MB ELETTRONICA SRL

SOLUTIONS AND SERVICES FOR YOUR ELECTRONICS

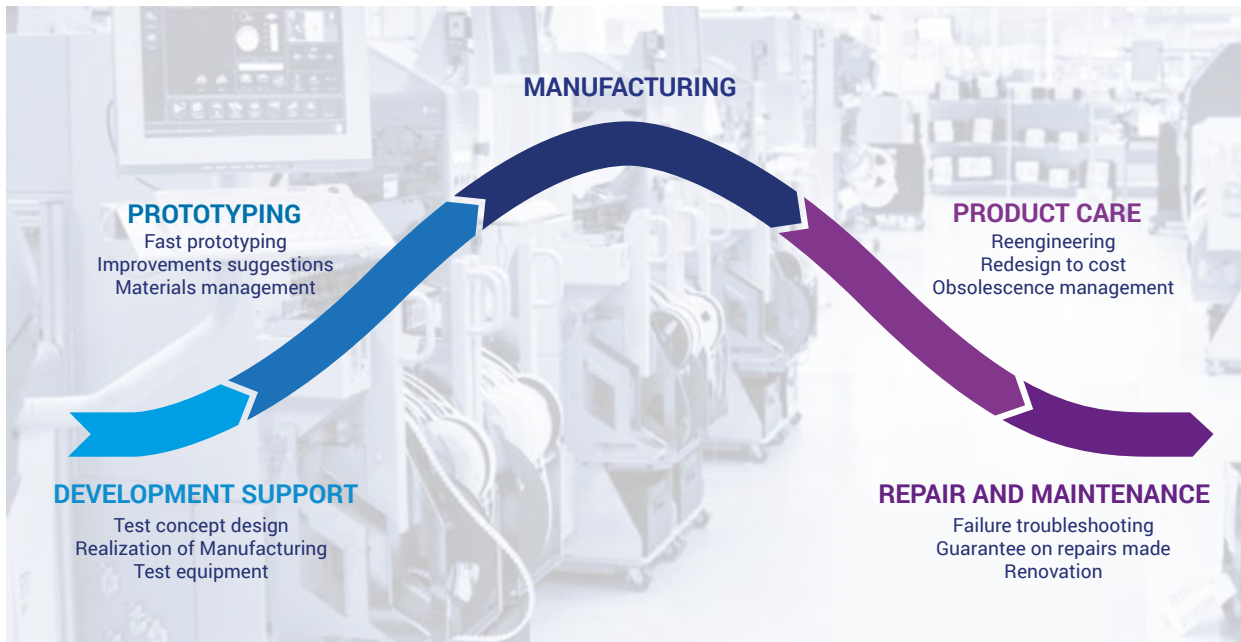# VISION, ETHICS AND FAMILY VALUES ARE THE ELEMENTS THAT MAKE MB ELETTRONICA HISTORY WINNING SINCE 1961.

MILESTONES IN OUR HISTORY

1961: Francesco Banelli founds the company Cafel, a company that assembles parts for tape recorders, players and radios and other consumer products.

1988: Francesco Banelli founds MB Elettronica, a company that manufactures products for primary customers in the railway, pacekeeping and telecommunication markets.

1999: MB Elettronica achieves the ISO-9001 certification, that is substituted in 2001 by Vision 2000

2012: MB Elettronica realizes a "Clean Room", compliant to US Fed. Std. Class 100000 (ISO 8) Standard, Space Qualification.

2013: MB Elettronica opens its new plant

2014: New ERP System goes live

2015: MB Elettronica achieves the IRIS certification for engineering and manufacturing activities

2016: MB receives the KB Awards "Supplier of the year" and gets EN9100 Certification

2017 MB gets two NADCAP Certifications and ISO TS Certification

LIFE CYCLE SERVICE SOLUTIONS

MB represents a solid bridge between product development and producible products. We also provide services of Fast Prototyping and After Sales.

MANUFACTURING

PROTOTYPING
Fast prototyping
Improvements suggestions
Materials management

PRODUCT CARE
Reengineering
Redesign to cost
Obsolescence management

DEVELOPMENT SUPPORT
Test concept design
Realization of Manufacturing
Test equipment

REPAIR AND MAINTENANCE
Failure troubleshooting
Guarantee on repairs made
Renovation

SOLUTIONS AND SERVICES

MB Elettronica lives alongside its clients to develop solutions together, that can meet the most demanding requirements in the field of technological innovation without overlooking the economic factor.

Competence, skills, technology assets and more than 50 years of experience is the fundamental key to understand problems, find quick solutions and guarantee definite delivery times.

Our business model is based on tailor made solutions for individual needs for volume and products variants.

