

Pre-cleaning station, completely automatic with touch-screen control



*Picture is for illustration purposes only.
The offered unit will look different as it
will be conform the below description*

Dimensions ± 1960x800x920mm (LxWxH)

Fully automatic pre-cleaning station completely made of stainless steel AISI 304 with touch-screen control.

The worktop is made of 1.25mm thick stainless steel which is equipped with a water rim at the front and sides to prevent any spilled fluids from dripping of the unit. Furthermore, the clean-up counter is equipped with a back splash of 100mm at the back.

The underside of the worktop and the back of the back splash is covered with high quality waterproof chipboard. This chipboard is covered with stainless steel.

The unit is equipped with:

- Ultrasonic cleaner IND5535
 - Internal dimensions 550x350x300mm
 - Produced out of stainless steel 304
 - Control by means of touch-screen
 - Automatic filling and draining
 - Provided with fully automatic tray lift which is integrated in the worktop and in the cabinet underneath.
 - Removable tray rack to store 2 instrument trays:
Both levels can store one tray with a maximum dimension of 500x320x110mm WxDxH.
 - Squeeze protection on the tray lift due to the fact the lift will slide down on its own weight.
 - Acryl transparent automatic closing lid connected to tray lift
 - When opened the lid of the tray rack will be positioned in an angle of ± 50°C which provides a good view on the instrument tray.
 - Unit is equipped with a mixing system (which is placed in the cupboard underneath the ultrasonic cleaning bath) which automatically mixes the water before the ultrasonic cleaning bath is being filled. This feature shortens the pre-heating time of the bath drastically. The mixing system heats the water to a maximum temperature of 40°.
 - Automatic detergent pump to add detergent into the ultrasonic cleaner
 - The detergent pump is equipped with a low level indicator which signals in the touch-screen when the detergent level is too low.
 - Temperature for the ultrasonic heating (20-80°C) can be set in the touch-screen
 - Overflow protection channel
 - Protection against overheating
 - Removable filter to avoid drainage obstruction

- One spraying tank equipped with nozzles
 - Internal dimensions 600x500x300mm
 - Made of stainless steel 304
 - Completely welded into the worktop
 - 8 pieces of spraying nozzles (separate system for the upper and lower compartment of the tray lift).
 - Provided with fully automatic tray lift which is integrated in the worktop and in the cabinet underneath.
 - Removable tray rack to store 2 instrument trays:
Both levels can store one tray with a maximum dimension of 500x320x110mm WxDxH.
 - Squeeze protection on the tray lift due to the fact the lift will slide down on its own weight.
 - Acryl transparent automatic closing lid connected to tray lift
 - When opened the lid of the tray rack will be positioned in an angle of $\pm 50^\circ\text{C}$ which provides a good view on the instrument tray.
 - Removable filter to avoid drainage obstruction
- Two cupboards with double doors are mounted underneath the unit.
- The cupboards are equipped with a removable bottom shelf for easy installation of the out- and inlets of the unit and which adds a nice finish.
- The doors which are placed within the cupboards are double walled and equipped with insulation material. Grips are produced as integrated grips so no parts will stick forward.
- The unit is placed on a 100mm plinth for easy installation underneath the unit and in order to conceal any drainage tubes as well as in and outputs.

Touch-screen control panel:



The unit is equipped with a full-colour capacitive touchscreen 5" which is placed above the worktop at viewing height. Through this touch-screen all functions of the ultrasonic cleaner and spraying tank are being controlled, like the automatic filling and draining of the ultrasonic cleaner. With the help of the touchscreen the added detergent liquid can be set.

In the touch-screen the spraying time for the upper and lower spraying level of the spraying tank can be set as well.

The use of a touchscreen offers many advantages compared to a regular time-relays controlled unit as no time relay is now required to change the process duration.

The process times can be easily changed by everyone without having to consult a technician who has to adjust the time relays within an external control section. The adjustment of important parameters with the help of technicians now belongs to the past and every employee within the CSSD can now operate and adjust the parameters to the requirement of the instruments which have to be processed.

Should there be any updates in the future for either the PLC or touch-sceen then they can easily be uploaded via a cable connection.

The ultrasonic cleaner type IND5535:

The ultrasonic cleaner with the type IND5535 consists of a generator as well as the ultrasonic cleaner itself. The ultrasonic cleaner will be mounted into the worktop in such a way a complete flat surface will remain. The ultrasonic cleaner will be placed within a specially made frame which is equipped with a special rubber sealing to absorb the vibrations which are generated by the unit. The ultrasonic tank is equipped with 16x50mm pillars which, through the control of the generator will be adjusted to the optimum level of 40Khz. The adjustment is interactive which means that the unit will find the highest ideal ultrasonic frequency based on the load which is placed within the ultrasonic cleaner. Due to this method there is an effectively pass through ultrasonic frequency reached of 83% which is extremely high. On the bounding between the transducers and the ultrasonic tank bottom a guarantee of 2 years is applicable.

