

**AUTOMATIC COATING SYSTEM**

**1S 4 + TA 10/1**



**DATASHEET 01/25**

*Some of the features listed may be subject to change that do not affect the use of the product.*

## GENERAL DESCRIPTION

Compact automatic system for dip coating using fluorochemical-based coatings known for their excellent dielectric properties, low surface energy, and resistance to moisture and chemicals. The coating carrier has to be a fluorinated solvent non-flammable and low boiling.

It is extremely versatile, thanks to the implementation of the automatic conveyor (robot) that manages the various phases of the coating cycle: the operator, after selecting the cycle through the touch screen panel located on the control panel, simply has to load and unload the storage basket or the mechanical gripper.

The high technological content is easy and intuitive to use through the digital synoptic display and the touch screen for setting the parameters of the coating process. It combines high performance with extremely low operating costs. Installation is extremely simple, requiring only the connection to the electrical and pneumatic utilities.

Designed and manufactured entirely in Italy and CE certified, it comes with a one-year warranty.

## STANDARD COATING PROCESS

The standard process is about 60 sec. and involves:

1. Fixing the PCBA (electronic board) on the mechanical gripper over the lid / or inserting them in the basket over the lid (depends on the machine version)
2. Pushing start button, then the system:
  - automatically immerses the PCBA in the coating product, maintained at controlled temperature
  - automatically makes the PCBA drip and dry on cold area
  - automatically returns the PCBA to the initial stage (over the lid).
3. Removing the coated PCBA (electronic board) from the mechanical gripper or the basket (depends on the machine version)

## SPECIFICATIONS

Usable capacity of the coating tank:	4 litres
Coating tank dimensions (l x w x h):	150 x 150 x 100 mm
Standard tray (l x w):	105 x 105 mm
Maximum capacity of the robot (basket included):	10 Kg
Overall dimensions (l x w x h):	900 x 900 x 2005 mm
Weight (empty):	300 kg
Supply Voltage:	400 V (3 Ph + N + PE) - 50 Hz
Installed electrical power:	1500 W

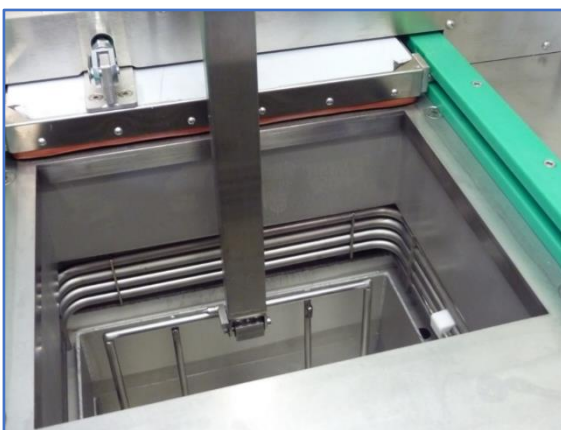
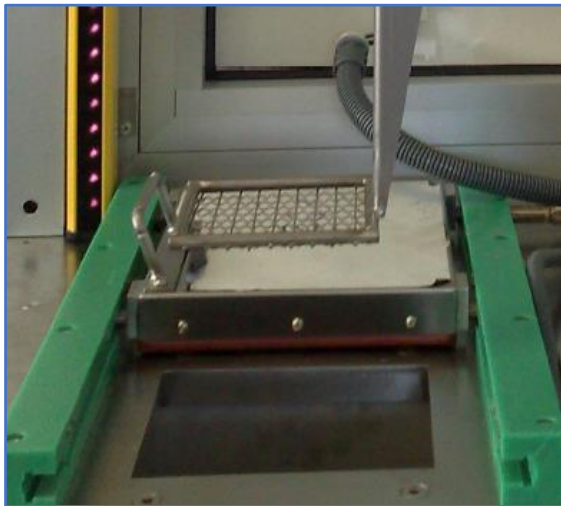
## CONSTRUCTION FEATURES

**STRUCTURE:** stainless steel frame and platform | casing to cover the system completely | sandwich panels made of synthetic material and polyurethane core supported by an anodized aluminium profile structure, sliding on the back for easy maintenance | easy-to-remove stainless steel front lower panels | basket loading and unloading station located above the tanks with transparent hermetic access door with vertical automatic opening | fully illuminated casing interior | mounted on swivel castors with brakes or on adjustable feet | stainless steel basket or adaptable to customer needs (on request) | **TANKS:** made of stainless steel, with pickled TIG welds | thermally insulated heated areas | valves and seals specific for solvents | heating systems by means of electric plate resistances fixed externally to the walls of the tanks | cooling coil in the immersion tank | hermetic automatic stainless steel lid | **AUTOMATIC CONVEYOR:** linear basket lifting unit (vertical *lift*) | the basket is automatically positioned in the different zones of the coating cycle | **ELECTRICAL PANEL:** IP 54 protection | **CONTROLS AND SOFTWARE:** control panel with operator interface via digital synoptic colour display and touch screen | programmable and storable coating cycles | adjustable parameters (time, temperature, robot speed etc.) | possibility to enter passwords to access the various parameters | alarm history | weekly timer for machine switching on and off | **WATER-SOLVENT SEPARATOR:** made of stainless steel | type available: molecular sieve or gravity depending on the type of solvent that will be used | **COOLING UNIT:** double stainless steel cooling coil for the condensation of solvent vapours and for the function of thermal cap above the drying zone | air heat exchanger with fan | **SAFETY DEVICES AND CONTROLS:** thermostats for electric tank heating systems | level controls | temperature control by PT 100 probes with display of values on the control panel | microswitch and safety anti-crushing edge for the sliding door | system for air intake from inside the casing, which can be connected to an intake chimney

