



● **CONVEYOR BELT TUNNEL WASHING MACHINE
[COMMANDER-LT] MODEL**



**A Worldwide Experienced Team
Generating
World Class
EXCELLENT TECHNOLOGY**



Sand it!



it's clean!



Automation!

ENGINEERED SOLUTIONS

The pieces that must be washed are carried on a belt **stainless steel conveyor** that can advance continuously or step by step. The belt speed and the tunnel length are determined by each customer's cycle time and production need. The synergy between **chemical, thermal and mechanicals actions**, helps to create a **high pressure washing solution** that will collide and remove all the contaminants from your work piece with **excellent cleaning result**.



ENGINEERING AND DESIGN

With the increasing market standards for a better surface quality in the final product, a reliable and **efficient machinery supplier** such as I.T.F. becomes an invaluable strategic partner. Every customer's requirement is unique and that's why it deserves our full attention. For this reason we offer our **efficient Testing Center** always at the customer's disposal to perform process simulations and to verify test quality result. Only when the customer is satisfied with outcome, our technical department will start the engineering proposal to find the **perfect balance** between the customer's request and the best technology the state of art can provide, in order to achieve maximum efficiency with the best final result.



FRIENDLY SOLUTIONS FOR THE ENVIRONMENT

The I.T.F. heat exchanger is **entirely manufactured in stainless steel AISI 304**, due to its dedicated design ensures a progressive **specific heat exchange power**, thus ensuring a much **longer useful life** in comparison to the conventional heat exchangers. The recovery of the burnt gases from the exchanger of the first tank (degreasing) is employed to heat the bath in the next tank (hot rinse). This solution **saves thermal energy**. The detection and management of the temperature of the solutions takes place via PT 100 probes connected to the PLC.

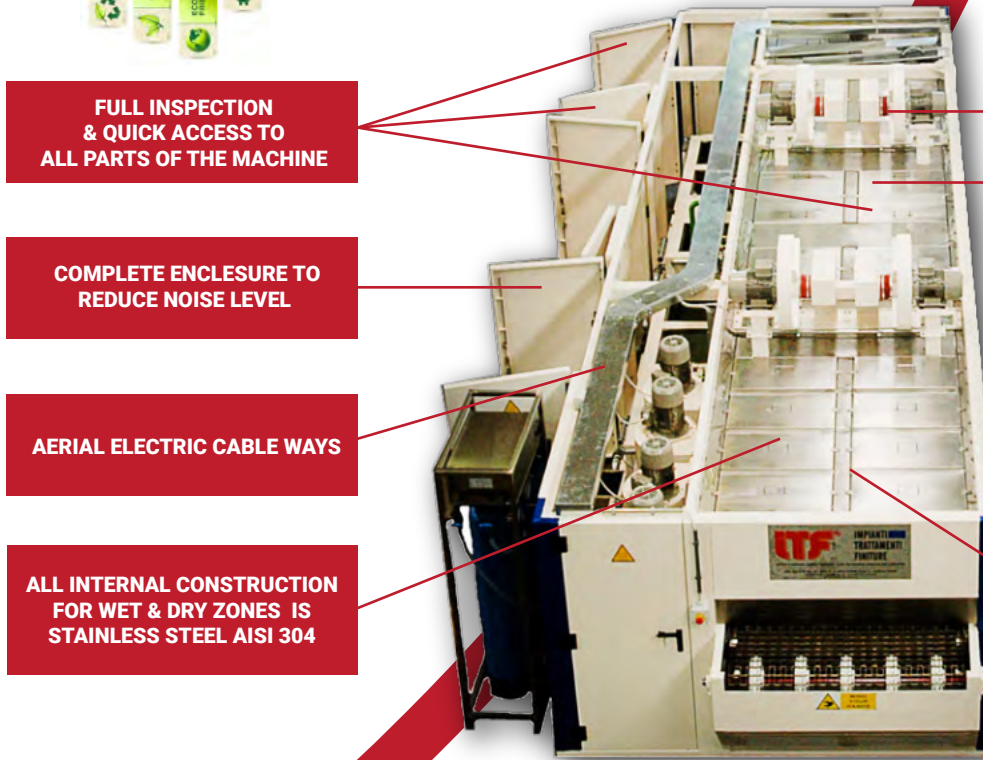


In the pre-wash chamber, at the entrance of the tunnel, we have a **vapor aspiration** device that will draw in all the hot steam generated by the hot washing solutions. The machine can also be equipped with a **vapor dumper**, this eliminating the need for the exhaust chimney. The excreted steam is sent to an exchanger cooled with air at room temperature and, due to the heat exchange, it condenses to return in the form of liquid in the tank. The particular I.T.F. in-house design guarantees that the two air flows do not meet, preventing the saturated vapors from dispersing in the working environment



SOLUTIONS FOR CONTINUOUS IMPROVEMENT

The tunnel can be easily inspected thanks to **sealing doors** installed along the tunnel in correspondence with each washing station, on the opposite side of the water tanks, the pumping system and filtering devices. The standard stainless steel **spray manifolds** are assembled on **adjustable supports** that are positioned to achieve maximum treatment accuracy and efficiency. The manifolds are connected to the collectors through **"clamp" joints** of fast and easy assembly and disassembly. The spraying of the washing solutions liquids takes place through special **anti-clogging stainless steel nozzles** of suitable capacity. The spray pressure is controlled by pressure gauges and is regulated by ball valves with the possibility to **individually adjust** upper and lower manifolds.



