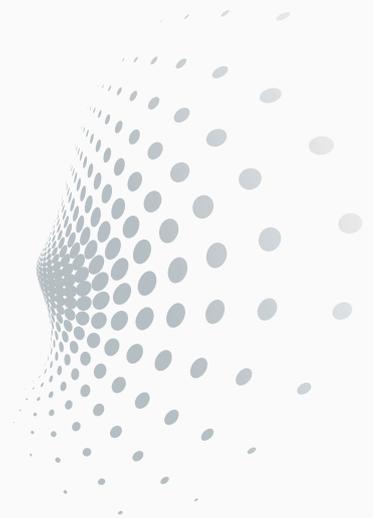




# RoboSPA

The cleaning station



# Process-reliable cleaning

Our cleaning station is designed to clean and dry your workpieces, electrodes and tools in a minimum of time. This is done by continuous "swiveling" of the part and using a special cleaning agent that flushes around your workpieces under pressure.



# Easy to use and process-oriented



The compact cleaning station is the key to cross-process automation. The workpieces are cleaned before they are transferred from the milling stage to quality measuring or to eroding to ensure the subsequent process.

Manual loading and unloading of palletized electrodes or tools happens by pushing a button through an automatic operator door.

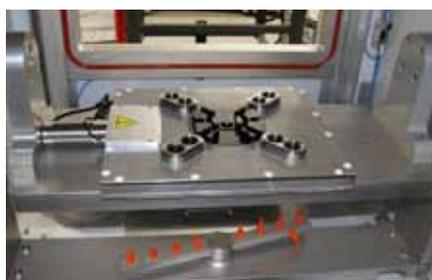
For automated operation, there is a completely separate access for the automation, as well as a corresponding interface for process-reliable automation.



The cleaning programs can be manually programmed and selected via the touch pad, depending on the degree of pollution.

If a suitable program is not available yet, a custom program can be created and stored very easily. This custom feature applies both for cleaning and drying programs.

When connected to an EROWA process control system, these programs are selected via the corresponding software module.



Whether in manual mode or integrated into the automation – our RoboSPA is very user-friendly.

A polycarbonate window on the user side allows visual inspection before, during and after the cleaning process.

By using a powerful blow-off that is independent from the air supply network, no expensive compressed air is used.



The sophisticated arrangement of the wet cleaning nozzles ensures thorough cleaning of workpieces.

Combined with swiveling the rocker, debris is removed from the workpieces efficiently and effectively.

