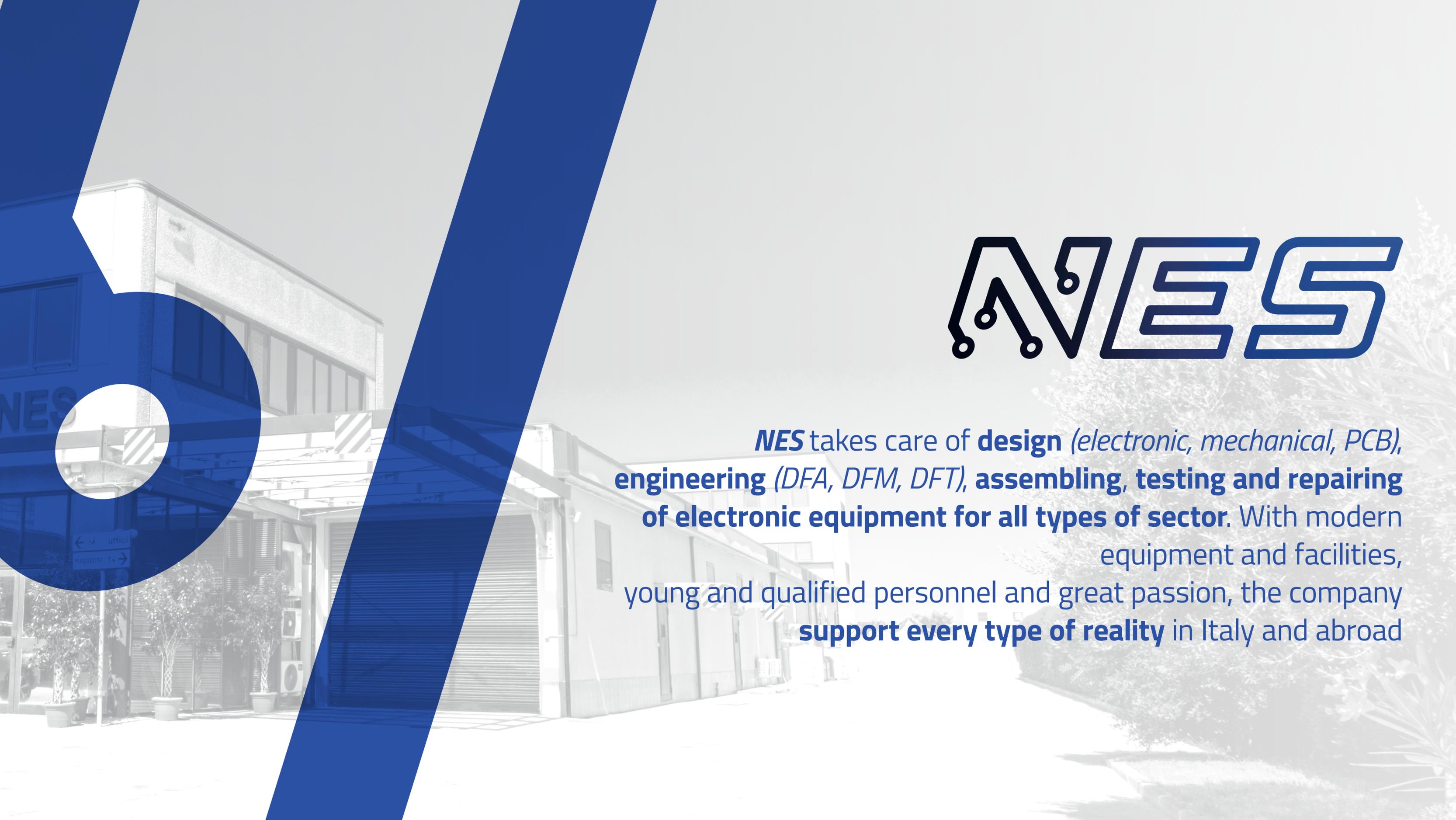




COMPANY PROFILE



# NES

**NES** takes care of **design** (*electronic, mechanical, PCB*), **engineering** (*DFA, DFM, DFT*), **assembling, testing and repairing of electronic equipment for all types of sector**. With modern equipment and facilities, young and qualified personnel and great passion, the company **support every type of reality** in Italy and abroad

