

CLEANMASTER

Fully automatic machine for cleaning back-moulded and hot-stamped parts



Key Facts

- ✓ **2 in 1: Top and underside cleaning** in one procedure
- ✓ **Specially developed for the gentle removal of foil flakes and IMD paint residues**
- ✓ **Clean production cell** as a result of targeted suction of loosened particles
- ✓ **UV irradiation for final curing of the foil's decorative surfaces**

Product Description

The end of the balancing act: our response to foil flakes. The CLEANMASTER 3D offers a custom-made solution for surface cleaning of peripheral edges and IMD/IML component break-outs. Specific adaptation to the component geometry is done via the product carrier, brush stations and the control panel.

The CLEANMASTER 3D features a special cleaning head that combines various forms of cleaning, electrostatic discharge, brush and compressed air. The compact system can be seamlessly integrated into the cell layout of the injection moulding machine, with parts handling carried out by the on-site factory robot.

The IMD films are then cured with a UV module in an upstream or downstream process step. The space-saving arrangement of the UV station over the cleaning area ensures an optimum configuration of the production cell.

Technical Features

Cleaning:

- In-process operation: The machine is integrated into the cell layout of the injection moulding machine and enables optimum utilisation of cycle times and existing handling equipment such as feeder robots
- Freely programmable cleaning of the outer contour
- Integrated filter and suction system
- Supply of components via individual product carriers

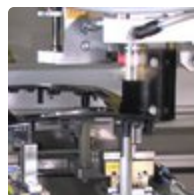
UV:

- UV irradiation for the final curing of the foil's decorative surfaces
- Traversing speed and travel path can be programmed as needed for the optimum curing process
- The power of the UV lamps is adjustable
- The number of UV lamps varies depending on the application



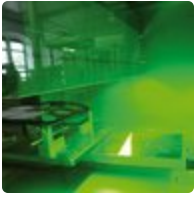
Defined part holders:

Optimal orientation for the best possible cleaning result.



Freely programmable cleaning:

Precise adjustment to the outer contour.



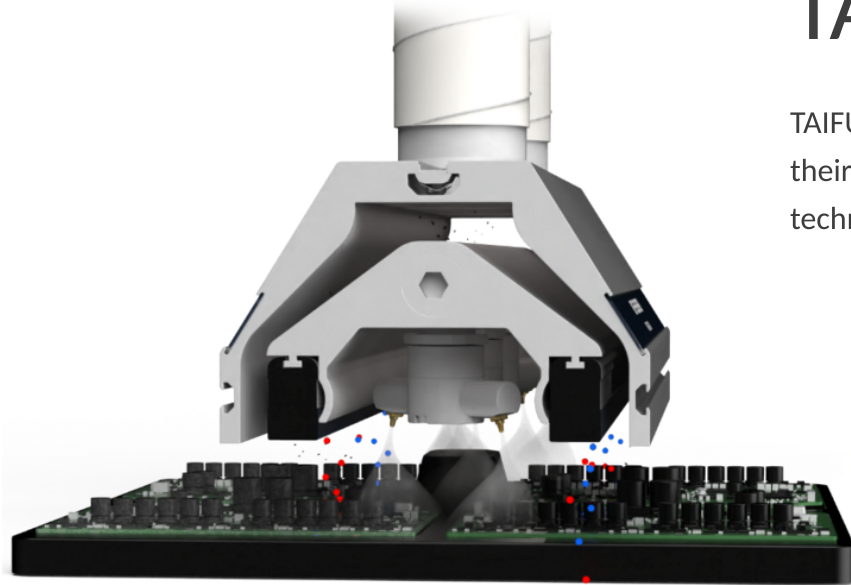
UV curing:

Efficient curing for durable and high-quality surfaces.



Integrated filter and suction system:

Efficient particle removal and clean air.