## OPTIONALS

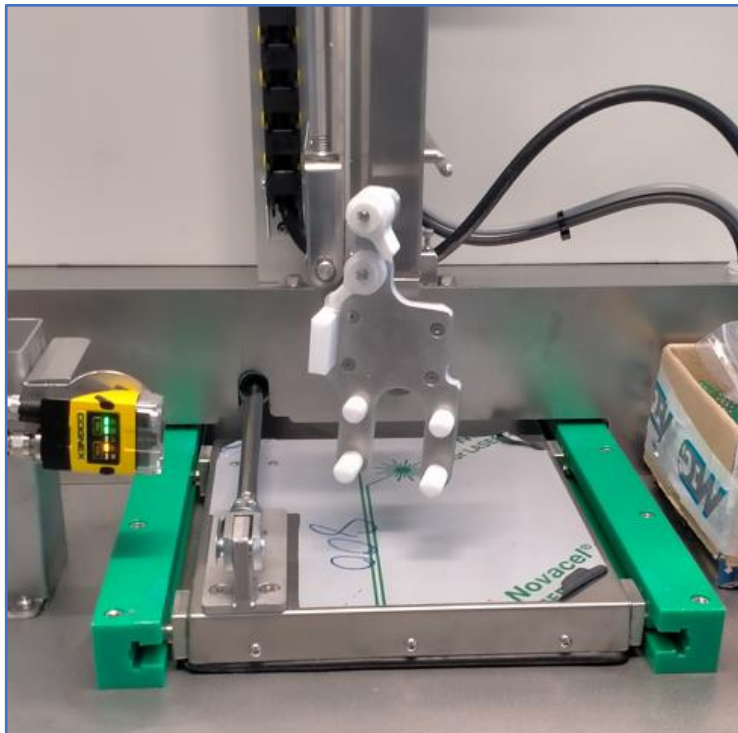
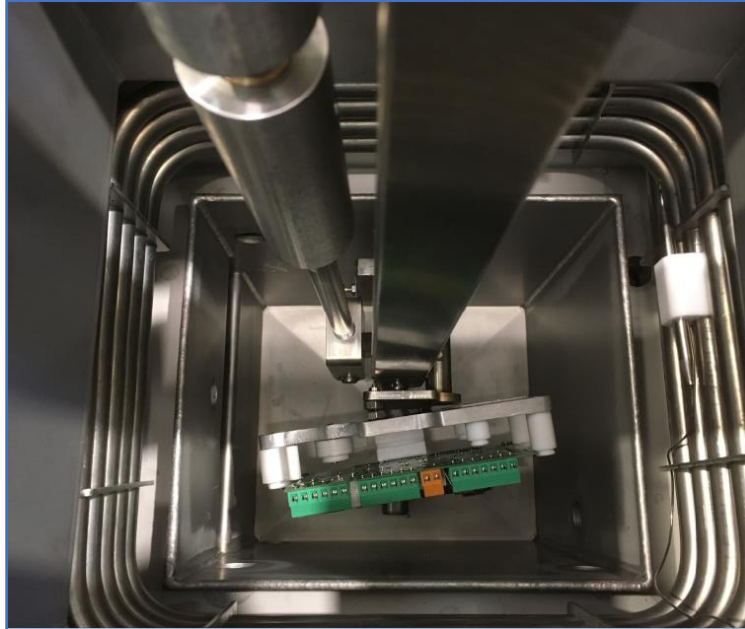
**ROTATING LIFT WITH BRUSHLESS MOTOR:** The electronic commutation used in brushless motors allows for more sophisticated and flexible control over motor speed and torque; the rotation allows, using a mechanical gripper, a selective coating | **SOLVENT FILTRATION SYSTEM:** consisting of cartridge or bag filter, pressure gauge or pressure switch to control filter saturation, dedicated pump | **REMOTE ASSISTANCE:** module for remote assistance connection inserted inside the electrical panel | **INDUSTRY 4.0:** predisposition package for the integration of the coating equipment to the company system

## PHOTOS



*Photos for representative purposes, not contractual.*

### PHOTOS



**OPTIONAL: rotating lift, brushless motor and mechanical gripper**

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