





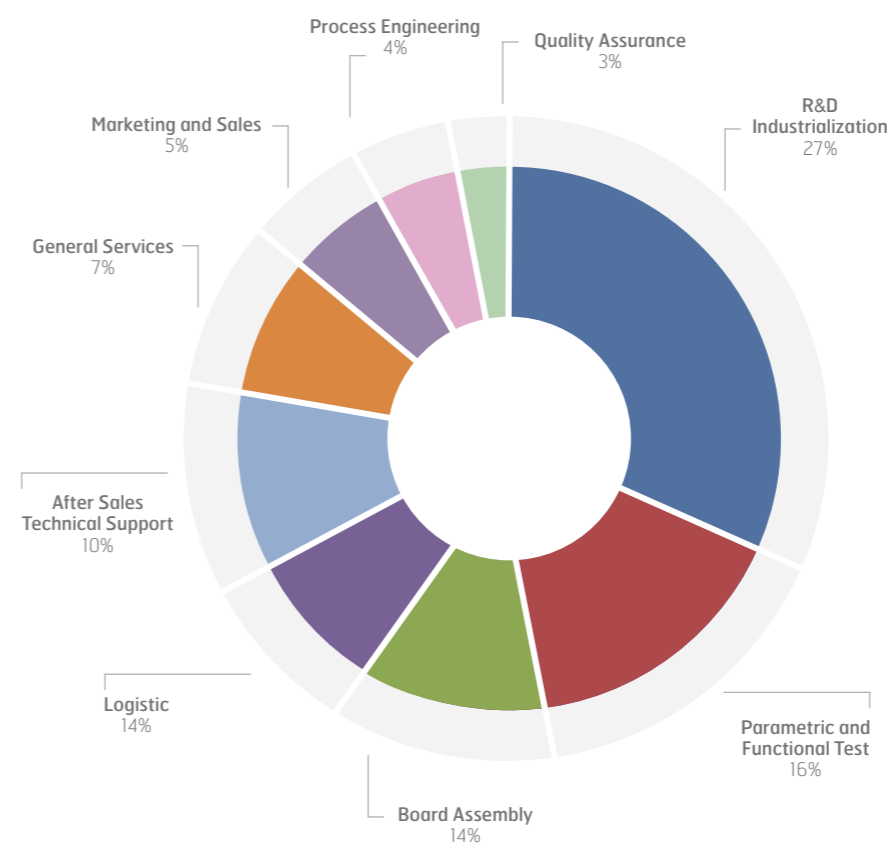
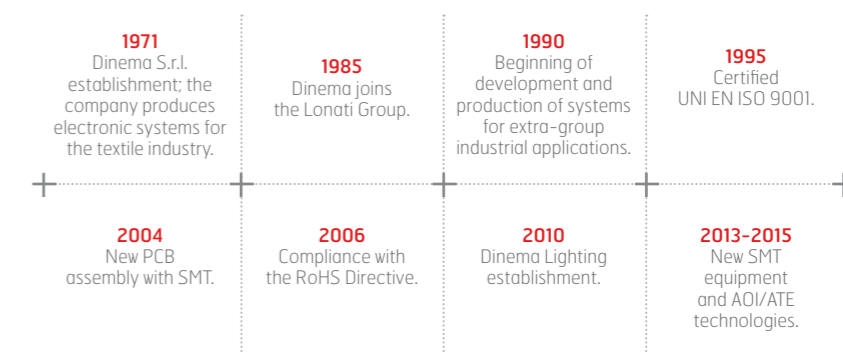
# DINEMA

## COMPANY TODAY



**DINEMA** is an advanced company that has been providing for over 40 years electronic products and services at the technological forefront in many application fields, standing out of the market for the fullness of proposals that can offer to their customer.

We rely on specialized technical resources, in compliance with international standards and/or specific requirements from our customers.



