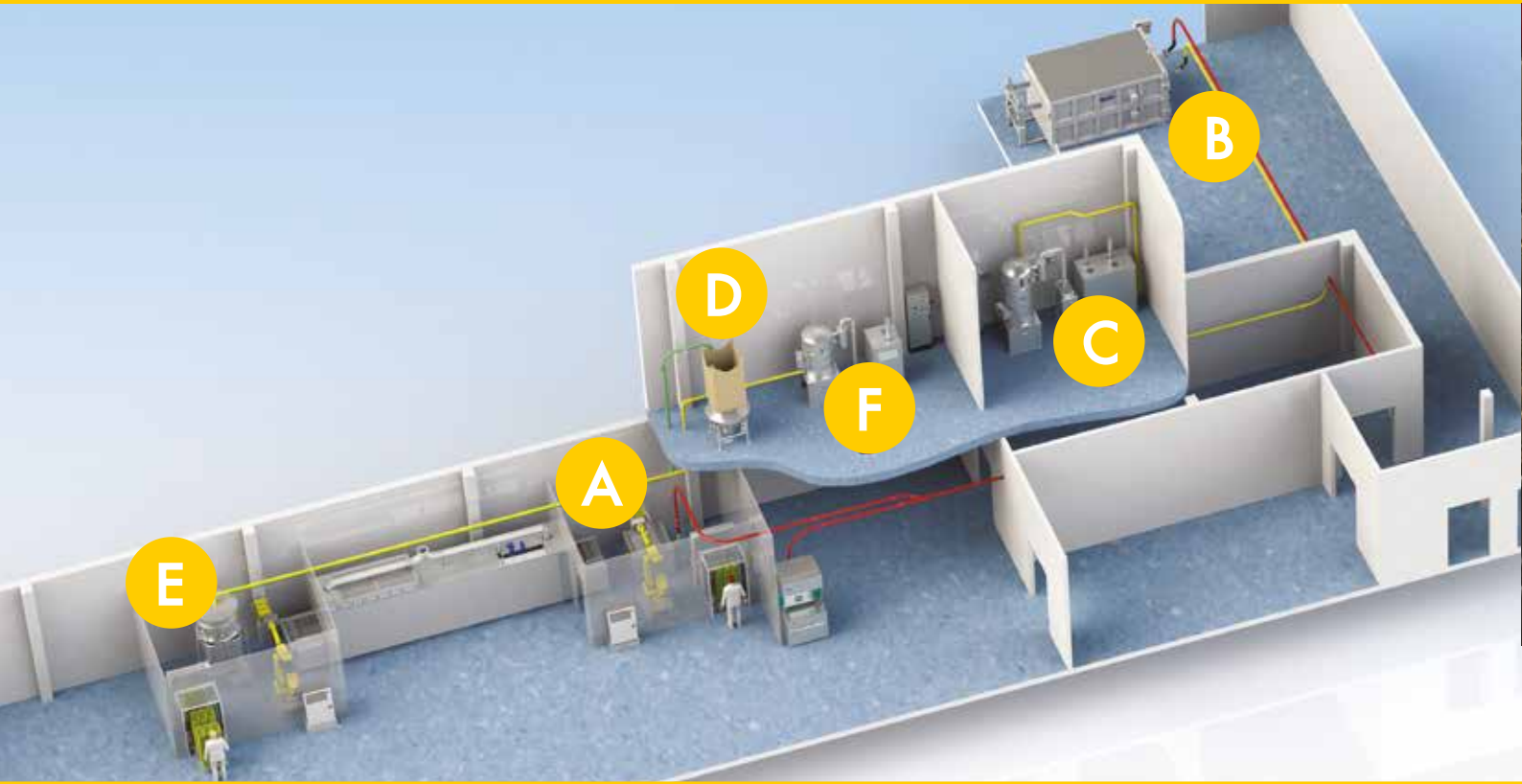
EOLUS
CLEAN SIDE



EOLUS
DIRTY SIDE

THE EOLUS IWT CENTRALIZED BEDDING HANDLING SYSTEM IS A HIGHLY RELIABLE AUTOMATED SYSTEM ABLE TO FIT EVERY CUSTOMER REQUIREMENTS

- NUMBER AND SPECIES:
ALL CAGE COUNTS
VARIOUS ANIMAL MODELS
- DISTANCES INVOLVED:
ALL DISTANCES
- TECHNOLOGY:
VACUUM



EOLUS CENTRALIZED BEDDING HANDLING SYSTEMS

EVERY CAGE COUNT AND ANIMAL MODEL • EVERY DISTANCE ADMITTED

- EOLUS for Dirty and Clean side applications are the best systems for a reliable and complete automated bedding handling solution which guarantees minimal operators' exposure and efforts
- Designed to fit every specific customer requirements, regardless the distances involved, the animal model or the cage count
- Flexible solutions for your specific workload compatible with different waste collection systems and different clean bedding material dispensing solutions
- Vacuum pumps are managed via inverter resulting in limited electrical consumption and great efficiency



EOLUS CLEAN SIDE SYSTEM

LOADING FUNNEL + SILO(S)

- Flexibility: modular design to easily switch from tote to small bag applications and vice versa
- Advanced operator protection and safety: suction rings for dust exposure reduction
- Efficient workflow system: single or multiple intermediate silo(s) available in different sizes for larger buffer capability.