FULL INSPECTION & QUICK ACCESS TO ALL PARTS OF THE MACHINE

COMPLETE ENCLOSURE TO REDUCE NOISE LEVEL

AERIAL ELECTRIC CABLE WAYS

ALL INTERNAL CONSTRUCTION FOR WET & DRY ZONES IS STAINLESS STEEL AISI 304

HIGH EFFICIENCY ELECTRIC MOTORS

COMPLETE AND TOTAL OPENING OF THE TOP GRANT

ACCESS TO SPRAY MANIFOLDS AND NOZZLES.

ACCESS TO DRYING MANIFOLDS



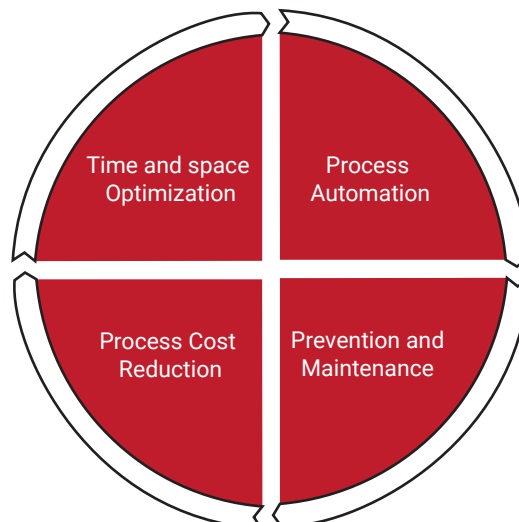
EFFICIENT ENGINEERING CONCEPT

Time and space optimization

- Plant Space Saving
- Cycle Time Optimization
- Process/Cost Reduction

Process cost reduction

- Water Saving
- Energy Saving
- Waste Reduction
- Disposal Reduction
- Part / Cost Reduction