OUR QUALITY SYSTEM IS CERTIFIED ACCORDING TO UNI EN ISO 9001:2008 AND IS BASED ON THE FOLLOWING PRINCIPLES:

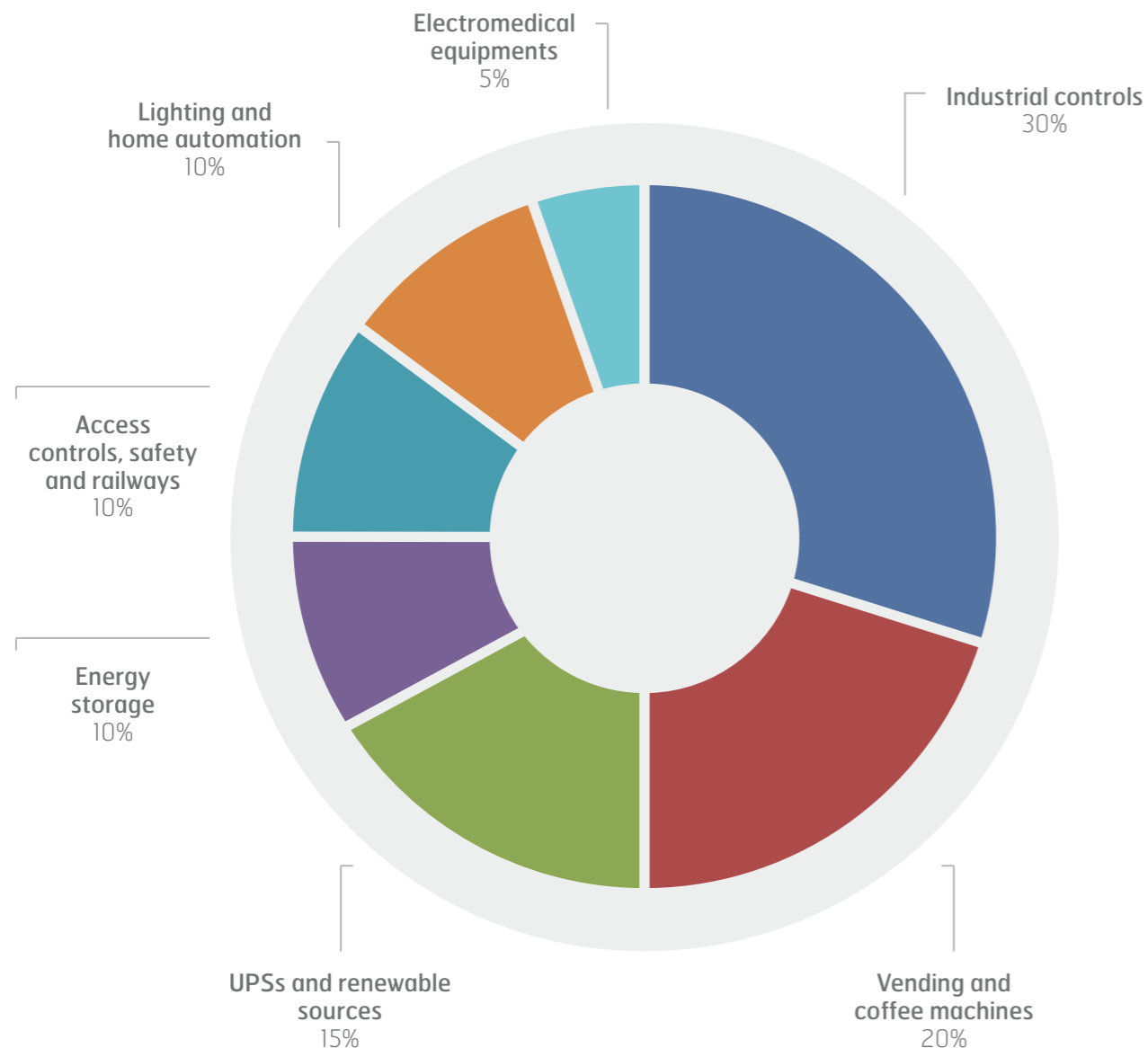
1. CUSTOMER FOCUS
2. LEADERSHIP
3. INVOLVEMENT OF PEOPLE
4. PROCESS APPROACH
5. SYSTEM APPROACH TO MANAGEMENT
6. CONTINUAL IMPROVEMENT
7. FACTUAL APPROACH TO DECISION MAKING
8. MUTUALLY BENEFICIAL SUPPLIER RELATIONSHIPS

# WHAT WE DO

## APPLICATIONS

DINEMA IS ABLE TO ADDRESS **ALL COMPANIES THAT REQUIRE ELECTRONIC SOLUTIONS**, REGARDLESS OF THEIR SIZE AND SECTOR OF ACTIVITY.

