

Test Engineering

- Inline-Test-Systems
- Test adapter for incircuit and functional test
- Manual and semi-automatic test equipment
- Functional test with confirmation simulation
- Special adapters for RF and high voltage test
- Contact modules for plugs, switches, sockets
- Adjustment unit, e.g. for potentiometer
- Customized and product-specific extension of contactings

Measurement Technology

- The measurement is based on modular systems such as VXI-Bus or Compact-PCI (PXI)
- With integrated test run control
- In the common programming languages

Assembly Automation

Boardhandling

Robotics

Temperature Testing Chambers

Inline Tunnel Systems

Marking- & Recognizing Units

Lean Production

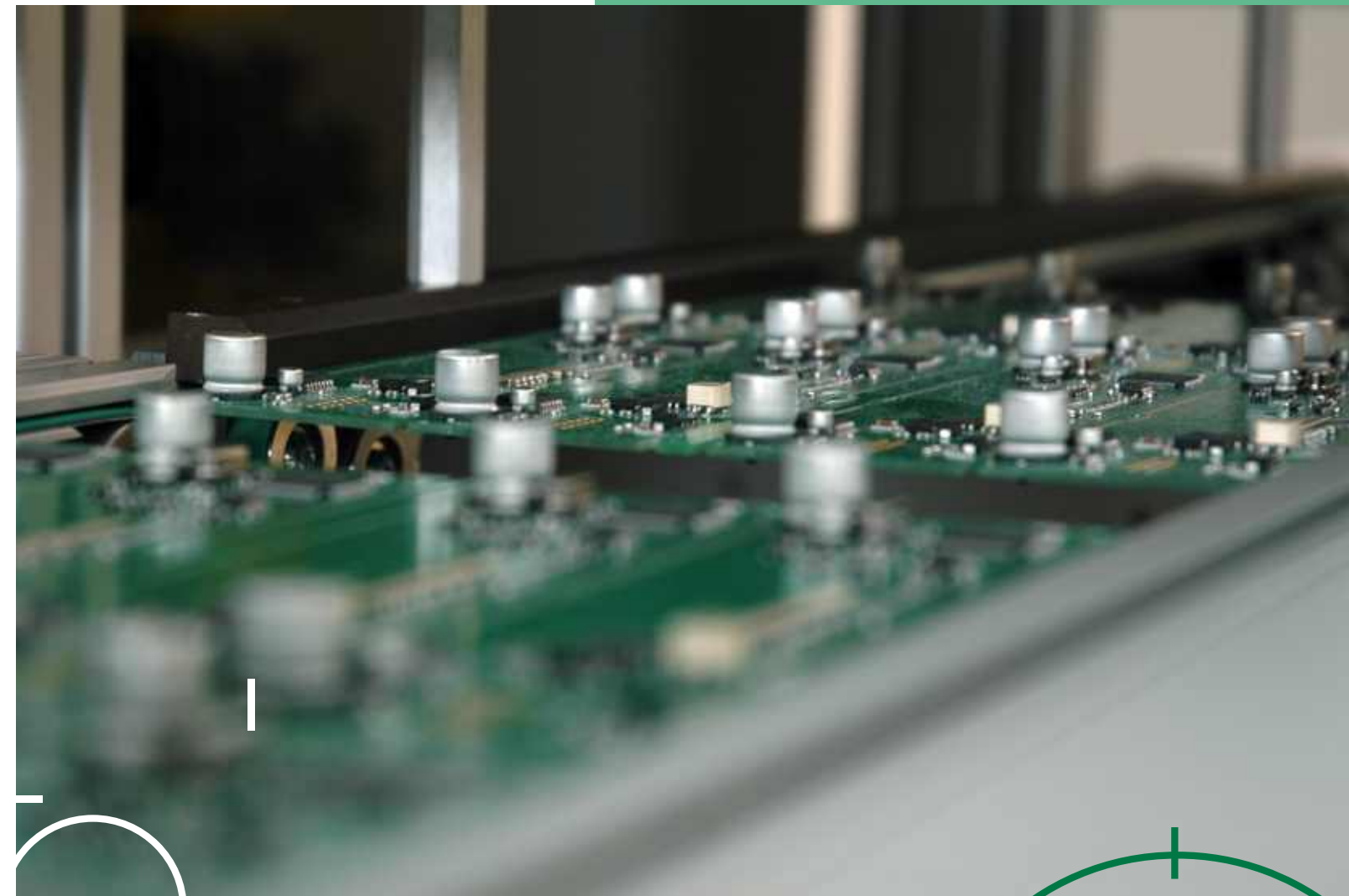
Vision Systems

ENGMATEC GmbH

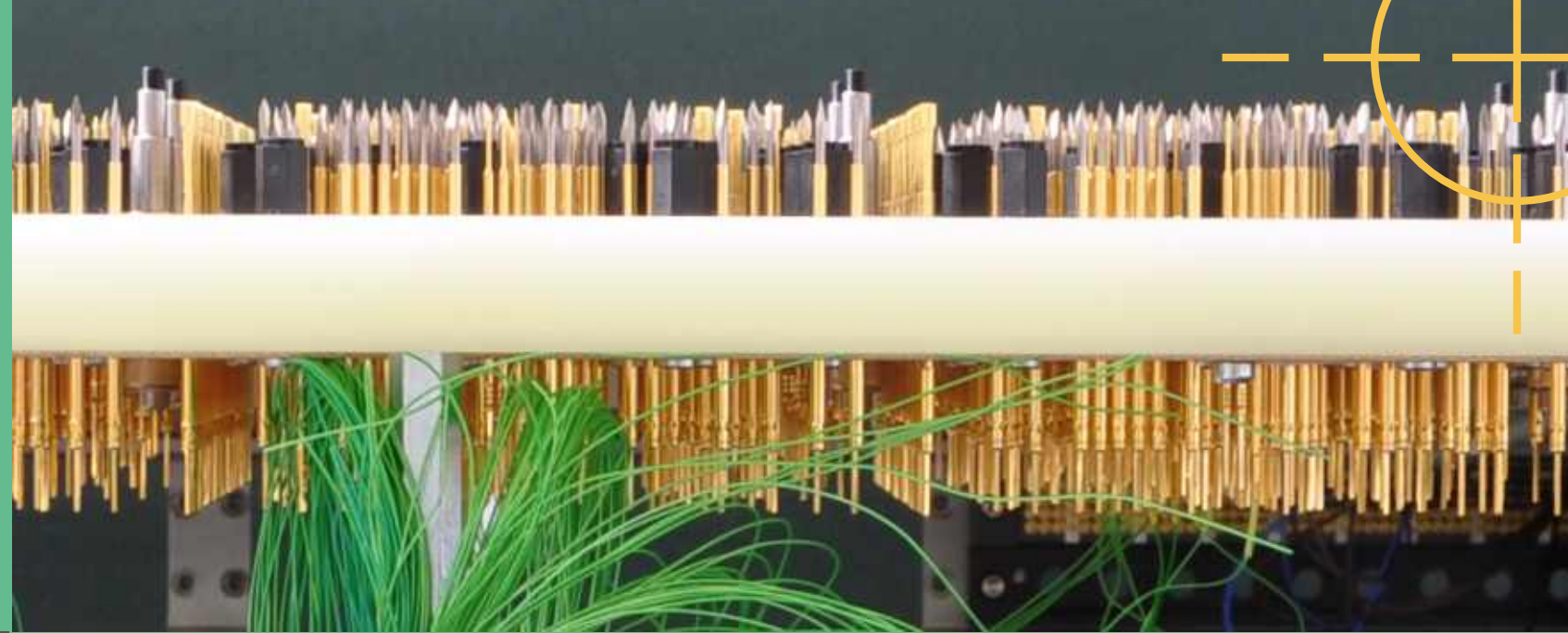
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References



The powerful one, the small one,
the precise one, the special one...



ENGIMATEC Testhandler - effectively testing in a systematic way

The demands on testing systems in the electronics sector are becoming increasingly complex. Flexible volumes and a growing variety of product variants often determine the production processes, automation systems are employed even more frequently. With its modular Testhandler assortment ENGIMATEC offers cost-effective solutions for diverse testing requirements.

The ENGIMATEC Testhandler as the core of our inline test solutions impresses with the extended range of uses for in-circuit, function or end-of-line tests. All components of the module system are coordinated and can be combined with each other and with different production systems. Vision systems, scanner, marking systems and many other functions can easily be integrated.

A comprehensive range of boardhandling systems completes our testing equipment. The product portfolio comprises a number of handling and transport systems for PCBs and workpiece carriers.