TECHNOLOGY

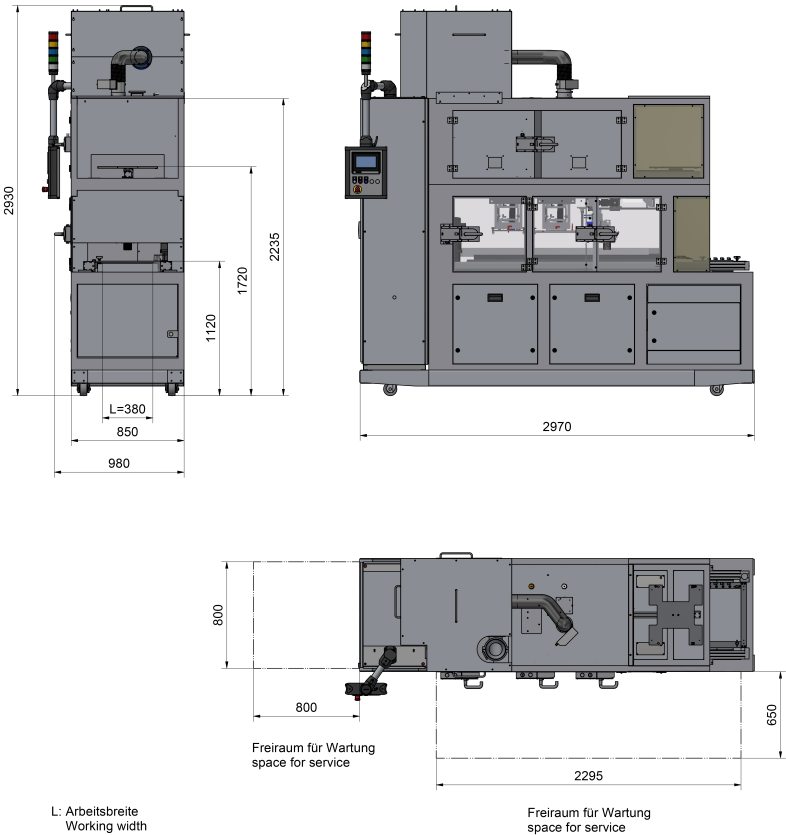
TAIFUN-CLEAN®

TAIFUN-CLEAN® begins where others have reached their limits. Would you like to learn more about the technology behind our product?

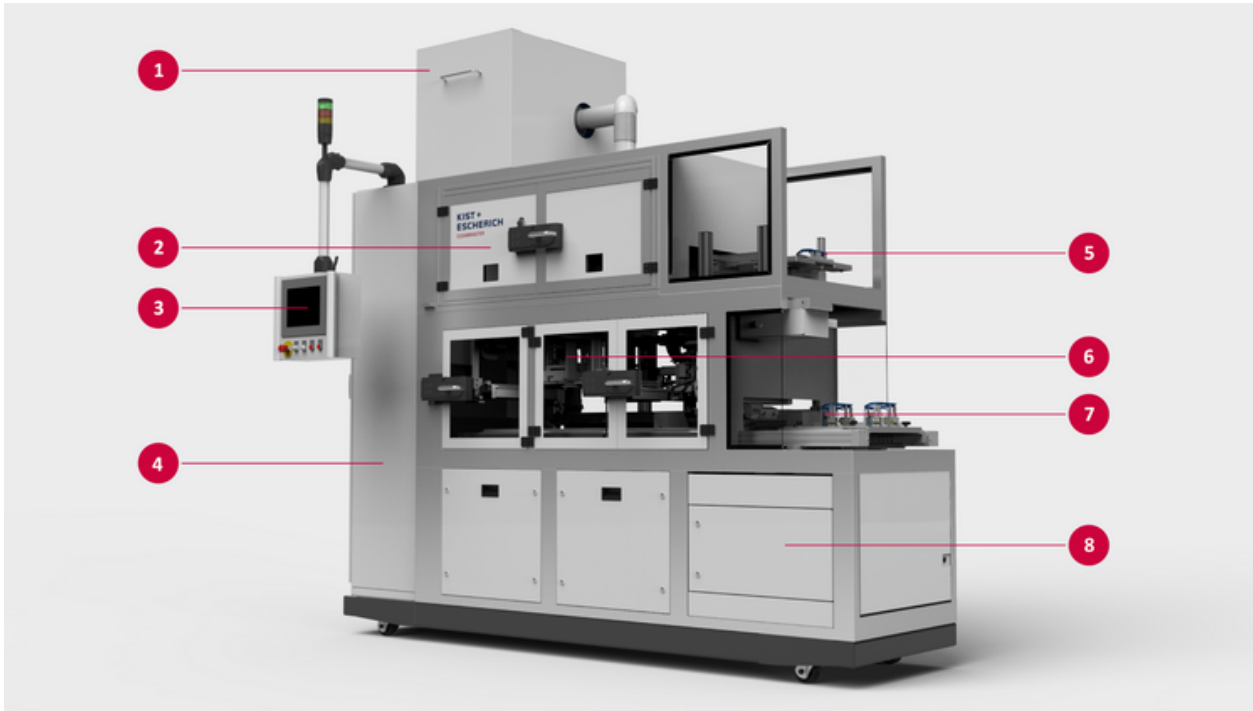
Technical Data

CLEANMASTER 3D-UV	
Work chamber	440 × 300 mm
Compressed air connection	1/2"
Transfer height	1120 mm cleaning 1800 mm UV treatment
Weight	1400 kg
Operating voltage	3 × 400 V AC, PE, N
Frequency	50 Hz
Power consumption	30 kVA
Rated current	7 A
Conveyer speed	3–10 m/min
Wire colour	Grey RAL 7035

Technical Drawings



System Installation



- 1 UV suction
- 2 UV curing
- 3 Front panel
- 4 Control cabinet
- 5 Component holder UV
- 6 Cleaning system
- 7 Component holder cleaning
- 8 Suction and filter unit cleaning

Options

- **Component-specific cleaning system:** Adapting the cleaning system to the component according to cleaning requirements.
- **Cleaning only:** At your request, the CLEANMASTER can also be configured without a UV station.
- **Programme module:** Component-dependent cleaning programmes with recipe management and parameter control functions.
- **Compressed air control:** Controlling the compressed air via an integrated program module.
- **Monitoring bundle & TC CONTROL:** Extended monitoring package for the systematic recording of all process-relevant functions.
- **Operating and machine data recording:** Data recording and processing of operating and machine data with a link to the production control system (MES).