DISPENSER UNIT

- Maximum flexibility: different dispenser models for both manual and automation applications (EASY, FLEXY and FLEXY XL versions)
- High-level dispensing versatility: embedded pre-filtering system and mixer for a wide range of bedding types processing, including light-weight bedding materials
- Advanced operator usability and protection: integrated touchscreen panel and efficient suction rings technology at the dispensing points.

TECHNICAL COMPARTMENT

- Compact dimensions with minimal footprint: compact, all-in-one solution which includes the vacuum pump, the filtration unit and the control box
- Flexible layout: available in two sizes (COMPACT, REGULAR) and designed to fit all specific customer requirements.
- Filtration unit with outstanding operator protection: easy-sealing bag system and HEPA filter (H14).

Choose
the best
dispensing solution
for you!





BACK-DRAFT HOOD FOR OPERATOR PROTECTION



ERGONOMIC DUMPING OPERATIONS

EOLUS DIRTY SIDE SYSTEM

WASTE DISPOSAL STATION (WDS)

- Flexible working: compatible with all common types of bedding and enrichment available on the market, thanks to the shredder technology
- Efficient material transportation: material flow controlled by the conveyor belt which also ensures enrichment processability and operators' safety
- High-level operator protection for minimum allergen exposure: back draft hood with a combination of G4+F7+H14 filters and suction rings technology.

Whatever is your animals' favourite enrichment, EOLUS will handle it!



WASTE COLLECTION SYSTEM

- Flexibility for different waste collection solutions (four wheeled mobile bins, sealed containers and open dumpster solutions): the system can be customized for your specific workload
- Easier and safe operations: bag clamp, suction ring technology, easy camlock connections (for sealed container solutions)
- Filter lifespan optimization: embedded pre-filtration system for enrichment and fibrous bedding applications