Depending on the requirements, ENGIMATEC designs test systems for medium-sized series manufacturing and high volume production. Easy and fast retooling as well as extensions dependent on the quantity of items offer you the required flexibility, in order to be prepared for current and future challenges.

Test Technologies

- In Circuit Test
- Function Test
- Combination Test
- EOL (End of Line) Test
- RF Test
- High Current Test
- Optical Inspection
- Flashing, Run In

Control System

- Beckhoff
- Siemens
- Control by measurement computer

Traceability + Database Connection

Integration into traceability and data management systems, higher level control systems:

- ITAC
- Handke
- SAP

Boardhandling

- Conveyors
- Loader / Unloader
- Lift Units and Traverser
- Turn and Flip Units
- Buffer Stations
- Pass / Fail Sorting Function

The powerful one - for large forces

Testhandler Servo (ETH-S)

- Servo Drive
- Up to 4080 test points

The small one - for function testing

Testhandler Low Force (ETH-LF)

- Pneumatic Drive
- Up to 200 test points

The precise one - for small test points

Testhandler Microcontacting (ETH-MC)

- Test points from 0.2 mm
- Optical alignment

The stackable one

Testhandler Multilevel (ETH-ML)

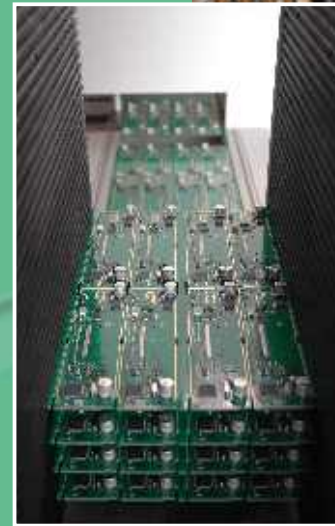
- 3 contact units stacked

The manual one

Testhandler Drawer (ETH-DR)

- Drawer loading
- Manual workplace

High standard, many variants, one concept



The basis of the ENGIMATEC test handler is a robust knee lever system, which can be fitted both with a servo drive or with pneumatic cylinders. With the servo drive, connections can be made up to 4080 test points simultaneously on a maximum effective area of 400 x 400 mm. The contacting unit works single-sided or double-sided, also step by step for panel testing depending on requirements.

An automatic fixture feed unit and conveyor width adjustment guarantee short set-up times and universal use of the handler. An essential feature of the compact construction method is the facility for accommodating the measuring electronics in the lower part of the unit.

An intelligent control concept and standard interfaces guarantee a safe function in each system configuration without change of control. The use of a PC based controller contributes significantly to the flexibility of the testhandler.

Reading, marking and vision systems as well as many other functions can be incorporated both on the fixtures and in the testhandler.

Features

- One- or double-sided contacting
- Step-by-step contacting
- Changeable Fixtures
- Integrated measuring
- SMEMA interface
- User administration
- Comfortable, multilingual operator guidance
- Remote maintenance

Interfaces to test systems

- Digitaltest
- Teradyne, Genrad
- Aeroflex
- Rohde & Schwarz
- SPEA
- Dr. Eschke
- PXI-Testsysteme
- customized
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Options

- XYZ axes system
- Vision systems
- Marking systems
- Actuators, push and turn buttons, force-displacement measuring
- Plug contacting
- Code reader
- Automatic width adjustment