# NES

*tech inside*

*–PRODUCTION–*

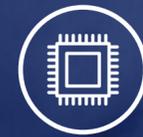
*–SERVICES–*



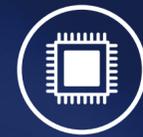
**FAST  
PROTOTYPING**



**ELECTROMECHANICAL  
ASSEMBLING**



**ELECTRONIC  
AND MECHANICAL  
DESIGN**



**PCB DESIGN**



**COATING**



**TESTING AND  
REPAIRING**



**ELECTRONIC  
ASSEMBLING**



**PRODUCT  
ENGINEERING**



**TEST EQUIPMENT  
DESIGN**



**MATERIAL  
MANAGEMENT**



**OBSOLESCENCE  
MANAGEMENT**

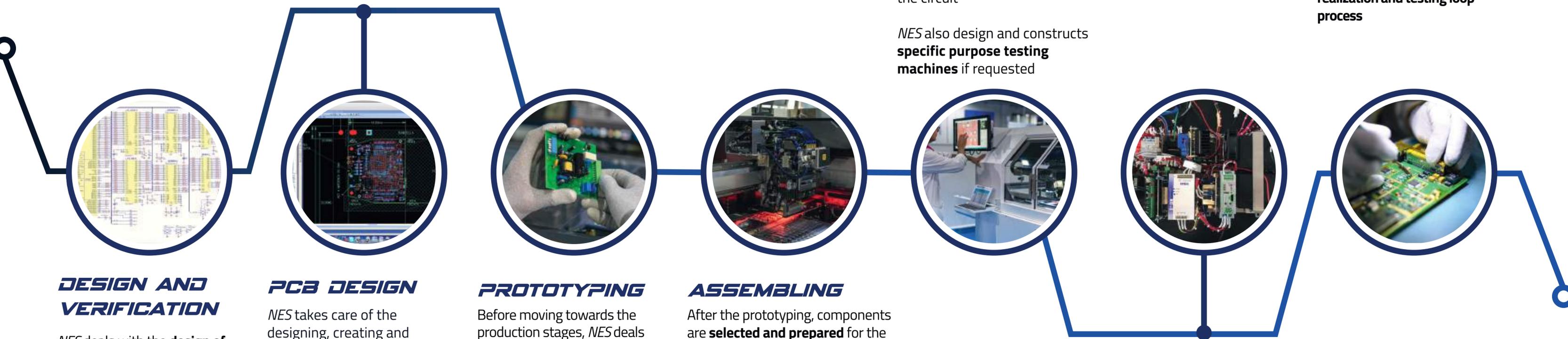


**QUALITY  
TRAINING**

*THE RANGE OF SERVICES IS COMPLETED  
WITH THE ELECTROMECHANICAL ASSEMBLY.  
WE ARE STRUCTURED TO GUARANTEE THE  
REALIZATION OF THE FINISHED PRODUCT,  
ALSO WITH THE WIRING AND FINAL CLOSURE  
IN COMPLEX MECHANICS*



# **PRODUCTION LAYOUT**



## **DESIGN AND VERIFICATION**

NES deals with the **design of electronic boards** ensuring **project problem solving** and **project verification tests** starting from the customer's **idea** or even eventual intermediate phases

## **PCB DESIGN**

NES takes care of the designing, creating and solving steps of the realization of **printed circuit boards** following the origin projects

## **PROTOTYPING**

Before moving towards the production stages, NES deals with the **creation of prototypes** in order to **verify the eligibility of the projects** following the **optimal standards** for the realization according to the customer's requests

**Prototyping** also applies to companies that needs **only this preliminary realization stage**

## **ASSEMBLING**

After the prototyping, components are **selected and prepared** for the assembly phase

Leading the origin project, the **PCB goes through the various steps of automated assembly**, starting from the **positioning of the components** on the circuits until the **coating stage**, taking advantage of predisposed **avantgarde machineries**

## **TESTING**

Complete PCBs pass through **different test and check phases** such as **x-ray analysis**, **micrometric measurement**, component testing and **climatic chamber**, aimed at verifying the effectiveness, performance and eligibility of the circuit

NES also design and constructs **specific purpose testing machines** if requested

## **ELECTRO-MECHANICAL ASSEMBLING**

The range of services is completed with the **electromechanical assembly**. We are structured to guarantee the realization of the finished product, also with the wiring and final closure in complex mechanics

## **MAINTENANCE AND REPAIR**

NES offers a maintenance and repair service **on single or multiple** already existing projects as well as on their **own realized products**

This step also accomplishes the purpose of **closing the internal realization and testing loop process**

# SERVICES DETAIL

## PCB DESIGN

NES develops from technical requirement supplied from the customer, electric schematics, PCB file, BOM and the output documentation necessary to assembly and manufacturing the PCB as Gerber file, ODB ++, 3D STEP file and so on (tools used ALTIUM DESIGNER 2020, PADS PROFESSIONAL).

