

## Cencorp Test and assembly solution for ECU units

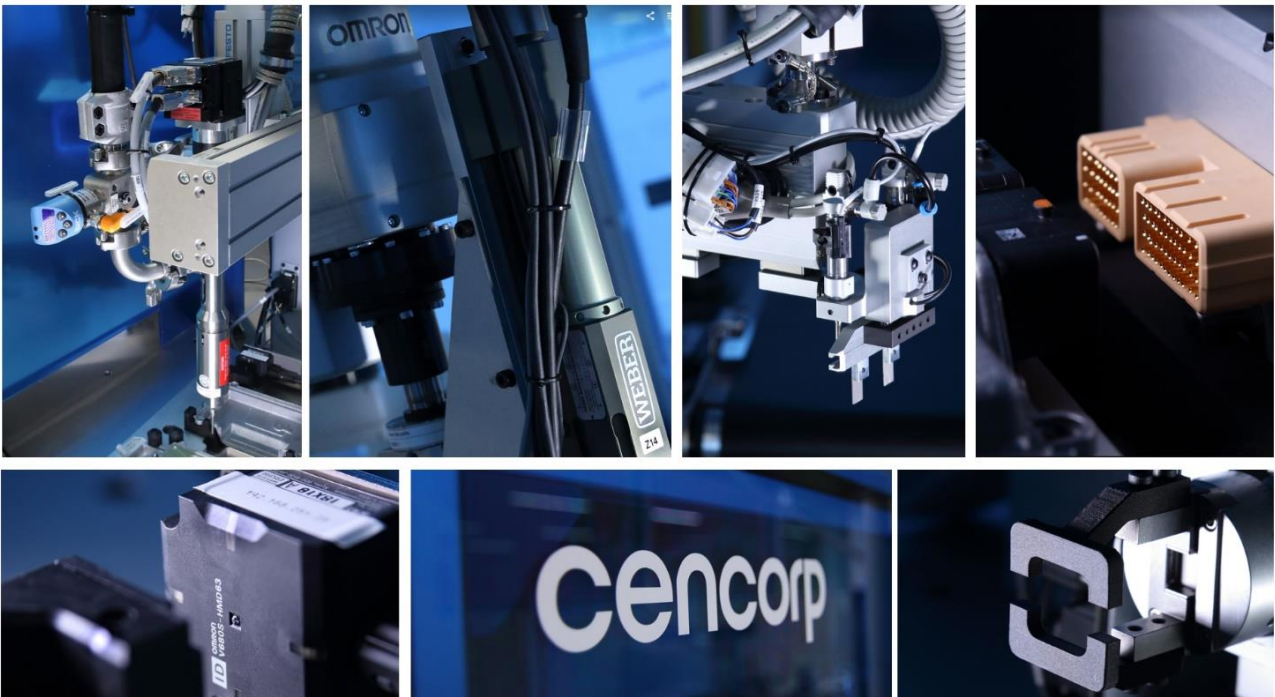
Turnkey solution for ECU unit manufacturing, including an **XPRS test solution** for PCB level testing, **Weiss TR1500 dial table** solution with **Omron NX7 PLC**, 3 x **Omron Scara robots**, **Festo/Omron XYZ gantry robotics**, **Weber screw driver** and **Viscotec material deposition** solution with full traceability and inspection solutions.

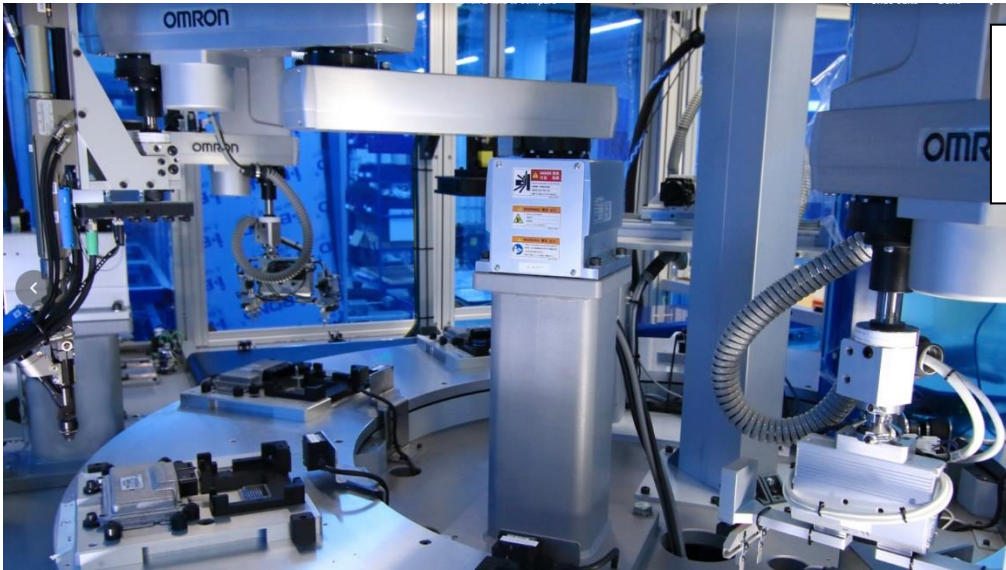
Cencorp 750mm **PCB conveyors** with automatic width adjustment are handling various size PCB modules to the **XPRS tester** with automatically test unit selection and connection. Tested products and components are picked and placed with **Omron Scara robots** ensuring smooth and controlled material handling through the whole process.