SUCTION RING TECHNOLOGY:
OPERATOR SAFETY IS OUR PRIORITY

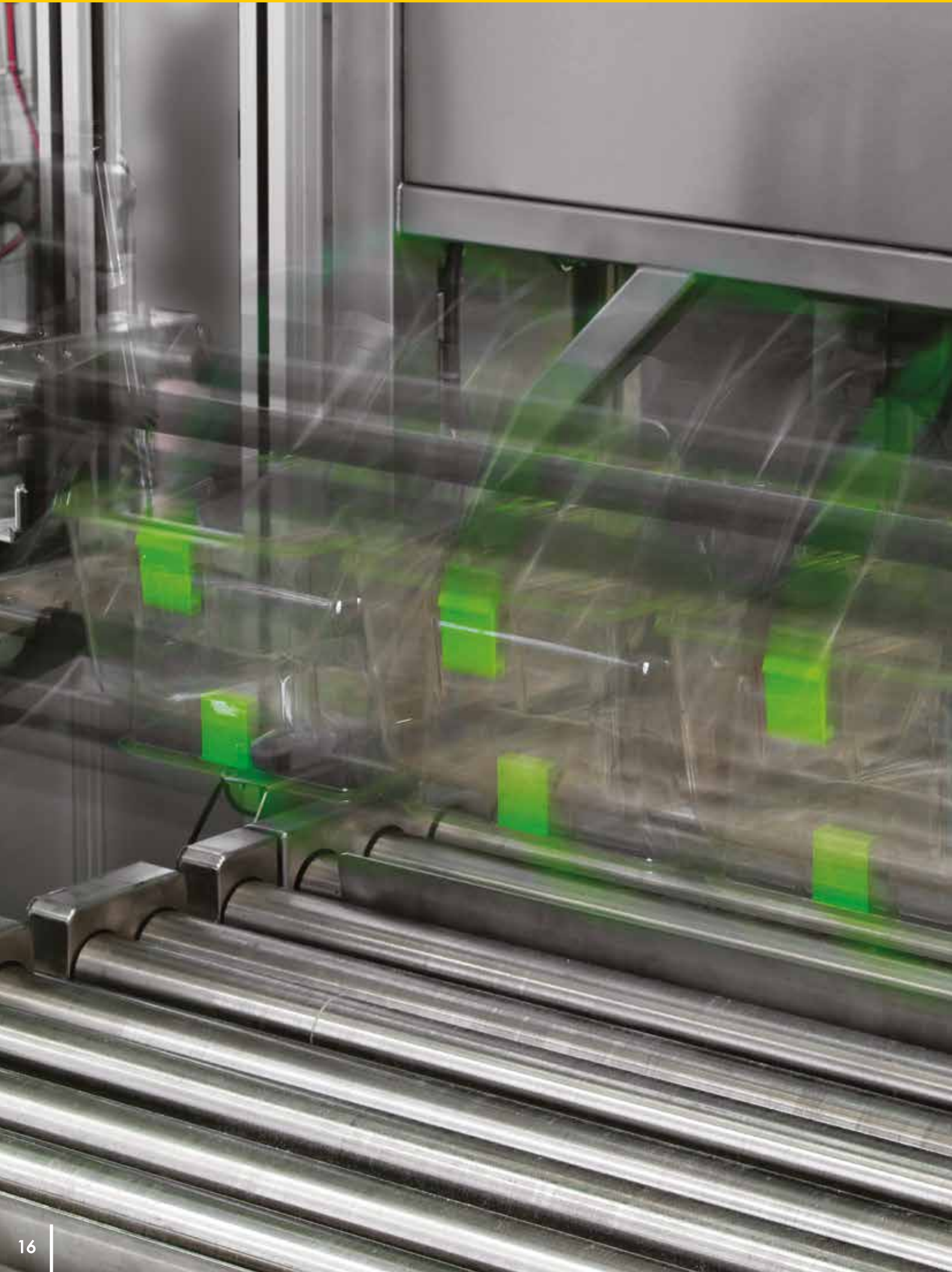


TECHNICAL COMPARTMENT

- Compact dimensions with minimal footprint: compact, all-in-one solution which includes the vacuum pump(s), the filtration unit and the control box.
- Layout flexibility: designed to fit all specific customer requirements, available in different sizes
 - Filtration unit for outstanding operator protection: with easy-sealing bag system and HEPA filter (H14)



EASY-SEALING BAG SYSTEM
FOR MINIMUM ALLERGEN EXPOSURE



IN-LINE DISPENSERS



GRAVITY
FLIPPING



CAGE
INVERTER

IWT GRAVITY FLIPPING
AND CAGE INVERTER
IN-LINE DISPENSERS
ARE DESIGNED TO
COPE WITH HIGH
THROUGHPUT DEMANDS
OF BUSY WASHING AREAS

The systems
can be integrated
with any
tunnel washer

TAKE A LOOK AT IWT
WASHING BROCHURE
TO FIND OUT MORE



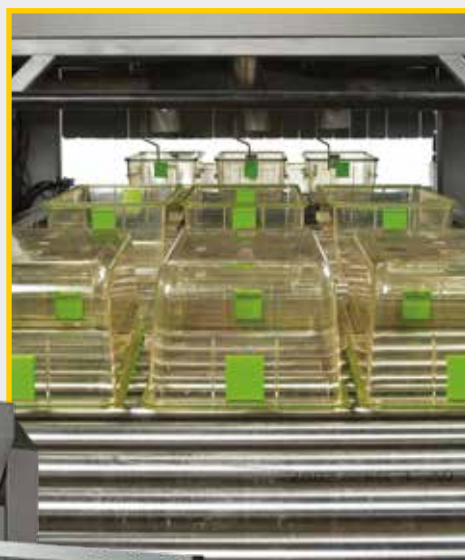
IN-LINE DISPENSERS

- The dispensers can be refilled from remote areas by means of vacuum system (see “Standard Solutions” and “Centralized Solutions” sections) or they can behave as Stand Alone units
- Stand Alone units feature an on-board vacuum pump and filtration system to draw material from up to 5m (16ft)
 - Through the correct selection of dosing technologies it is possible to achieve consistency and accuracy of material in any cage
 - Can be provided with an allergen control kit inclusive of suction ring technology to contain dust particles at dosage point level
 - Entirely made in S/S 304



GRAVITY FLIPPING

- Cages are automatically inverted by means of gravity flipping at the end of the washer
- Cages are gradually moved towards the dispensing points by a S/S roller conveyor
- The fresh bedding is dispensed in each individual cages via dedicated dosage mouths maximizing accuracy and minimizing material waste
- Up to 4 mice cages are dispensed in a single shot and all standard free-flowing materials can be processed



CAGE INVERTER

- Designed to achieve the best efficiency for inverting cages exiting the tunnel washers
- Unprecedented consistency and reliability thanks to an automatic patented gripper
- Ideal to process different types of bedding ranging from free-flowing materials to non-free flowing ones
- The cage inverter, working at tunnel washer height, allows the operator to collect cages in the best ergonomic position



TECNIPLAST

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COMPANY WITH
QUALITY SYSTEM
CERTIFIED BY DNV
ISO 9001

COMPANY WITH
ENVIRONMENTAL SYSTEM
CERTIFIED BY DNV
ISO 14001

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SISTEMA DI GESTIONE
CERTIFICATO DA DNV
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CAT W-DP059ING - Rev June 2025

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