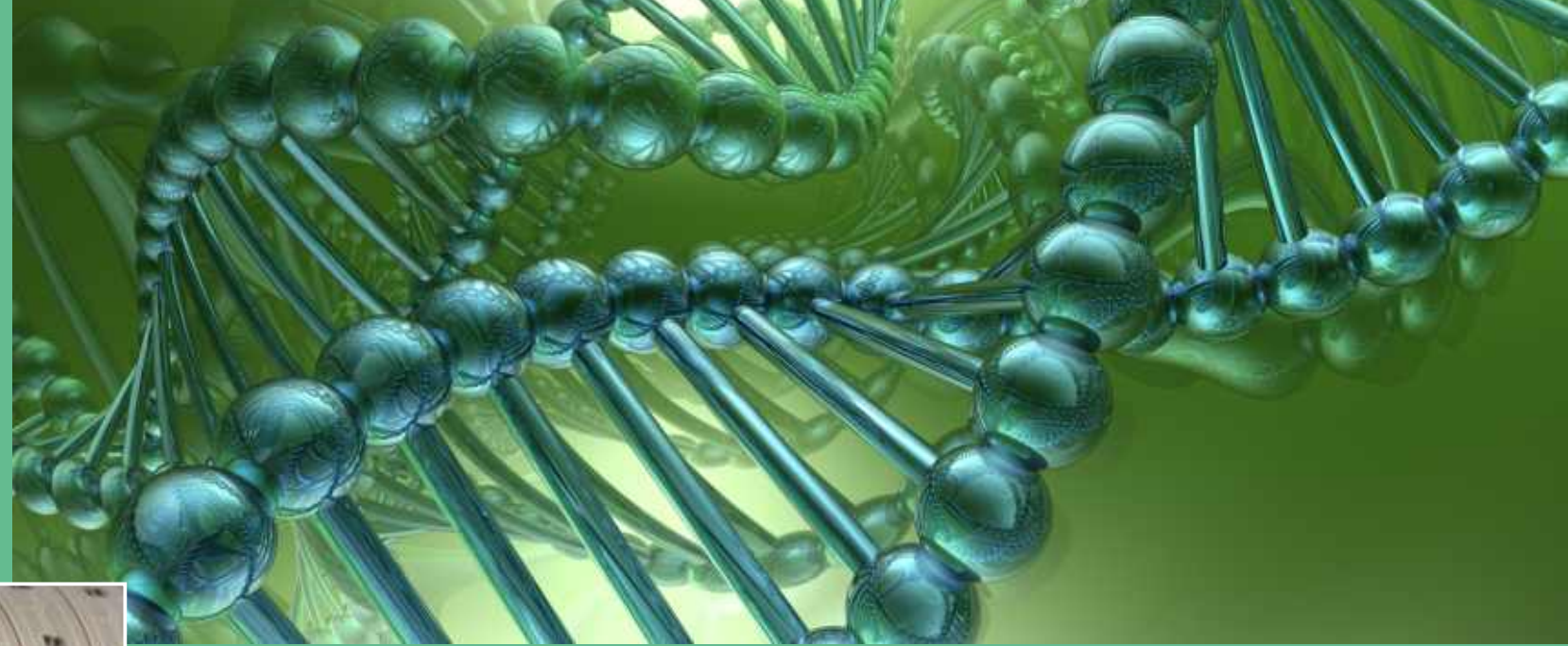
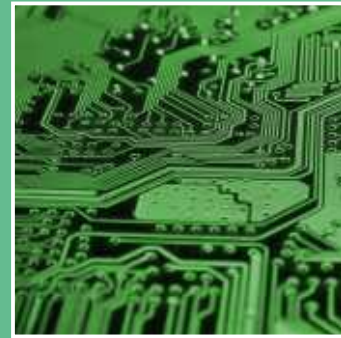
Internal interfaces

- Pylon
- Virginia Panel
- ODU
- customized

Transport

- Conveyor systems for workpiece carriers
- Conveyor systems for PCBs

Open and flexible for your applications



At ENGMATEC, you will be professionally supported by a highly-qualified team in every phase of the process development. All tasks from product design to final assembly are accomplished in-house:

In cooperation with you, experts from the departments Project Planning and Sales elaborate efficient testing and assembly strategies, which comply with your needs optimally.

Specialists in the areas of line planning and traceability realize the connection to databases and support your project management relating to structuring and documentation of your processes.

With state of the art tools and extensive expertise, our engineers and software specialists develop customized and efficient systems according to your tasks.

Highly competent and skilled employees in the fields of manufacture and assembly stand for the quality of ENGMATEC installations. Service engineers ensure fast reaction times and technical support.

A special feature of ENGMATEC GmbH is the high in-house production depth. This allows us to handle projects in very short amounts of time at competitive prices. The own competence in all core processes guarantees a flexible orientation towards customer benefit and the realization of highest quality standards under our own control.

Present in many different industries

Systems from ENGMATEC are in successful operation in various industries worldwide:

- Automotive
- White goods
- House and building
- Medical engineering
- Biotechnology
- Renewable energy sources
- Industrial electronics
- Automation

Range of services

- Project Planning
- Design
- Line planning
- Control engineering
- Assembly
- Mounting
- After-Sales-Service
- Documentation

Operating ranges, products

- Mounted circuit boards
- Substrates
- Glas tops
- Flexfoils

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