## TEST EQUIPMENT DESIGN (DFT)

NES is able to design and implement customized testing systems that can guarantee the technical requirements provided by the customer starting from a DFT analysis of the product. **NES designs and manufactures customized automatic test solutions (ATE) with CE certification.** The test systems developed by NES are engineered by our technicians on the basis of a synergy between functional specifications of the product, test instrumentation and interface software.

## OBSOLESCENCE MANAGEMENT

**Instant and automatic management of obsolescence through Silicon Expert.** We can inform the customer whenever the datasheet of single components of the bom is changed or the component is in End Of Life.



## ELECTRONIC AND MECHANICAL DESIGN

NES designs electronics boards upon customers' specifications or as reverse engineering of old product together with the necessary mechanical interfaces, such as brackets or enclosure, needed to provide a complete finite solution. **Furthermore we are able to support our customers in product industrialization and production testing tool.**



## PRODUCT ENGINEERING (DFA, DFM)

NES is able to provide customer PCBA design suggestions aimed at the industrialization of the product. It focuses on reducing time-to-market and total production costs by prioritizing both the ease of manufacture for the product's parts and the simplified assembly of those parts into the final product. **Together with the customer we work to find the best possible solution** that allows an optimization of the production cycle and a decrease of the total cost of final product.



## MATERIAL MANAGEMENT

NES offers its customers a material management service that concerns the search for alternative codes, the finding of obsolete material and the purchase of kit of components to be supplied to the customer even without assembly.



## QUALITY TRAINING

NES has qualified operators "IPC-A-610 Trainer" who can take courses "IPC-A-610" and issue the relative certification.



# WHY NES

## FULLY INTEGRATED SERVICE

The customer who relies on NES can find **complete support** in the realization of his project. Starting from client's idea up to the realization of the finished product, **NES is able to offer every single step of the entire processing cycle internally**

## CERTIFIED COMPANY

NES has been released with the main certifications such as **ISO 9001, EN 9100, IRIS, ATEX etc.** to ensure quality in development and production. Furthermore, the **staff is highly qualified** and meets certifications such as **IPC 600, IPC 610T, IPC 7711/7721, J-STD-001 etc.** as well as it is **annually subject to checks** by the certifying body **RINA**

## FAST PROTOTYPING

Based on the complexity of the product and the components market availability, **NES is able to provide a complete prototyping service in 2/4 days** from the release of the first documentations

## ALWAYS OPEN AND READY

**NES is always ready and available** to offer its services any time of the year

## VANGUARD AND KNOW HOW

By investing every year, NES is continuously updated with the most modern production equipment, **increasingly expanding the range and quality of the services offered.** Thanks to its skills it is able to provide customers with the **best solutions** for the realization of their projects

## TRASPARENCY

Loyal customers have the possibility via an **internet dashboard** made available by NES, **to follow the work progress** and to obtain informations about production line **in real time**

## TEST ENGINEERING

NES designs **testing strategies** for a product and even **complex equipments for testing the product itself**, providing certifications and manuals

## SOLIDITY

**NES can guarantee long-lasting partnerships** to customers, thanks to the adoption of medium and long term based strategies and thanks to a careful economic-financial management that made the **company solid**

## FLEXIBLE STOCK CAPABILITIES

Thanks to his financial strength, NES is capable to offer **storage of even half-processed products** for their clients; the opportunity of **completing the assembly even few days before the delivery** gives to the customers the chance to place their orders with a **long term timing**

## FAST SMT PRODUCTION

With three independent SMT production lines with a **power rate of 160.000 components mounted per hour**, NES is well capable of handling **high manufacturing numbers** without even interfering with his prototyping line

## NATIONAL LOGISTIC COVERAGE

Thanks to his two facilities based in *Caserta* and *Bologna*, NES guarantees **logistic coverage upon the whole national territory**, approaching managerially and physically to his clients