The supplied generator gives an output of 800 Watt with a frequency up to 40Khz. The generator will be placed in the cabinet underneath the ultrasonic cleaner. The heating elements of the ultrasonic cleaner have a capacity of 2000 VA and are responsible for an efficient heating of the unit due to their flat structure.

The ultrasonic cleaning bath is controlled by means of a touch-screen panel.

The ultrasonic cleaning bath has the following features:

- Automatic water inlet
- Automatic water drainage
- Water overflow outlet
- Level switch
- Heating elements and temperature probe
- V-shaped bottom for easy drainage and cleaning
- Drain filter

The tank base has a 5 deg. slope to the drain which prevents any fluids from being left behind in the bath after drainage.

The ultrasonic cleaner is equipped with a detergent pump, which will automatically add detergent to the ultrasonic cleaning bath when the bath is being filled.

The required amount of detergent that needs to be added can be set before filling the tank. The detergent pump is equipped with a low level indicator which signals when the detergent level is too low.

Unit is equipped mixing system within the unit which automatically mixes the water before the ultrasonic cleaning bath is being filled. This feature shortens the pre-heating time of the bath drastically.

Tray lift system:

The tray lift system is equipped with a removable tray rack on which two trays can be placed at the same time during the rinsing process.

The tray rack consists of two levels. Both levels can store one tray with a maximum dimension of 500x320x110mm WxDxH.

The tray lift system is being driven pneumatically. The downwards movement of the tray lift is realised by the weight of the lift system itself, which prevents dangerous situations from occurring when either staff or instruments get stuck underneath the lid.

When the tray lift is in its highest position the bottom side of the tray rack is on the same level as the worktop so instrument trays can be placed in very easily which prevent unnecessary lifting. The complete mechanism is produced of stainless steel with exception of the bearings. These are made of linear polymer sliding bearings, which have a much longer life time than standard ball-bearings.

The reason for this is that stainless steel ball-bearing are not available for this application and therefore standard bearing would be exposed to corrosion.

The lid of the tray lift is transparent.

When opened it will be positioned in an angle of 50° which provides a good view on the instrument tray.

The tray lift has a maximum loading capacity of 20 kilos (excluding tray rack)
The result of the ultrasonic cleaning will depend a great deal on the way the instrument trays have been loaded and how much is being loaded each cycle. It will lead to a better result if the instruments are properly spread out along the bottom of the instrument tray, than when the instrument tray is compactly and fully loaded. The lid of the tray lift closes automatically.

The under structure of the pre-cleaning unit:

The under structure of the unit consists of two cupboards.
Both cupboards are equipped with two double walled doors which are made with internal insulation. Due to this insulation the sound which is generated by the ultrasonic cleaner is reduced to an incredible low level. Every cupboard is equipped with a removable bottom shelf on which detergents or other equipment can be stored. Due to the fact these shelves can be removed, easy access to all in- and outputs is ensured.

Grips are produced as integrated grips and the stainless steel hinges which are used on the doors are placed on an equal level with the front of the doors so no parts will stick forward. The hinges are self-locking which means that when the door is being closed it will stay firmly closed.

The complete unit is placed on a 100mm high plinth.

For a correct installation it is very important that the floor is level.

The unit offered is only suitable to be connected to tap water.

Product:	Fully automatic pre-cleaning station with IND5535 ultrasonic cleaner and spraying tank with touch-screen control
Dimensions:	± 1960x800x920mm WxDxH

Technical specification

TYPE	IND5535
<p>Construction case Construction tank Operating voltage Power consumption ultrasonic Power consumption heater Dry run protection Transducers metal bonded Power output into fluid Thermostat control (digital) Timer range (digital) Tank dimensions internal (mm) Maximum capacity in liters Working capacity Water inlet Drain outlet Operating frequency Overall dimensions Net weight Gross weight packed with accs.</p> <p>Note: Tank base has a 5 deg. Slope to drain end and shallow "v" drain valve in centre of "v" fitted vertically</p>	<p>Stainless steel rigidised 304 Stainless steel 304 220/240 1PH 50 Hz 1000 VA RMS 2000 VA (4x 500 watt heaters) Stainless steel float switch 16x50mm pillars 20.8 WATT/LITRE 20-80°C 0 – 59 minutes 550x350x300mm deep 57.75 liters 48.0 liters ½" BSP MALE ¾" BSP MALE 30-40 Khz 660x460x400mm high 60 KG 75 KG</p>