OUR KNOWLEDGE SUPPORTS CUSTOMERS IN THE MOST IMPORTANT INDUSTRIAL SECTORS

HIGH COMPETENCE ANY VOLUME

- Aerospace and Defence
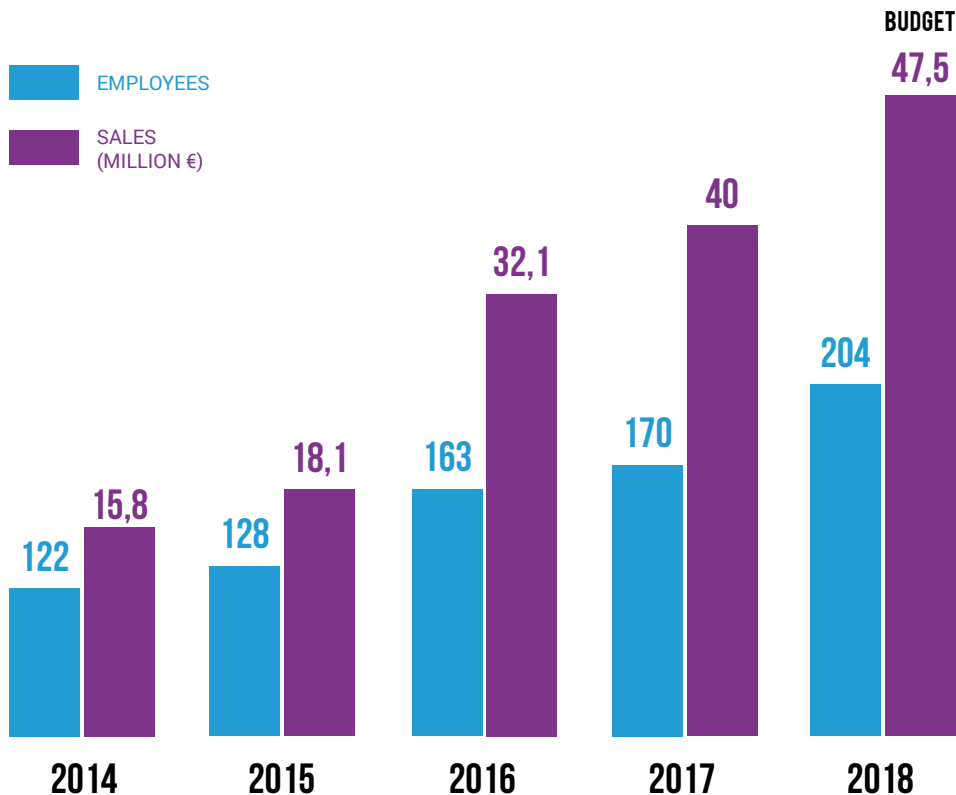- Audio Industry
- Security
- Professional communication
- Railways
- Automotive
- Medical

KEY FIGURES

EMPLOYEES

SALES (MILLION €)

BUDGET
47,5

204

40

170

32,1

163

18,1

128

15,8

122

2014   2015   2016   2017   2018

YEAR

18% export

2014
- New ERP
- Layout Lean
- New SMT line
- 6 engineers in staff and development

2015
- IRIS Certification
- 4 engineers in staff
- Document management system

2016
- EN 9100
- 3 engineers in staff
- New SMT Line
- Lean Warehouse operation and Traceability Assurance

2017
- ISO/TS Certification
- NADCAP Certification
- ISO/IEC 27001
- SPI + 3D AOI

2018
- New SMT Line
- Selective Soldiering Line
- 3D Professional Printing

SITE CERTIFICATIONS AND STAFF QUALIFICATIONS

Accredited
Nadcap™

IRIS
Certification

Member of CISQ Federation
RINA
EN 9100
Certified Quality System

Member of CISQ Federation
RINA
ISO 9001
Certified Quality System

Member of CISQ Automotive
RINA
ISO/TS 16949
Certified Quality System

IPC®
Certified IPC-A-610
Application Specialist

EUROPEAN COOPERATION
E CSS
FOR SPACE STANDARDIZATION

CSQ

ISO 27001
Information Security Management System
Certified

IS ON THE WAY

THE SMT PRODUCTION LINE

A selective investment policy in choosing the facilities allows MB to offer an assembly service in line with the high quality standards combined with a high production flexibility.

THE CLEAN ROOM

Active since 2012 the "Clean Room" is realized in accordance to the US Fed. Std. Class 100000 (ISO 8), Space Qualification.

CAPABILITIES/FACILITIES IN THE SPACE FIELD

Main facilities for board population and inspection, parts traceability is fully guaranteed.

