AERIA.ZERO
Dispensing system
CNC in atmosphere

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Multi-Functional Dispensing Cell for Industry 4.0

CNC System with cartesian kinematics robot and interpolation between motion and dispensing.

This system offers:

- Management of multiple dispensing systems (DOP pistons, DOI gears).
- **Interpolation between motion and dispensing** for a simplified and repeatable process.
- Remote control via SCADA and/or PLC.
- Quick production changeovers thanks to advanced software, compatible with all browser-equipped devices.
- Integration with factory computer systems.
- Automated connection with the logistics system, supply network, and other machines.
- Teach programming with joystick (JOG).
- Integrated weighing control (BIL).
- 3D G-Code programming tool, *G-Sketcher*.
- Temperature management (RIT).
- Management of external feeding systems (pressure and vacuum tanks, pressure plate pumps and cartridges).

Key features

Industry 4.0 dispensing system with multiple dispensing technologies, advanced remote control, and seamless integration with production line systems, ensuring continuous operation and monitoring.

Main applications

The system enables a wide range of processes, from dispensing to bonding, from sealing to the application of thermally conductive materials.
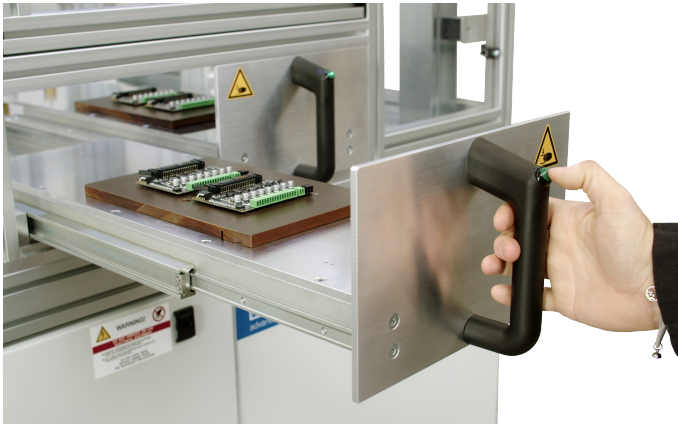
Industrial fields

The system is successfully employed by leading international industrial players in the electrical, electronic, automotive, aerospace, chemical, and medical sectors.

Seamless production with drawers

Remote control, via Wi-Fi

Integrated operator panel

Features

- Multi-axis CNC with motion and dispensing interpolation.
- Embedded controller and user-friendly multi-device HMI interface (CON).
- G-Code programming.
- Presence and pallet positioning sensors.
- Safety PLC, optical barrier, and position sensors (SIL-3).
- Remote control via clean contacts and TCP/IP.
- Industry 4.0 certification.
- Integration with factory computer systems (ERP/MES).
- G-Sketcher software for 3D programming.

Applications

- Potting of electronic components of various sizes, including PCBs, sensors, transformers, coils, stators, connectors, and wiring.
- Gaskets and seals for electronic enclosures.
- Suitable for variable batch sizes and dispensing of thermally conductive and thermosensitive materials.
- Capability for surface treatments using a plasma torch.

Optionals

- Different metering heads with interchangeable piston pumps (DOP) or gear pumps (DOI).
- Quick head changeover capability.
- Choice between single or multiple nozzles (DOP).
- Integrated material preparation management.
- Handling on speherical surfaces or with drawers.
- Joystick for teach mode programming (JOG).
- Plasma unit implementation option.
- I/O for vision systems and quality control (barcode).

Description	Value
L x P x A (mm)	1410 x 1350 x 2500
Working area XYZ (mm)	(500/1000/1500) x 500 x 300
Max speed (mm/s)	up to 300
Transportable weight	up to 18 kg
Power supply	3F + N + T 400 V/50 Hz

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