



TECNOSTABLE
Animal Care Automation

italy*vacuum
GROUP

Environmental
Engineering
Division



MASTERSTABLE:

The innovation that transforms stable management

In the world of stables, riding schools, and breeding farms, hygiene is not just an aesthetic matter, but a crucial element for the well-being of the horses and operational efficiency.

Masterstable, the revolutionary system developed by Italyvacuum for the evacuation of animal solid waste, represents not only a giant step forward in evolution and technology but also a groundbreaking change in how stables manage solid waste.

Able to provide an unparalleled solution for owners, operators, and horses, it ensures **efficiency, sustainability, and prestige** at the same time.

Why Choose MASTERSTABLE? - The Benefits of the System:

1. Superior Care for Horses

- **Cleaner Environment:** Constant and complete removal of manure, reducing the proliferation of pathogens, unpleasant odors, and the excessive presence of flies and insects that can only result from a dirty and degraded environment. Such situations may present a negative impact on businesses interacting with the public.



- **Always Tidy Stalls:** Cleaning can be done multiple times a day owing it to the system's quick execution times, increasing the horse's comfort and improving air quality inside the stall
- **Preserved bedding:** Reduction of rotting due to increased cleaning frequency
- **Suitable for All Bedding Types:** Compatible with any type of bedding material, including wood shavings, straw, sawdust, peat, paper, hemp, rice husks, and more
- **Complete elimination of rat proliferation**, which regularly occurs when using open air scrapers or chains.
- **Reduced bedding consumption** thanks to the use of the manual scraper tip, which allows targeted removal of waste material, thereby optimizing its usage

2. Operational Efficiency

- **Unbeatable Speed:** Cleaning a stall takes just a few minutes, allowing multiple cleaning cycles per day with minimal effort.
- **Time Savings of Up to 70% Compared to Traditional Methods**
- Optimization of personnel
- Opportunity to dedicate the saved time to other essential activities for the daily management of the stable

Maximum flexibility for optimizing pipes and suction points.

Four types of layouts are typically adopted:

- **With floor-mounted collection hatch** – ideal for new structures where it is possible to install completely underground piping;
- **With corner collection inlet** – ideal for existing structures with exposed piping
- **With wall-mounted collection inlet** – suitable for walls with external walkways on which the collection pipes can rest.
- **With extendable arm and dedicated collection nozzle** – suitable for specific needs in existing structures with exposed piping – allows less bedding waste thanks to its ability to select the suction point.

In addition to studying the best possible route in all four cases, there is the option to position the collection mouths (regardless of the chosen layout type) in the center of two adjacent stalls in order to serve both with a single discharge point, thus optimizing space and economic resources.

Safety against mechanical damage

A powerful magnet is provided at the entrance of the evacuation mouths in case the operator accidentally introduces metal objects, such as nails or horseshoe nails, into the pipes, which could damage the pipes or the machinery itself.

3. Cost Savings

- Drastic reduction in costs
- Less staff required for daily management
- Lower logistics expenses
- Through the compaction of the manure forced through the pipes, there is a significant reduction in the volume of the material being evacuated, making it easier to transport and reducing the number of trips needed to deliver it to its final destination.

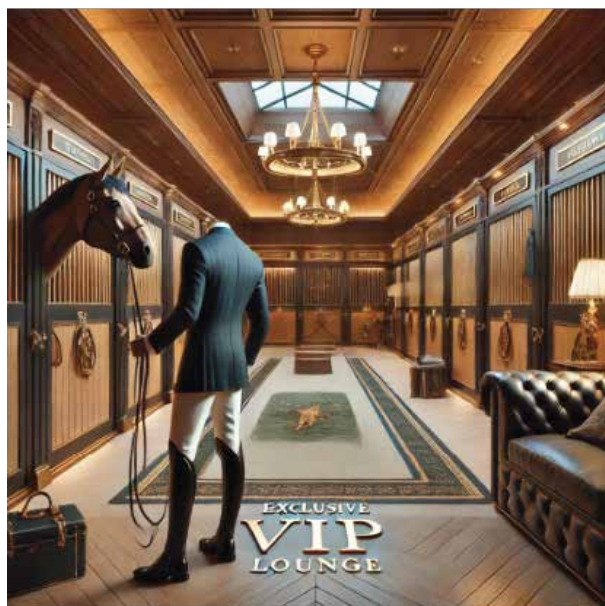
R.O.I. – (Return on investment)