Thanks to the continuous investments in technology and research, today **DINEMA** is able to cover almost all the market fields.



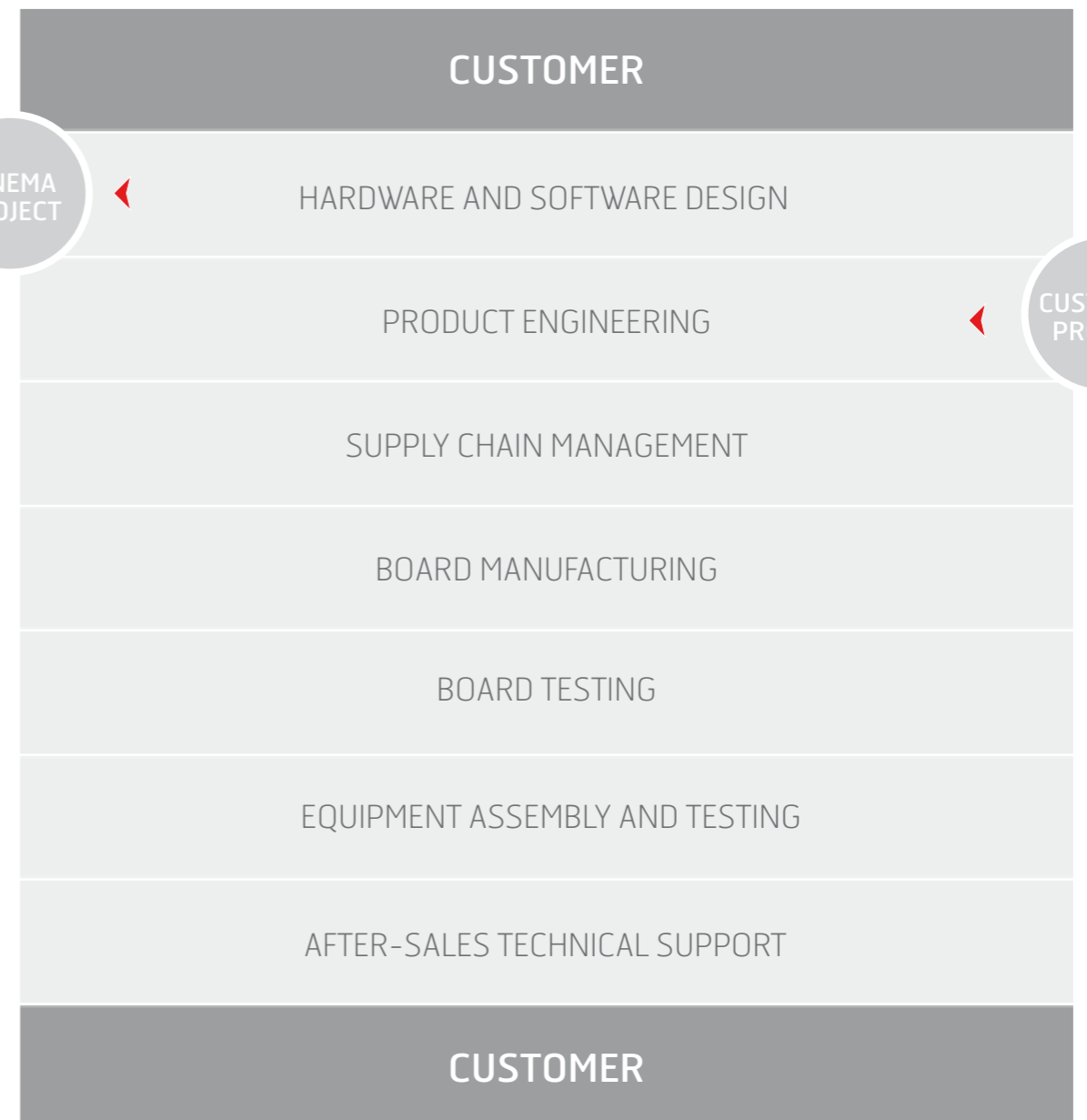
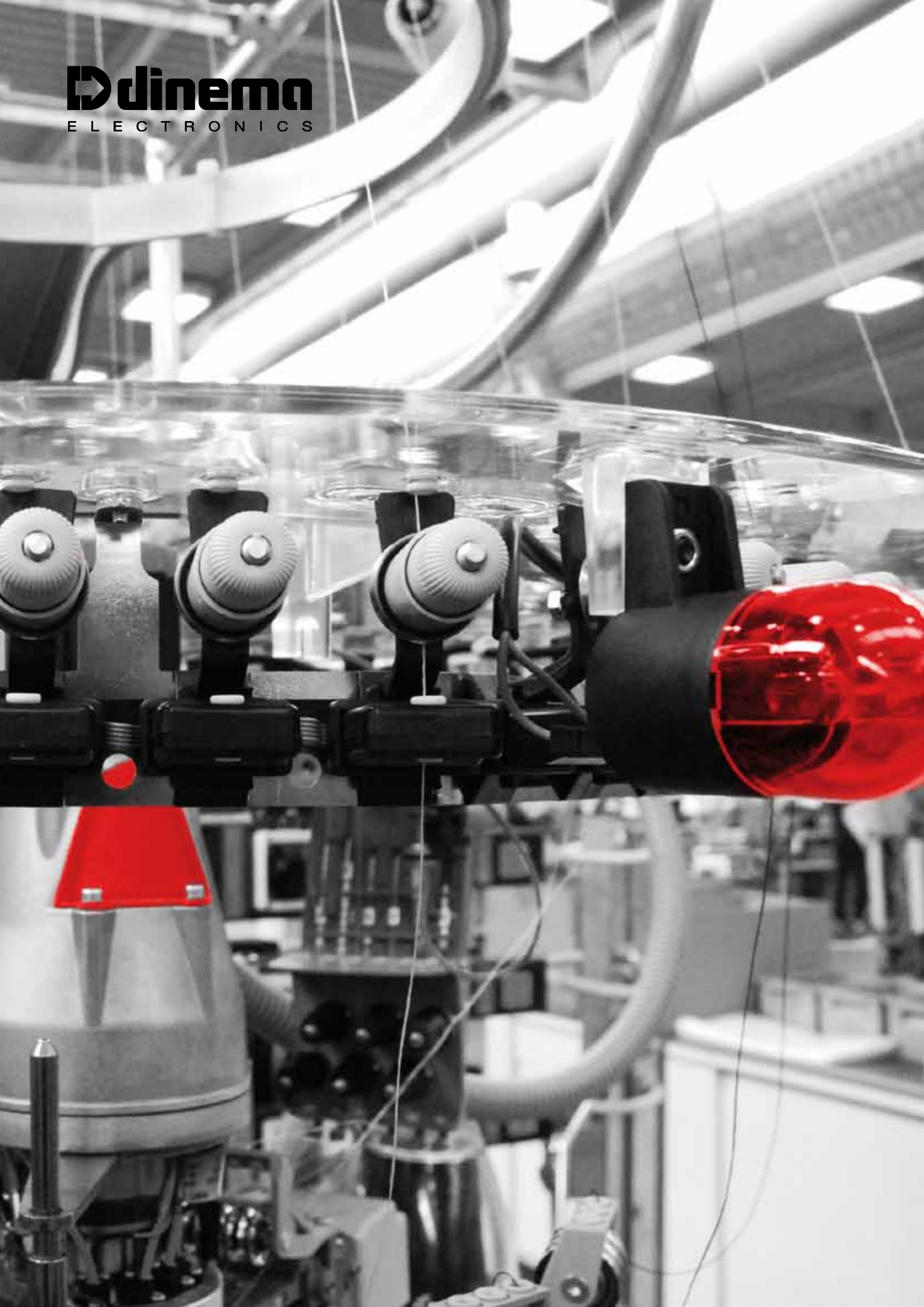
# WHAT WE DO