Tools and Equipments	Manufacturer	Model
Clean Room		Class 100000 (ISO 8)
Printing Machine	MPM	Ultraprint 1500
Pick and Place	Philips	Assembleon Opal X2
Vapor Phase	IBL	BLC509
AOI	Saki	BF18D
Degolding	Cemev	MPGR
Pretinning	Cemev	MPGR
Preforming	Fancort	Flex FA 6197
Preforming	Fancort	FA 6195, FA6194, FA6224
Baking	Binder	FED 52
Microscope	NIKON	SMZ 1270
Microscope	NIKON	SMZ 1000

TESTING, BOX BUILD AND SYSTEM ASSEMBLY

Leading equipment for all kinds of tests e.g. Flying Probe, Boundary Scan, Functional Test. Development and realization of custom HW and SW Functional Tests
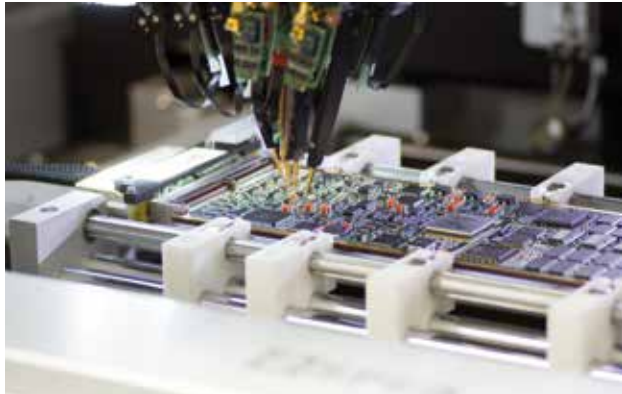
Dedicated area for customer combined with the skills of our qualified technicians guarantees the maximum reliability in every step as required.

SPECIAL PROCESSES
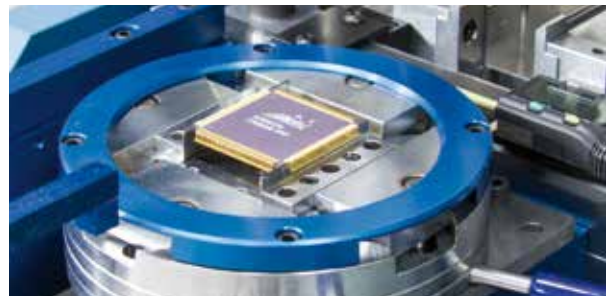
Rework and repair of BGA, Underfilling used to increase the device resistance to shock or drop failures, conveyorized Coating for in-line production.

HARNESSES & CABLE ASSEMBLY CONTRACT MANUFACTURING

We have been manufacturing cables since 1964, our production range covers many sectors, from railways, avionics, telecommunications, industrial automation to marine and military industry, as result of continuous investments in people and machines.

We combined high know-how of the staff with the latest generation of machines. Our manufacturing capabilities and versatility enable us to manufacture an extensive product range. We can manufacture to customer specific high technological specifications also for relatively low volumes of productions.

CUSTOM CABLE MANUFACTURING AND WIRE HARNESS ASSEMBLY

We manufacture all types of cable assemblies using hand and automatic pin crimping machinery or soldered connections.

We produce harnessed cables with moulded plugs on request also for your special application.
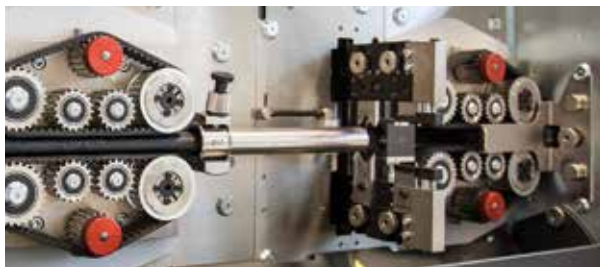
CABLE AND WIRE HARNESS QUALITY

Cutting machines, winding machines and automatic crimping machines
Connector molding
Mechanical assembly / Semi-automatic product integration

A constant control of the process guarantee the highest quality level of products.

CONTINUITY: Harnesses are tested on proprietary equipment to ensure correct routing of all connectors and wires.
POLARIZATION: Testing is done to check polarization of all connections, ensuring proper grounding and safety.
PULL TEST: Weights are added at various stress points to test sufficient flex and hold. Ensuring long lasting connections.
**VISUAL INSPECTION:** All harnesses pass multiple inspection points by trained QA Inspectors.

MATERIALS MANAGEMENT

Every Customer's BOM is evaluated on individual parts data to focus each risk in sourcing, manufacturing process, lifecycle and ensure compliance with environmental regulations.
Proactive manage of component obsolescence with PCN/EOL alerts when there's a change in lifecycle.