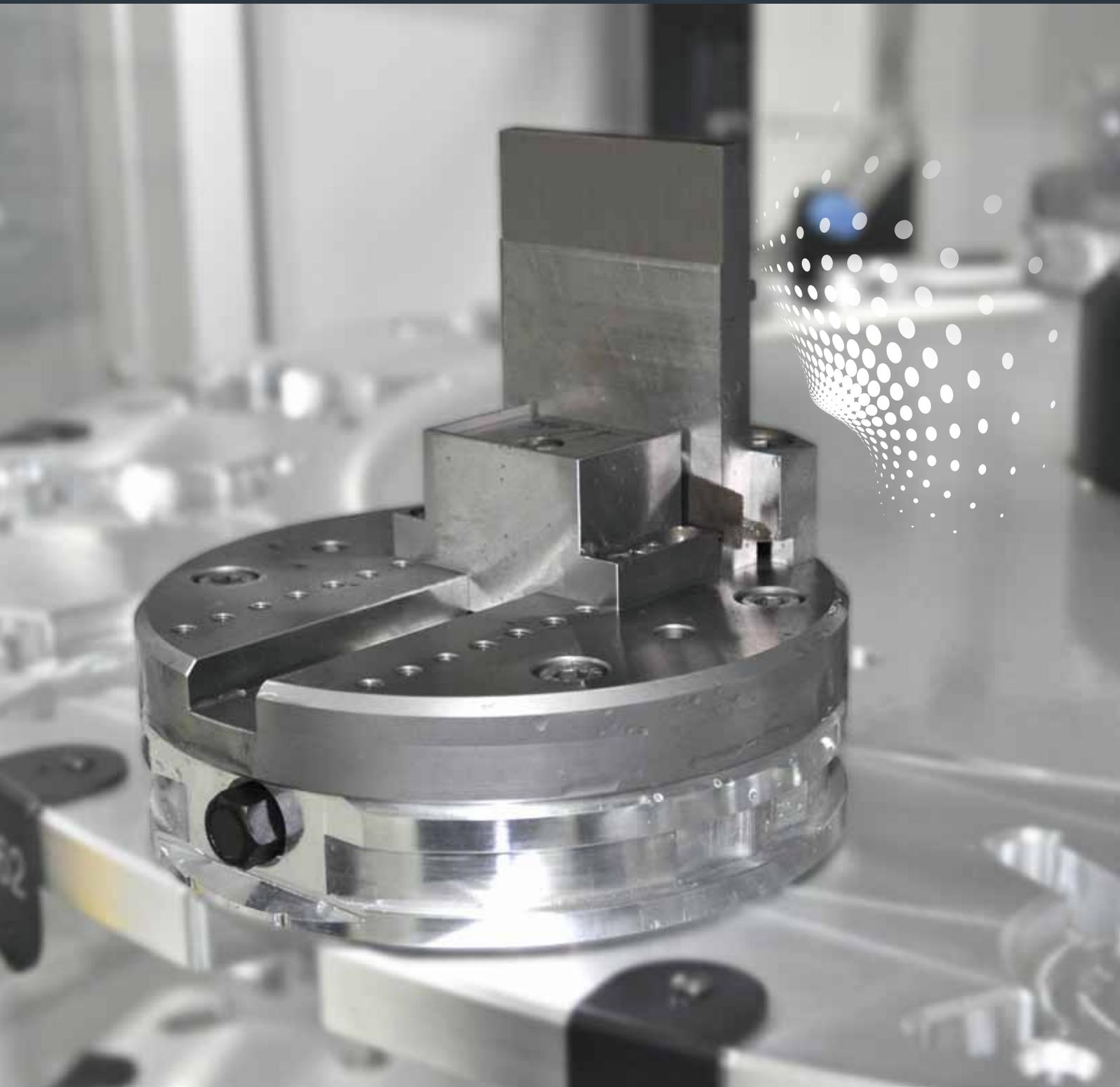


Special cleaning nozzles can be used depending on the application (retrofit possible).

# Cleaning of workpieces

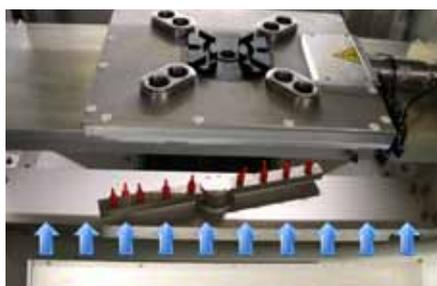
Integrating the RoboSPA in the automated process ensures the required quality standard even when cleaning.

Saving time, continuity in the workflow to the relief of your staff – while conserving resources to the maximum.



# Gentle to people and the environment

The cleaning station RoboSPA is available as a purely manual version as well as a combined automatic/manual version. As "stand-alone", it is designed as an autonomous machine that can be used without any automation. In the combined version, it is used both in single-machine automation cells and complete automation lines, while manual use within the automated cell is still possible.



The cleaned parts, again being constantly kept in motion, are then dried quickly and thoroughly through circulated air (↑) by the "air blade".

If required, additional drier nozzles can be installed.

The humidity caused by the cleaning process is extracted from the interior and fed back. The cleaning station can be operated both automatically and manually.

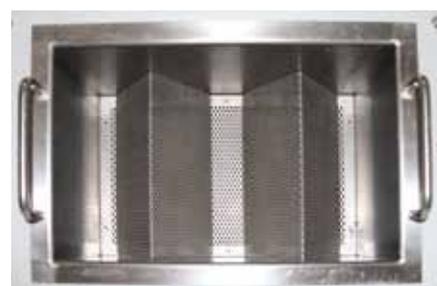


By our closed cleaning circuit and the integrated filter system, the fluid is cleaned and dirt particles are filtered out. The cleaned fluid is fed back into the large safety tank and can therefore be reused.

The cleaned fluid is then again delivered to the nozzles by a powerful pump. Replacement of the cleaning fluid depends on the level of pollution and the process requirements and can be done easily by the user.

EROWA recommends non-aggressive cleaning agents or, if requested, provides direct contacts for appropriate cleaning products.

Requirement: The cleaner to be used must be solvent-free.



