



TUNNEL

C A G E W A S H E R

- Lowest energy consumption in the industry
- 2 bar pressure at the jet for sticky soil removal
- Effective soil retention and separation with minimal water usage
- **99,99%** drying result with no rinse aid



"Safe, reliable and effective with different types of soiled cages even after several months of extensive use."



WASHING

imt
a **TECNIPLAST** company



WASHING

GP™ Tunnel Washer Series

1/The Green Power concept

Dealing with dirty and autoclaved cages is a very challenging task and that is why IWT have recently launched a tunnel washer purposely designed for this purpose. The GP series tunnel washer gives remarkably higher throughput and effective waste separation and compacting, whilst reducing energy and water consumption. Powerful wash performance is now compatible with the environment!

2/Water pressure and load proximity

IWT tunnel washer features a highly compact chamber resulting in a reduced distance between the load and the upper/lower arms. This ensures the best mechanical action of the spray arms and guaranteed removal of organic residues regardless of the selected chemical agent. Moreover, with this load proximity to the jets, a perfect hydraulic balance is achieved and no complex restraining device is needed to consistently hold the cages in position.

3/Bedding and waste separation®

One of the key innovations of the GP tunnel washer is the pre-wash module featuring a partially re-circulating and highly pressurised (2 bar) water treatment. Bedding, food waste and hairs are effectively removed, then pushed to the side by the water and, through a unique combination of an auger and a fine mesh filter, separated from the pre-wash water and compacted. Waste can then be flushed into the drain or better collected in a separate side container or even conveyed into a central vacuum bedding handling system when available.

4/Drying performance

The new IWT tunnel washer offers varying degrees of drying performances, depending upon the required throughput and expected water residue. The most basic configuration features a blowing module complete with a vacuum pump delivering from a close distance a small quantity of high-speed air over the load which contributes to blasting away most of the water drops. This module is followed optionally by a drying module using "oven" type technology, which heats up the load and removes moisture and humidity. The combination of water drop blasting and load heating guarantees an outstanding drying result, documented by visual control or quantified in terms of water removal, all with no need whatsoever of any rinse-aid!

5/Energy conservation

Despite the very powerful action and the massive water flow, the cascade concept, combined with waste separation, make for a significant reduction in water usage (minimum 25% saving) and energy consumption (minimum 40% saving) compared to the most popular cage tunnel washers in the field. A special sensor on the unloading module belt stops operation in the case of prolonged absence of cage passage through the tunnel and therefore prevents unnecessary use of electricity and calories.

6/Ergonomics and Safety

The IWT tunnel washer, like the 900WP rack washer, is fully enclosed, with easy to remove full-insulated panels. This results in extremely quiet machine operation - less than 79 dBA - and remarkably low heat emission in the wash-up area. The unique IWT bedding retaining screens and waste separation/compacting module, by means of an auger, prevents jet clogging and reduces screen maintenance frequency to once a week! With this technology, during the highly pressurised pre-wash module, it is possible to process heavily soiled IVC cages and autoclaved-out bottoms without performing unsafe and labour intensive scraping. Safety bars at both ends and an emergency button on the electrical box provide the required peace of mind in the case of emergency or belt jamming.

7/Flexibility

Modern animal facilities require equipment capable of dealing with rapidly growing demand. That is why we offer as standard two types of belt width, 720 mm or 920 mm respectively, resulting in different hourly throughputs, ranging from 500 to as many as 1200 type II cages an hour. For IWT flexibility also means integration with different waste disposal systems (gravity, mechanical, vacuum) as well as bedding dispensers, both stand alone or automated in-line delivery technology systems' both in-line delivery type or continuous bedding fall technology. Another unique feature of the GP tunnel washer is the option of being prearranged for future automation which gives the possibility to install a manual tunnel washer and later on, as the cage count grows and budget becomes available, to add robotics and conveyors for automated staging, picking and placing.

8/Quality of Construction

Construction and finishing are to the highest possible standard. The chamber is fully made of AISI 304 stainless steel with rounded corners to prevent dirt build-up, and orbitally welded pipes. What is more, the GP tunnel washer is fitted with tri-clamp connections to facilitate service procedures and keep the pipe-work bacteria free, as well as sturdy, reliable pneumatic valves - even with dirty steam! As standard inspection doors of pre-wash, wash and rinse modules are made of clear double glazed tempered glass for ease of inspection and observation.

The Green Power concept



Water pressure and load proximity



Bedding and waste separation®



Drying performance

4



Energy conservation

5



Ergonomics and Safety

6



TECHNICAL SHEET

Specifications and Dimensions

GP Tunnel Washer Series		
Code	Overall Dimensions* (W x H) - mm / inch	Belt Width - mm / inch
9LATUN	1230 x 2600 / 48" x 102"	720 / 28"
9LATUNW	1465 x 2600 / 58 x 102"	950 / 38"

* Overall linear length depends upon final module selection/composition and ranges from minimum 5500 mm (16') up to 10250 mm (33.5'). The tunnel can be disassembled after internal testing and shipped in individual modules at extra cost.

Note:

- 1) Custom models are also available, please consult the factory or IWT local representative for further details.
- 2) IWT will provide mechanical information, detailed service requirements and installation drawings upon request.

Flexibility

7



Quality of Construction

8



Options

- Pre-wash module featuring 2 bar pressure (9LATUNP).
- Blowing module, complete with twin vacuum pumps to blast away water drops (9LATUNBL).
- Standard length (1500mm) drying module featuring 500 cages/hour performance (9LATUNDR1).
- High speed (2500mm) drying module featuring 1000 cages/hour (9LATUNDR2).
- Top mounted fan and S/S plenum for vapour removal (9TUNFCE).
- Real View 2™ purpose hardware and software set-up for monitoring and controlling functions from the customer's PC (9VIEW2TW).
- Water discharge control system (cooling and pH control) (9TUNWDCS1).
- Heat recovery system for water inlet pre-warmup (9TUNHRS).
- Separation frame for pass-through applications made of a s/s tubular frame and studs (9TUNSF1).
- S/S adjustable length bench with idle rollers for easy cage movement and staging cages on the loading and unloading areas (9ACTUNRF).
- SAT - IQ - OQ - PQ - Validation protocol (9TUNVAL).

Related Products

To maximise operational efficiency and learn more about these products contact your local representative.



BHS: highly reliable automated system using a combination of proven technologies to ensure totally smooth and simple material disposal and dispensing operations, cutting operator exposure and effort to a minimum.



Cage Inverter & In-Line Dispenser: Tunnel washer in-line high efficiency system for cage filling, integrated with a reliable and patented automated cage bottom flip-over device.



Pegasus: the most reliable, versatile automated cage processing system for modern laboratory animal facilities housing large numbers of valuable rodents.



Logistic trolleys offer safety and ergonomic features that enable high load-density for moving cages and bottles, crates, pallets and covers.

