



● **STEP-BY-STEP POSITIONED WASHING SYSTEM
WITH TRANSFER CHAIN [NEMESYS-LPS] MODEL**



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



WASHING PLANT POSITIONED WITH TRASLATING CHAIN

These systems allow to **process parts directly on board the work islands avoiding costly packing and transport operations.** The transfer of the pieces takes place thanks to a transfer system with rotating satellites operated by a **mechanical rotating table which guarantees satellite positioning at loading / unloading.** Considerable flexibility in the change of customized piece holders and a possible repositioning of the spray and blowing ramps that allows a total retooling of the system in a very short time (15 min). In addition to the TR systems, **they allow the rotation of the satellite on its vertical axis and the integration of the cycle in the rinsing phase.**

- Elimination of cartoning costs and transport costs
- Re-equipment of the plant in a very short time
- Number of satellites to be chosen
- Customized systems

These plants are fit for **the treatment, with aqueous detergent solutions, of:**

- Critical machined parts (cock bodies, automatic actuators, burner bodies, water meters, a.s.o.);
- Delicate parts with dead holes (friction flywheels, valve bodies, gas on-off valves, a.s.o.);
- Pieces placed on automatic assembly lines for which is requested a perfect washing, blowing and drying process;
- Hydraulic, pneumatic multichannel distributors and manifolds;
- And so on...



TECHNICAL FEATURES



- **Standard washing cycles:** spray wash, spray rinse, blow and hot air drying.
- **Customized washing** cycles according to customer needs.
- **Adjustable spraying manifolds and nozzles.**
- Chutes underneath all the treatment areas for the collection of water, and the outflow of the same into the relative tank, **full filtration** on removable stainless steel mesh baskets.
- Drainage between washing and rinsing in order to avoid mixing the baths. (avoid cross-contamination)
- Satellite translation by means of a **positioned chain.**
- Satellite transfer via special stainless steel chain with stainless steel pinions
- Rotation of pieces on themselves by means of stainless steel rotating pinions moved by a peripheric motorized stainless steel chain

- **Insulated tanks** equipped with:
 - electric heating
 - thermoregulation probe
 - tub drain tap
 - sludge cleaning doors
 - stainless steel pumps feeding spray manifolds
 - inspection lids vapor-tight
 - automatic level control and reset
 - stainless steel inspection doors for treatment areas.
- **Accessories:**
 - self-cleaning filters on the pump outlets
 - cartridge filtrations and / or **magnetic filters**
 - detergent **dispensers** and water economizers
 - automatic gravity **oil separators**
 - **ultrafiltration.**



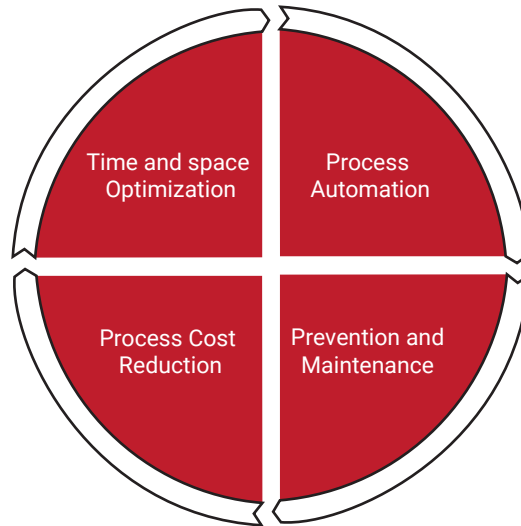
EFFICIENT ENGINEERING CONCEPT

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

FRIENDLY SOLUTIONS FOR THE ENVIRONMENT

**AIR COMPRESSOR
INSTALLED AT MACHINE
SIDE (by request)**

**ELECTRIC
BOARD**

**FULL INSPECTION TO
INNER PARTS OF DRYING
STATION**

VAPOUR DAMPER

HMI 8" TOUCH PANEL

**SAFETY BARRIER IN CASE
OF MANUAL OPERATOR
LOADING-UNLOADING**



**INDEX POSITIONS FOR
LOADING-UNLOADING**

**MID PRESSURE PUMP
SOTRAGE UNDERNEAT**

**DUPLEX BY-PASS
FILTRATION
WASHING STAGE**

**FULL INSPECTION TO
INNER PARTS OF
CLEANING STATION**

**DUPLEX BY-PASS
FILTRATION
RINSING STAGE**

CLEAN OUT LIDS

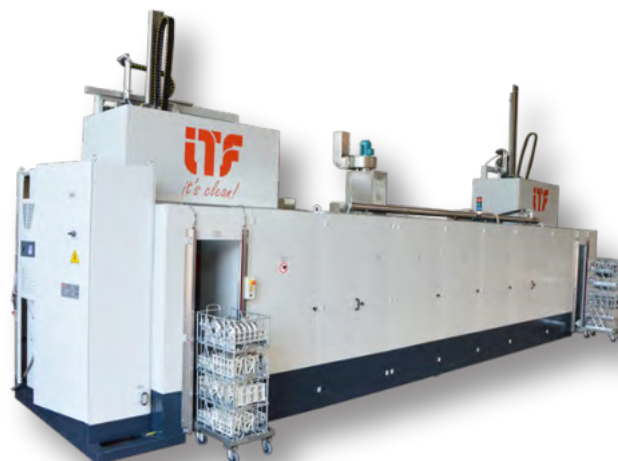


NOT JUST A PRODUCT BUT INTEGRATED SOLUTIONS AND SERVICES



Integrated brushing and washing systems

I.T.F. has always been an example of Italian industry excellence in the field of surface treatment and finishing, since its foundation in 1979. With more than 6.600 units of machineries installed all over the world and many innovative patents in the portfolio, I.T.F. keeps improving the industry standards by offering high technology integrated solution for industrial washing, shot-peening and deburring process. The know-how and on field experience, acquired during decades of constant activity, allow to provide the most suitable and efficient solution for each manufacturing plant, in compliance with environmental and operator safety laws. Thanks to the companies of I.T.F. Group, we can offer more than just a product but integrated solution and services.



Ultrasonic and spraying washing machines



Grit-blasting and shot-blasting machines



Robotic waterjet deburring plants



Handling and testing & assembling solutions



it's clean!