# **APPLICATION SECTORS**



- SPACE
- AVIATION
- DEFENCE
- RAILWAY
- INDUSTRIAL
- TELECOMMUNICATIONS
- RADIO DETECTOR
- AUTOMOTIVE
- DOMOTIC



***EQUIPMENTS  
— & TOOLS —***

## ***SMT DEPARTMENT***

### **2 SCREEN PRINTER DEK**

*(HORIZON 03I AND 03IX)*

### **2 SPI**

*(TRI TR7007QI)*

### **3 SMT LINES**

*(6 JUKI P&P RS1)*

### **2 REFLOW SOLDERING SYSTEMS**

*(VITRONIC S. MY REFLOW 820)*

### **2 AOI**

*(TRI TR7500 SIII 3D)*

### **1 Vapour PHASE SOLDERING SYSTEM**

*(ASSCON VP800)*

### **1 AUTOMATIC TAPE AND REEL SYSTEM**

*(ADVANTEK ATR1000)*

### **1 ULTRASOUND WASHING MACHINE**

*(SRA T. UC 150D)*

### **1 XRAY**

*(NORDSON DAGE RUBY XD7600NT)*

### **1 REWORK BGA**

*(ERSA HR600 AND REBALLING KIT)*

### **1 X-RAY COMPONENT COUNTING SYSTEMS**

*(VJ ELECTRONIX XQUIK III)*

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## ***THT DEPARTMENT***

### **1 SELECTIVE SOLDERING SYSTEM**

*(ERSA VERSAFLOW 3/45)*

### **1 WAVE SOLDERING SYSTEMS**

*(VITRONIC SOLTEC DELTA WAVE 6622)*



## **CONFORMAL COATING DEPARTMENT**

### **2 SELECTIVE COATING SYSTEMS**

*(PVA DELTA 6)*

### **2 INFRARED HEAT CURING CHAMBER**

*(PVA IR2000)*

### **1 COATING CABIN**

*(PACINI 2 M)*

### **1 CLEANING SYSTEM**

*(PBT COMPACLEAN III)*

### **1 IONIC CONTAMINATION TEST SYSTEM**

*(SCS IONOGRAPH 500M STD)*

### **2 TWO COMPONENTS RESIN DISPENSER**

*(CONTALDI INDUMIX IA)*

### **1 OVEN MPM**

*(M400-VF)*

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## **THT DEPARTMENT**

### **1 CLIMATIC CHAMBER**

*(ANGELANTONI DISCOVERY DM600 C ES)*

### **1 FLYING PROBE TESTER**

*(SPEA 4060S2)*

### **2 FIRST ARTICLE INSPECTION SYSTEM**

*(EXTRA EYE X3020)*

### **CAD, XJTAG, LABVIEW**



# **REFERENCES**

## **GLOBAL**

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**LEELEN TECHNOLOGY** - CHINA

**ANYLINK** - GERMANY

**CONSILIUM** - SWEDEN

**CERN** - SWITZERLAND

## **ITALY**

---

**LEONARDO**

**MBDA**

**SPII**

**INFN Istituto Nazionale di Fisica Nucleare**

**MARINI Impianti Industriali**

**MOOG**

**ABB**

**BOMBARDIER / ALSTOM**

**SIRTI / MERMEC STE**

**RIELLO UPS**

**IDS GEORADAR**

**SELETECH ENGINEERING**

**ELSEL**

**MICRODATA DUE**

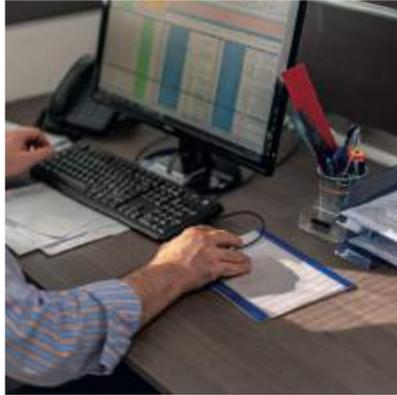
**CIVITANAVI**

**HITACHI**

**MERMEC**

**SITAEI**

# **OUR OFFICES**



## **CASERTA - HEADQUARTER**

Zona Industriale ASI  
81032 Carinaro - Caserta, Italy  
Tel. **+39 081 502 81 47**

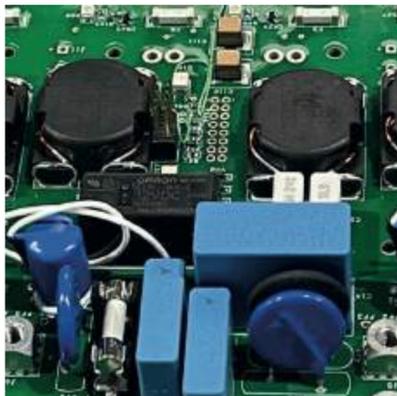
-  Design and Engineering
-  Material Management
-  Assembling
-  Coating
-  Testing and Repairing



## **BOLOGNA - BRANCH**

Via Ungheri 7/A - 7/N  
40012 Calderara di Reno - Bologna, Italy  
Tel. **+39 05 172 54 56**

-  Design and Engineering
-  Material Management
-  Testing and Repairing



## **PLOVDIV (BULGARIA) - BRANCH**

Rogoshko shose sever" 10,  
4003 Northern Industrial Zone, Plovdiv, Bulgaria

-  Assembling
-  Coating
-  Testing and Repairing
-  Material Management





**COMPANY CERTIFICATIONS**



**TEAM CERTIFICATIONS**



