

# TW

## CLEANING PROCESS CONTROL

Installation  
**NON CLASSIFIED  
 ZONE**  
**ATEX - ZONE 1**

Application  
**1000 litre IBC containers,  
 transport tanks and  
 process vessels**



**Sustainable**



**Compact**



**Modular**



### THE BENEFITS OF THE TW SERIES

#### BREAKTHROUGH DESIGN

IST concept of modular design allows to configure the machine according to specific needs. TW series have been designed to put in order and enhance tidiness in the washing area of your factory. The compact and modular design make it possible to install the unit everywhere and even with a double washing bay (optional) the footprint is small.

#### ECOLOGICAL

IST places a strong emphasis on environmental sustainability, and was founded with the specific purpose of assisting companies in minimizing their usage of water and harmful chemicals, such as solvents, while maintaining high cleaning standards.

Our systems are designed with modularity in mind, making it easy to modify the machines to accommodate changing cleaning needs, rather than having to purchase new equipment and dispose of the old. This approach not only provides cost savings, but also reduces environmental impact.

#### PROCESS AUTOMATION

Manually washing a container employs an operator for a period of 10 to 60 minutes. This is the time spent in taking the container to the washing area, washing it, replacing the container in the delivery area and all other operations involved in handling and maintaining fluids and washing tools. A worker's daily 8 hour shift corresponds to around 12-15 containers; TW, by contrast, takes around 2 minutes of the operator's time in loading the container, starting the machine, unloading the container and other auxiliary activities; for a cycle that lasts 4-5 minutes, the operator doesn't need to supervise the machine and meanwhile can prepare the next container being able to handle over 50 washing cycles per shift.

#### REDUCING THE COST OF DISPOSING OF WASHING WASTE FLUIDS

The cleaning liquid wasted by manual cleaning of a single container is around 50-75 litres of water and 5-10 litres of solvents/chemicals. Using an IST machine with water or solvent recirculation **reduces this consumption** to 15-20 litres of water and 1-3 litres of solvent. The amount of waste produced is thus reduced by 70-90%, with an equally significant reduction of the disposal costs and considerable **ecological** and **economical benefits**.

#### MODULARITY

Thanks to the **high engineering** level there are several configuration possibilities: the washing bay can be oriented with the entrance where is **more convenient for the operators** depending on the layout of the washing area. Based on the item to be cleaned the washing bay can be **completely customized and adapted to specific needs**.

# TW

## CLEANING PROCESS CONTROL

### SETUP

The operator places the container to be washed on the loading bay, connects the earthing clamp and the return hose to the drain valve.

Pressing the drop button the cover is automatically operated by the vertical axis of the TW on the right position to perfectly close and seal the vessel from the top and the washing cycle can be activated. The vessel support simultaneously leans to ensure total emptying at the end of the cycle.

### WASHING

The washing head is installed on a moving support that slides up and down to allow the easy positioning of the vessel to be clean.

For specific application a rotating cleaning head with brushes can be added to ensure perfect cleaning even with the most difficult contaminants.

The main washing pump grants constant **high-pressure flow rate**. The washing circuit is engineered and manufactured to **resist the aggressive liquids and pressure** and the machine is equipped with filters to retain main particles of contaminants, to protect the pumps and the washing nozzle. One tank, separate in two sector for **washing and rinsing**, is housed in the frame of the TW which also hosts **pumps, filters and control panel**.

The capacity of the storage is defined to **guarantee 50 washing cycles** in complete autonomy. To increase the washing output and reduce the downtime it's possible to have a **second washing bay**, to wash different vessel/tank/IBC.

### SAFETIES

When flammable products are being handled and processed in hazardous areas it is **essential to adopt certified equipment** that will protect personnel from sources of **electrostatic** ignition.

We supply **grounding systems of different kind** depending on the requirements that are penetrating any connection inhibitors like coatings, product deposits and rust and grant **maximum safety**.

In some application, inerting the container during the washing phase is mandatory: our software already includes **different cycle option** to comply even the most strict **safety regulation**.

The system is equipped with pressure sensors to **avoid any malfunction** of the washing elements and clogging of the filters.

Suitable for solvent  
water based detergents  
and eco friendly chemicals



High Pressure  
Pump



Efficient



Touch Screen  
Panel

Model	L (mm)	W (mm)	H (mm)
TW	2500	3740	3040 (1830)
TW-D	2500	5230	3040 (1830)