## DINEMA, ELECTRONICS DEDICATED TO:



1. TEXTILE MACHINES AND EQUIPMENTS
2. INDUSTRIAL COFFEE MACHINES AND AUTOMATIC VENDING MACHINES
3. PUMPS CONTROL AND PROPORTIONAL VALVES
4. BATTERIES, EQUIPMENT FOR ENERGY STORAGE AND POWER ELECTRONIC EQUIPMENT
5. WEIGHERS AND PACKAGING SYSTEMS
6. ACCESS CONTROLS, AUTOMATIC DOORS AND ELECTRONIC SAFETY
7. GAS CONTROL UNIT AND SENSORS
8. ELECTRO-MEDICAL DEVICES
9. RAILWAYS
10. LIGHTING AND HOME AUTOMATIC
11. UPS, SWITCHING AND MOTOR CONTROL
12. DATA COLLECTION, PRODUCTION CONTROL SYSTEMS AND WIRELESS DATA COLLECTION
13. LOW-POWER ACCESSORY FOR CIVIL WAPONS
14. HIGH-END APPLICATIONS

# COMPLETE PRODUCT MANAGEMENT



# COMPLETE PRODUCT MANAGEMENT

## RESEARCH & DEVELOPMENT, PRODUCT ENGINEERING

Characterized by high profile staff, our R&D and Product Engineering department is divided in different Units for Hardware and Software Development. Years of experience, together with the synergies and connections with the Lonati Group branches, allow us

to extend our electronic services offer into a proper turnkey solution: starting from a simple idea of our customer, we are able to deliver a complete finished product (including plastic moulding or metallic case, when required). The well-established relationships we can rely on

with Industry Associations, International Research Centers and Local Universities, make us an even more valuable partner also for the development of innovative solutions.

### MAIN HARDWARE SKILLS

- digital, analog and power electronics
- microcontroller systems from 8 to 32 bits
- programmable devices
- power supplies (fly-back, forward, push-pull and resonant)
- drives for trapezoidal or sinusoidal brushless motors
- step motor drives with digital and / or analog techniques
- drivers for piezoelectric actuators, positioning of proportional valves, sensors
- proprietary or standard communication interfaces
- complete development of the PCB layout

### MAIN SOFTWARE SKILLS

- C and C++ for embedded applications, Visual C++ for PC based applications, Assembler
- development of embedded applications with Linux or custom RTOS
- development of applications compliant to the norm IEC 60335-1 Ed. 5.0 Annex R (validation of software for safety purposes)
- development of applications on PC, both Linux or Windows operating system
- standard or dedicated communication protocols
- advanced user interfaces and applications for expert systems on Linux or Windows
- database management

# COMPLETE PRODUCT MANAGEMENT

## SUPPLY CHAIN MANAGEMENT



#### 1. COMPONENTS:

Research, purchasing and management of any electronic components. Procurement arrangements with major distributors.

#### 2. PRINTED CIRCUITS:

Supply of PCBs.



#### 3. WAREHOUSE

9 automatic warehouses with more than 18,000 codes already managed for our domestic production. Management of subcontractors and external stores. 1,500 m2 of indoor area, including the areas of check-in and shipping.

#### 4. LOGISTICS

Integrated management of materials flow in order to provide customers with the service required, by exploiting all the resources available.

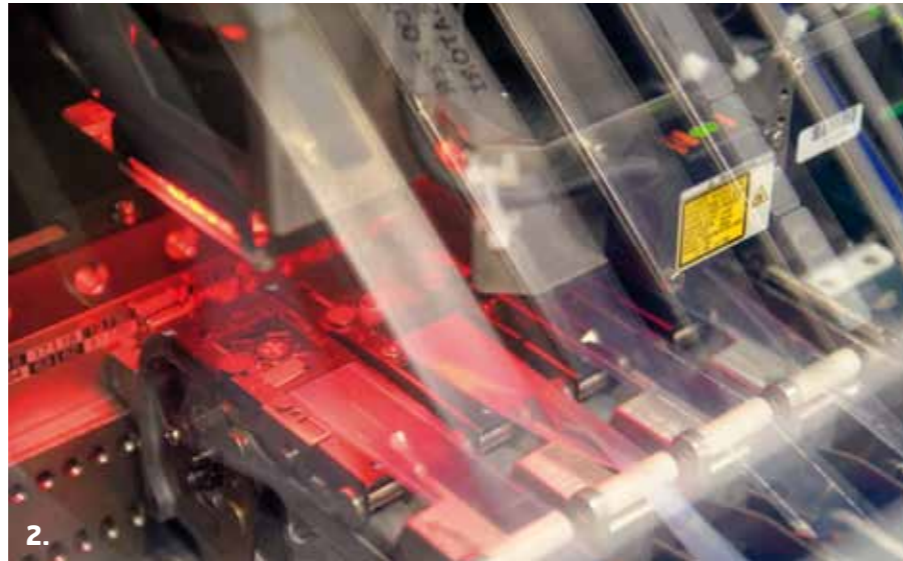


# COMPLETE PRODUCT MANAGEMENT

## BOARD MANUFACTURING



1.