It is estimated that, by adding the various comparison parameters derived from the installation of the Masterstable system, the investment will be amortized in just two years. However, this period may vary depending on the previous conditions of the buyer's business, the level of automation already in place, the size of the equestrian activity, and specific needs that may vary from case to case.



4. Elite Positioning

- **Innovative image**
- A system like **MASTERSTABLE** does not go unnoticed and places the stable in a position of excellence, attracting customers and stakeholders through the integration of advanced technology.
- It promotes cutting-edge business in every aspect, that will clearly be associated and mentally extended to the entire facility.



Operator Satisfaction

- The implementation of automation enhances staff availability and willingness to work in the facility by significantly reducing the physical effort required for the most demanding and least rewarding tasks. Employees will appreciate the ability to complete these tasks with minimal exertion, fostering a more positive and efficient work environment. Consequently, this innovation not only improves employee wellbeing but also boosts productivity and simplifies the recruitment process for facility owners by making the role more attractive to potential staff.

Animal Safety and Well-being

- Italyvacuum has carefully considered the potential reactions of horses when encountering unfamiliar objects in their stalls, such as the flexible hose and collection nozzle, which could pose a risk if bitten. To mitigate this, user-friendly mechanical systems with automatically retractable cables have been designed to suspend the pipes overhead. This solution prevents direct contact with the animals, minimizing the risk of injury while ensuring a safer and more efficient environment.
- The elimination of brooms and dustpans for waste collection also permits complete reduction of dust, improving air quality inside the stall.



5. Installation Flexibility (INDOOR – OUTDOOR)

- **New structures:** Possibility to optimize both the piping layout and the spaces dedicated to waste disposal services by designing the entire collection system underground so that nothing is visible on the outside, eliminating the visual impact of the system. When it's not possible to hide the entire system, an elegant and customizable discharge tower can be made visible.
- **Existing structures:** Custom-designed and optimized system and piping layout to suit the specific needs of the facility.
- **Wear-resistant reinforcements:** All pipes are equipped with a steel reinforcement system that is strategically positioned in areas of highest friction to prevent wear.



6. Evacuation of Suctioned Material

1. **Automatic discharge from above** directly to the ground, into containers, or onto a truck, through a dedicated tower structure where the material to be evacuated will be contained
2. **Evacuation from the tower** via a conveyor belt
3. **Evacuation from the tower** via an auger (screw conveyor)

7. Positive Environmental Impact

- **Waste Recovery:** Manure can be converted into renewable energy through biogas plants, turning a problem into a resource.

8. Advanced Monitoring Technology



- **Monitoring and Control:** Supervision system with **Touch Control Station (TCS)** – (available on a totem or wallmounted) that allows monitoring of the entire waste disposal cycle comfortably from the office, connected via software to all functions of the main turbine.
- **Smart Sensors:** Enable optimization of energy consumption



- **Webcam System** - Monitoring not only electronically but also visually across the entire area covered by the system and along the entire piping route



Basic advanced Technical Features

- **Super Powerful Turbine:** Quick and efficient suction even over long distances, capable of removing sticky or already dried materials.
- **Smart Management:** Full system control via the **Touch Control Station (TCS)**, with remote startup capability and real-time monitoring.
- **Intelligent Automation:** Integrated sensors to optimize energy consumption and ensure continuous operation.

MASTERSTABLE: More than just a system, it is an investment in the future!

Adopting MASTERSTABLE means:

- **Differentiating from the competition**
 - **Reducing long-term expenses**
 - **Improving animal welfare**
- **Increasing the commercial attractiveness of the facility**