A **Viscotec dispensing** solution makes sure that deposition is made correctly. The **Cognex 8402** verifies that the material is distributed as defined. A **Weber screw driving solution** ensures that tightening is executed according tightest specifications and controls. Final tested products are labeled with **Cab Hermes printer** and print quality is verified with **Keyence SR-710 reader**. Process states are followed by **Omron V680S RFID** technologies and mastered by **NXT7 PLC** platform

The Cencorp solution includes **Cencorp standard operating software** and graphical user interface. Traceability, MES, ERP etc. connections are seamlessly integrated to the solution trough master and gateway PC solutions with help of various **2D / RFID sensors**.





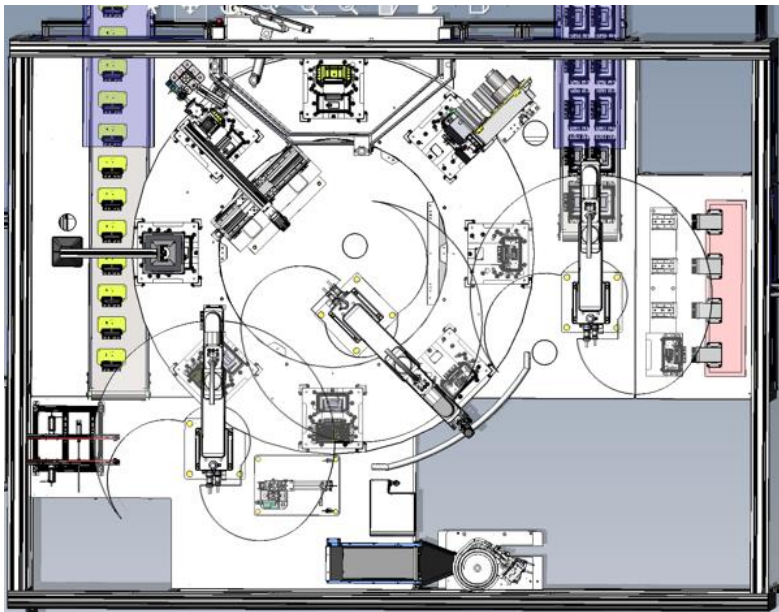
Busy but controlled functional unit team around Weiss TR1500 dial desk ensures fast and precise assembly operation



ViscoTec material deposition system connected to the Festo / Omron based gantry robotics



Omron R6YXG500 Scara with YRC family controller is guiding Weber SER03 series driver hosted by C30S controller



Cell is designed with superior maintenance access for each process phases

- **Welded steel frame + covers / safes / controls / Pneumatics / electrical cabinets**
- **Weiss TR1500 8 position dial table**
  - EF2150 Frequency controller
- **Omron NX 7 based control systems (NX701-1600)**
  - Omron NA5-15W1015 HMI unit
  - Omron, I/O, Power, Servo, Safety, UPS etc. systems used
- **Omron Industrial PC with Cencorp user interface / traceability connection**
- **3 x Omron Scara Robot, R6YXG500200YRCR3 with needed grippers and teach pendant**
  - Screw driver moving (
  - Electrical module loading to the dial disk
  - Functional module loading to the tester
- **XYZ gantry robotics units with Festo linear / Omron servos**
- **Viscotec dispensing systems with material feeding / controlling units**
  - Viscotec Dispenser 3RD10-H cpl with needed control and feeding units
  - B-KC-VISCOPRO Drive unit
- **Vision inspection**
  - Cognex 8402 Insight micro camera systems for sealant presence and part inspection
- **1 x Weber screw driving solutions with controller and automated feeding system**
- **1x Cab Hermes+4L/600/3 + Printer-Applicator system, Tamp pad, Operator panel etc.**
- **2 x Keyence SR-710 2D code readers**
  - 1 x Electrical module identification from conveyor line
  - 1 x Label verification
- **RFID**
  - Omron V680S RF tags on each fixture on the dial for product identification
  - Omron V680S RFID reader/writer units for each pallet / shuttle stations
- **Testing / programming**
  - 1 x Cencorp XPRS tester with 6 programming / testing units for Electrical module
  - 3 x Test stands and test adapters for a Functional module testing
- **3 x Cencorp PCB conveyor units**