2.

### 1. SCREEN PRINTING:

Automatic machines EKRA X5 and DEK Horizon Q3IX for solder paste printing, with software for stencil inspection, software for post print inspection and programmable cleaning.

### 2. SMT ASSEMBLY:

SMD machines JUKI FX-1, FX-2, KE 2050, KE 2060, KE 2070, KE 2080, with 4/6 nozzles, simultaneous optical laser alignment for chips up to 01005 and ICs up to 50x150 mm.



3.



4.

### 3. REFLOW SOLDERING

2 Vitronics-Soltec reflow ovens myReflow with high thermal stability, recirculating gas, inert nitrogen, cooling zones top and bottom with integral heat exchangers. Production can be either leaded or lead-free.

### 4. THT ASSEMBLY AND SOLDERING

Lines for THT mounting Vicronics - Soltec Delta Wave 6622, with double wave, spray fluxing system, preheating tunnel and nitrogen inertization. Production can be either leaded or lead-free.

# COMPLETE PRODUCT MANAGEMENT

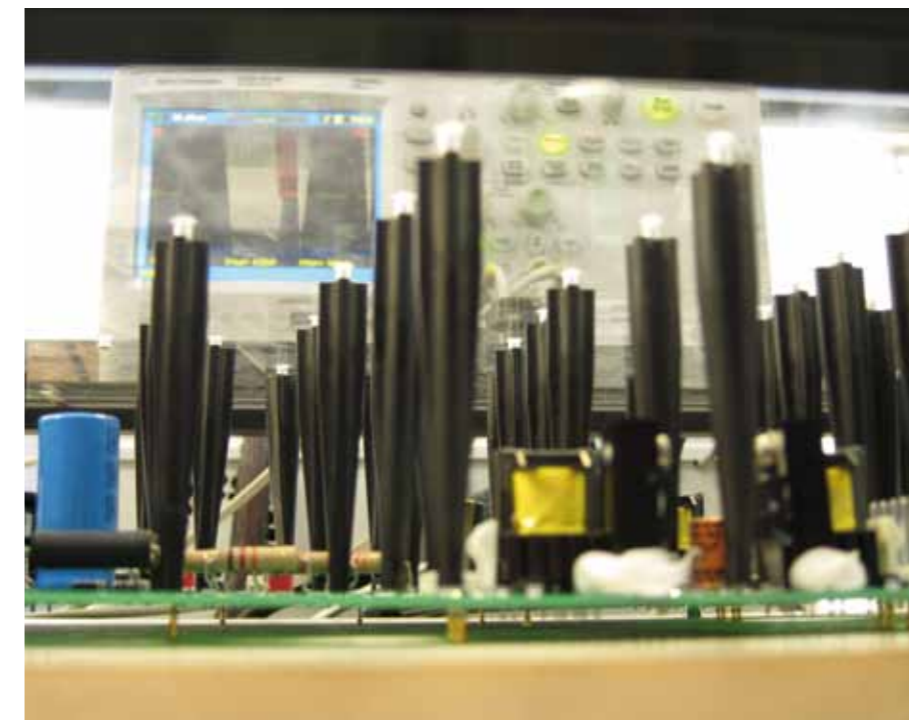
## BOARD TESTING



The design-for-testability integrates the planning stages with the analysis of the technologies of automatic testing and / or manual best suited. We can rely on decades of experience, which led us to the introduction of the best and more cost-effective testing

techniques. This experience finds its synthesis in the PaPA (Product and Process Analysis), developed in-house application. Thanks to that, we outline the performance of different testing strategies. Each product has got peculiar characteristics from the electrical, physical

and mechanical point of view. We are able to study and develop the best testing solution for every application.