## THE FACTS

16 preselectable programs

Closed circuit

Two-stage filtration

# Cleaning station at a glance



01 | Control cabinet with integrated fine filtration system

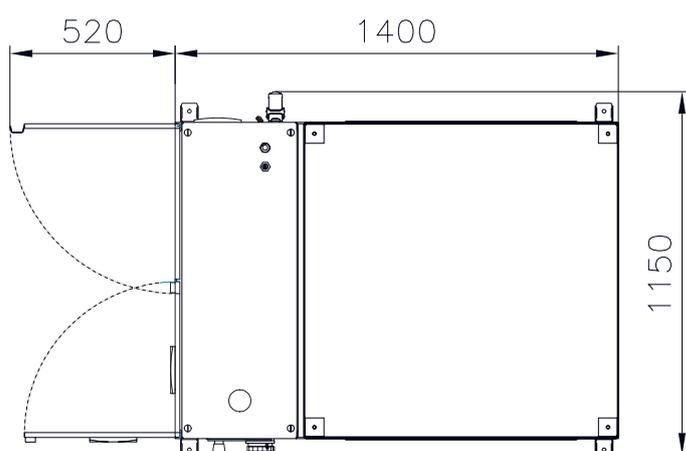
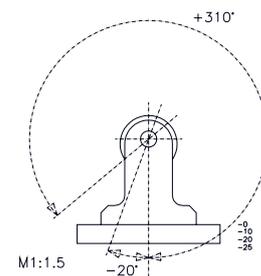
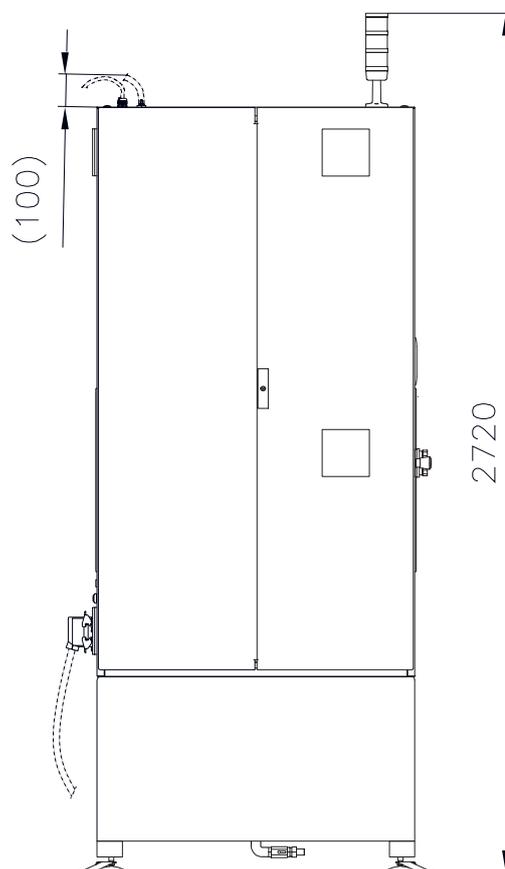
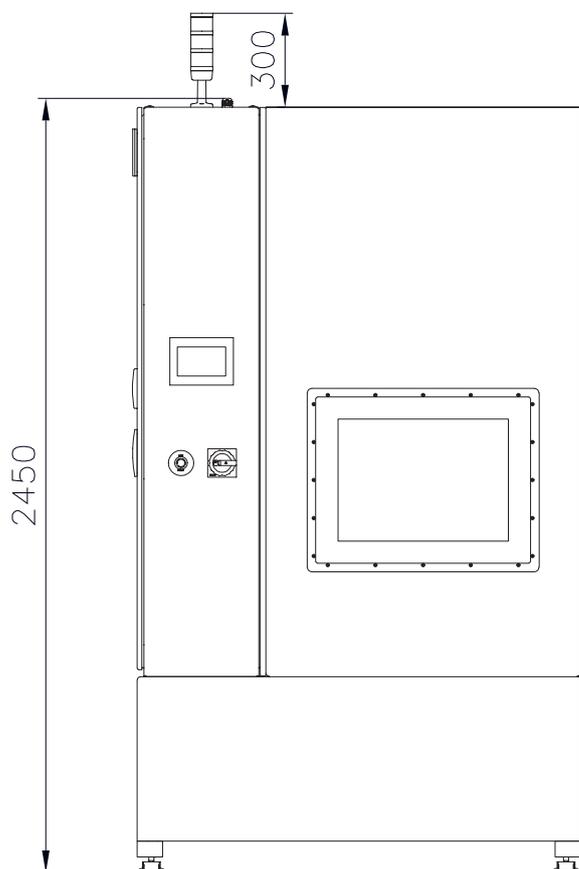
02 | Control panel

03 | Swivel table rotates 330°

04 | Cleaning agent tank

05 | Automatic loading door robot side

06 | Automation interface with connectors for pneumatic, electric and control systems