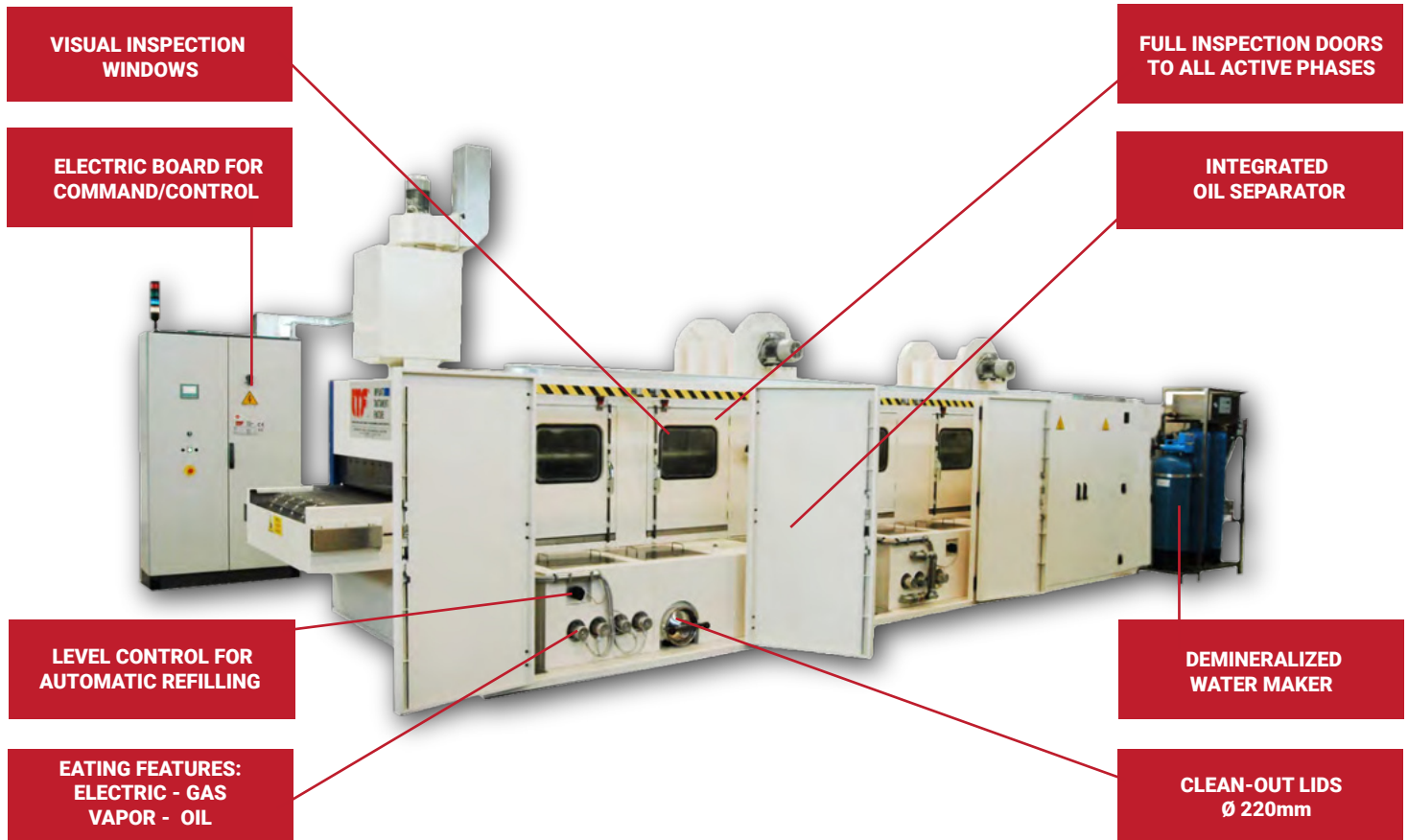
Process automation

- Cycle Time Optimization
- Space Optimization
- Higher Productivity
- Labor Cost Reduction
- Part / Cost Reduction

Prevention and maintenance

- Cycle Time Optimization
- Higher Productivity
- Labor Cost Reduction
- Part / Cost Reduction

SMART DESIGN FOR EASY MAINTENANCE

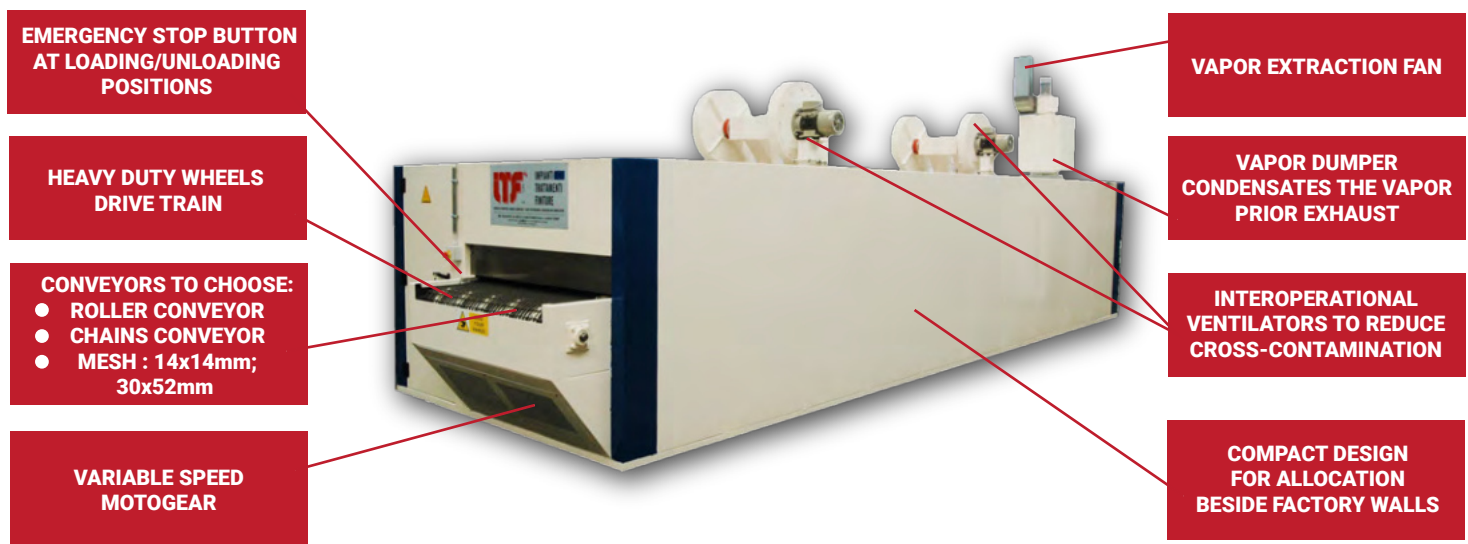


CUSTOMIZED CYCLES

EXTREME FLEXIBILITY – TREATMENT OF AN ELEVATE MIX PRODUCTION AT THE SAME TIME

FULL INSPECTION & QUICK ACCESS TO ALL PARTS AND COMPONENTS OF THE MACHINE

MAXIMUM RELIABILITY EVEN IN THE FULL TIME PRODUCTION 24/7



it's clean!