**EXPERIENCE, EXPERTISE AND TECHNOLOGY FOR MAXIMUM COVERAGE IN TESTING.**

We can count on a mix of technologies based on Automatic Testing Equipments (flying probes or bed of nails ICTs) and on National Labview® based platforms. Otherwise we can design custom equipments. Completing our test possibilities there are also burn-in thermal rooms, run-in and climatic chambers.

# COMPLETE PRODUCT MANAGEMENT

## BOARD TESTING



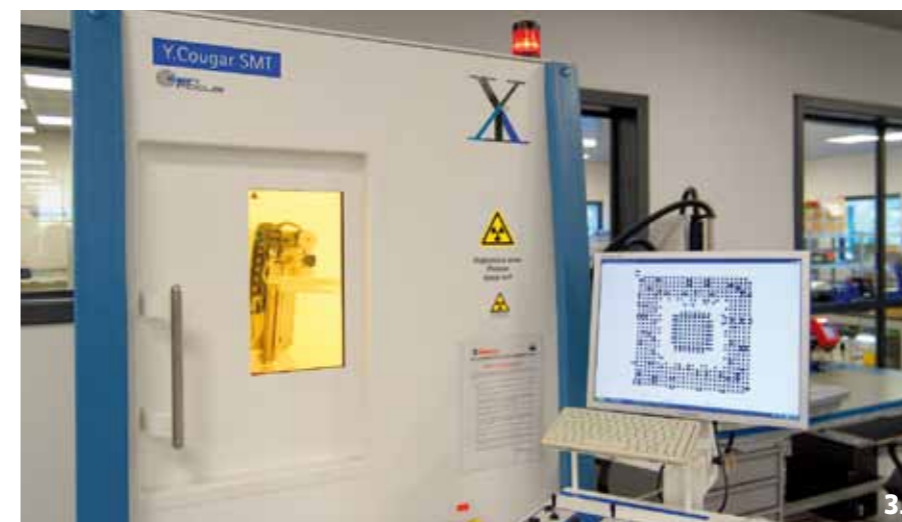
### 1. OPTICAL INSPECTION:

OMRON VT-720 three-dimensional automated post-solder optical inspection for SMD components. High performance CCD multi-camera system, inspection of components up to 01005 and up to 8 mils fine pitch.



### 2. PCBA REWORK:

Rework station ZEVAC ONYX 25 with thermal profile features, for automatic assembly and replacement of fine-pitch and BGA components.

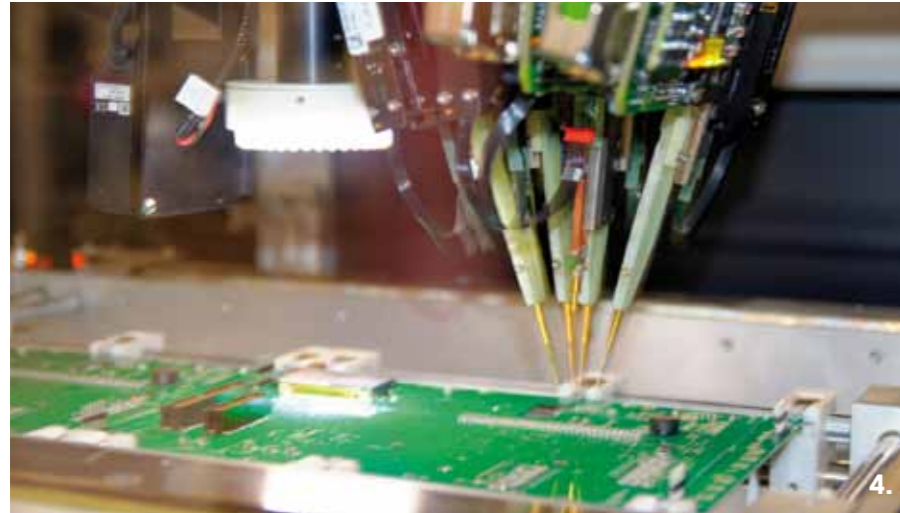


### 3. X-RAY CONTROL:

YXLON Feinfocus Y. Cougar SMT's stem for 2D and 3D X-Ray process control. Magnification up to 10.000X, inspection area up to 310x310 mm, PCB dimension up to 550x440 mm, resolution up to 500 nm. Algorithms for automatic inspection for BGA and QFN.

