

CMTS Test Station

Compact Multicell Test System



Designed for precision and efficiency, this station optimizes footprint by accommodating a large number of test positions while maintaining functionality comparable to other standard test systems.

KEY FEATURES

- Footprint optimization
- Highly modular concept design
- Multipurpose functional testing
- Multicell capability of test modules

INTRODUCING THE MULTICELL TEST SYSTEM CONCEPT

An innovative, multipurpose test machine concept designed to seamlessly incorporate diverse testing procedures, flexibly catering to evolving production demands.

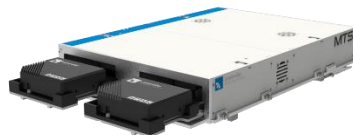
Designed with a modular framework, **CMTS - Compact Multicell Test System** is a versatile system divided into two main parts: the stations and the multicell test modules (MTM).

The station functions as an automatic pick & place system, enabling easy placement and removal of test modules based on test requirements and production demands. It was designed with a flexible approach, facilitating the selection and assembly of different configurations. This design enables upgrades to be easily implemented, allowing for the incorporation of new products, and creation of new configurations, with exceptional space-saving capability and versatility.

Furthermore, the station is prepared for multipurpose functional testing, covering a comprehensive range of tests such as complete run-in testing under high-temperature profiles, (re)flashing processes, and RF testing.

To seamlessly integrate various test modules' functionalities, a custom rack was developed simplifying the test modules placement and removal, while ensuring their secure and precise positioning. This custom rack can also be integrated with the standard 19" rack, allowing for easy addition of standard equipment if required.

MTM - MULTICELL TEST MODULES: EMPOWERING PRECISION TESTING



The **MTM – Multicell Test Modules** are incorporated within the test stations and have the capacity to execute multiple functions, enabling the integration of diverse functional tests.

The modules are designed with multicell capability, allowing for two Device Under Test (DUT) per module, according to the specific product and functionality.

Due to the high complexity and numerous configurations, a modular design approach was employed for ordering and assembling different modules. Thus, smaller reusable modules can be utilized across various designs. This facilitates easier development of complex test modules for different products and functionalities.

A custom loading lift is available for loading and unloading the test modules, providing a similar handling experience to other standard lifts. It incorporates a semi-automatic system for locking and unlocking modules in the tower.

Furthermore, the lift can also serve as a quick debug station, providing added convenience and versatility.

MAIN APPLICATIONS

This concept is specifically suited for the Automotive industry for functional testing of electronic components, with the possibility to be integrated into automated factory production lines and worldwide distribution.

A live demonstration of a **CMTS** will be exhibited at Controlar's stand (Hall A1 – 339) in Productronica 2023, between the 14th and 17th of November.

ABOUT CONTROLAR

Founded in 1995, Controlar Innovating Industry is a Portuguese company that specializes in Industrial Automation and Test Systems with focus on the automotive industry.

Supported by skills such as hardware and software development, the company services include the design, development, and integration of automated test systems for the validation and verification of electronic components and systems.

Controlar also offers solutions for data acquisition and analysis, production line automation, and quality control, holding a significant portfolio of projects and services.

Among its references are multinational companies and its partnerships include leading manufacturers around the world.

The company has a team of highly skilled engineers and technicians who are dedicated to delivering innovative technology and exceptional customer service.

With more than 390 employees, the Controlar Group operates through a network of global production units and companies (Portugal, Spain, Mexico and Malaysia), regional offices and partners (Germany and India). All working together with combined synergies to meet customers' needs and expectations.