### TECHNICAL DETAILS

Dimensions (LxWxH)	<b>1400 x 1150 x 2450 mm</b>
Cleaning cabin	<b>INOX and powder-coated</b>
Tank/capacity	<b>single-walled, approx. 550 l with integrated fill level monitoring</b>
Electrical system	<b>3x400 V AC/50 Hz <sup>1)</sup></b>
Pneumatic system	<b>6 bar for door and chuck control</b>
Part dimensions (LxWxH)	<b>400 x 400 x 350 mm <sup>2)</sup></b>
Max. workpiece weight	<b>approx. 150 kg <sup>2) 3)</sup></b>
Doors	<b>pneumatically controlled</b>
Rinse pressure	<b>min. 3.2 bar <sup>4)</sup></b>
Flow rate	<b>max. 16 m<sup>3</sup>/h (± 266 l/min.)</b> depending on the selected nozzle set
Rinse fluid	<b>water-based and cleaning agent</b> (solvent-free)
Cycle time	<b>min. 40 sec.</b> (depending on the process)
Cleaning programs	<b>16 in memory</b>
Chip basket (1st stage)	<b>1 l</b>
Particle filter (2nd stage)	<b>600 µm <sup>5)</sup></b>
Rotation angle	<b>330° (-20° to +310°)</b>
Empty weight	<b>approx. 1000 kg</b>
Tooling	<b>specific, automatable EROWA tooling (Receiver/MTS 2.0)</b>

<sup>1)</sup> Other voltages possible via external transformer, 60 Hz version optionally available.

<sup>2)</sup> Other details depending on the project (weight and dimensions).

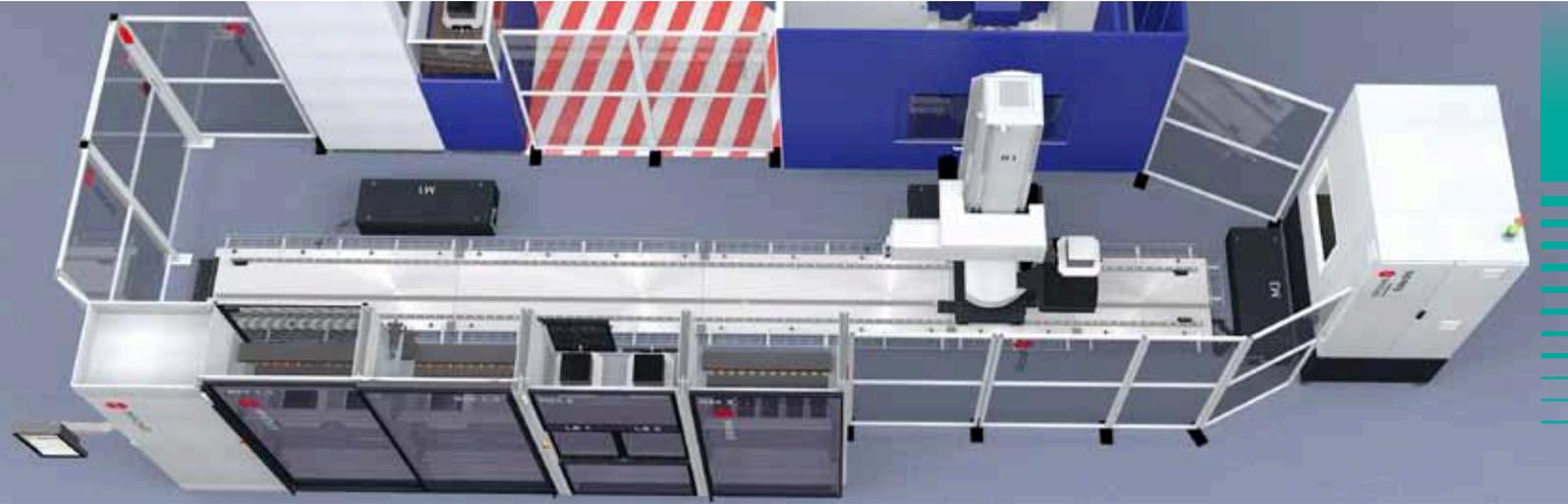
<sup>3)</sup> Without chuck and pallet / without extension.

<sup>4)</sup> Different at 60 Hz (2.9 bar)

<sup>5)</sup> 55, 100, 250, and 400 µm optionally available.

# The next step

Important things need to be planned. And your next step is certainly among the important things. For it is your start into a new, efficient era. We are pleased to be with you on the way. As consultants, in practice. For you to know at all times what you're engaging in. The next EROWA branch office is not far – **take the step.**



## Benefits you can count on:

- Cleaning and drying of palletized workpieces and electrodes
- Can be used as manual cleaning station (stand-alone)
- Can be used in line or single-machine automation
- Autonomous control (via control panel) and via process control system
- Various cleaning programs selectable (manual / automated)
- Create your own, part-specific programs for cleaning cycles
- EROWA standard robot interface
- Safety circuit with emergency stop functionality
- Plug and Play

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