# COMPLETE PRODUCT MANAGEMENT

## BOARD TESTING



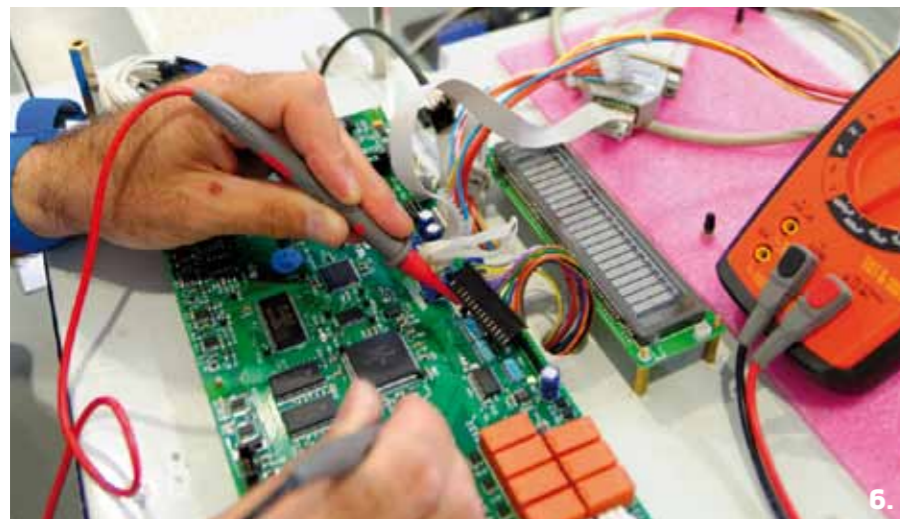
### 4. FLYING PROBES:

2 SPEA 4060 Multimode machines. Automated Loading System, 4 movable heads, possibility of 128 fixed needles, air cushion driving system, possibility of power on, optical test and SPC. Automatic generation of programs, centralised data collection.



### 5. BED OF NAILS:

2 SPEA 3030 with 1280 channels. 4 Teradyne Spectrum mod. 885X, with 896/1024/1152 channels, VXI architecture, Deltascan and Framescan features. 3 Tecnost TEC 8000 and TEC 4000 with 640 channels.



### 6. FUNCTIONAL TESTING WITH PC:

Functional test systems based on National Labview® platform, standard PC, custom hardware and software interfaces for units under test.

# COMPLETE PRODUCT MANAGEMENT

## BOARD TESTING



### 7. BURN - IN:

Burn-in systems with ACS climatic chambers for positive and negative temperature range or with heating rooms.



### 8. RUN - IN:

Run-in systems with ACS climatic chambers for positive and negative temperature range or in heating rooms. The Run-in is a complete functional test, with very sophisticated diagnostic and automation.



### 9. CUSTOM FUNCTIONAL TESTING:

Equipments designed and created ad hoc, in order to obtain maximum speed and coverage.



# COMPLETE PRODUCT MANAGEMENT

EQUIPMENT ASSEMBLY AND TESTING



## EQUIPMENT MANUFACTURING AND FINAL TESTING:

In addition to the manufacturing of electronic boards, we can also assemble entire units and are able to perform all the final functional and safety tests.



## AFTER-SALES TECHNICAL SUPPORT

We are able to offer to our customers: remote support (via telephone, e-mail and web), technical repair service by our laboratories, prompt on-field technical assistance.

# DINEMA LIGHTING

LIGHTING SYSTEMS INDUSTRIAL



**DINEMA LIGHTING** is the new challenge faced by **DINEMA** in the led lighting field. Dinema Lighting has been started up to offer a point of reference and an highly qualified support to any companies looking for a specialized partner to realize electrical plans for led lighting



## LED MODULAR HIGH BAY

Modular led system for the lighting of large industrial premises. It replaces 250W and 400W sodium sources (SON) and metal iodide (HMI). Consistent energy saving compared to traditional lighting sources, reduced maintenance, immediate full brilliance at lighting, no ageing event for repeated switching on and off, no UV and infrared emissions.

# CONTACTS

LOCATION

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