Enviromental Risk
10%

Multi-Sourcing Risk
20%

Lifecycle Risk
50%
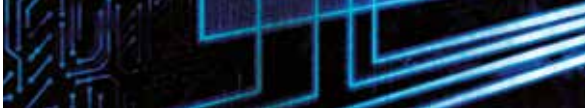
Inventory Risk
20%
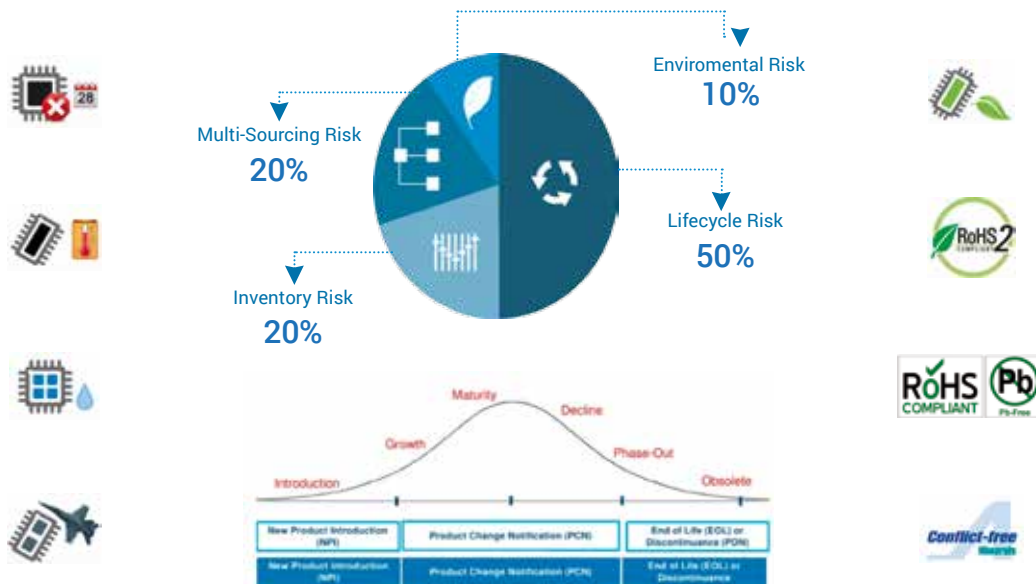
LEAN WAREHOUSE OPERATIONS AND TRACEABILITY ASSURANCE

Traceability means goods control over the whole Supply Chain. Our logistic process is characterized by Real Time Data Availability, Lean Warehouse Operations, full Traceability and FIFO system

ENGINEERING TEAM

The development team consists of a group of engineers who have gained a long experience in the electronics aimed at Security, Broadcasting, Railway and Industrial Sectors.

Many of the devices designed by MB Elettronica are installed on highway surveillance System, telecommunication nodes, broadcasting, railway coaches, also high speed trains, underground vehicles.

Thanks to the close connection between development and manufacturing facilities of MB, the customer can take big advantages in terms of quick responses to its problems and a very high level of flexibility.

ENGINEERING SERVICES

- Design on Customers specifications
- Hardware & Software Engineering
- Prototyping, Environmental, Reliability & EMC test
- Product Industrialization
- Test Bench realization: ICT and FCT
- Adoption and implementation of technical standards and relevant updates:
  - Cenelec Standards EN-50126, 50128, 50129
  - IEEE 1558 and associated standards
- Reverse Engineering

AFTER MARKET ACTIVITIES

In After Market applications, MB can provide its Customers with:
- Re-engineering and re-design of electronic boards
- Obsolescence protection management (monitoring of components'obsolescence)
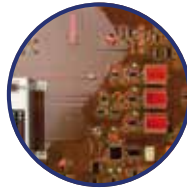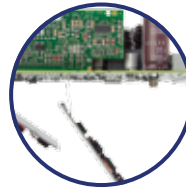- Service on field and troubleshooting

ORIGINAL BOARD	REDESIGN	ORIGINAL BOARD	REDESIGN	ORIGINAL BOARD	REDESIGN

The activity is carried out on electronic boards designed and manufactured several years ago and now required as spare parts.
The activity includes
1. Review of available documentation
2. Analysis of obsolescence
3. Analysis of compliance with current regulations
4. Interchangeability analysis of obsolete components.
5. Redesign and design and manufacturing documentation update.

Zona Industriale Vallone
C.S. Ossaia, 35
52044 Cortona (AR)

tel +39 0575 67951
fax +39 0575 679535

Via di San Quirico n° 199/I
50013 Campi Bisenzio (FI)

tel +39 055 444461

www.mbelettronica.com

info@mbelettronica.com

MB Elettronica s.r.l.
Zona Industriale Vallone, c.s. Ossaia 35-35P
52044 Cortona (AR) – Italy
+39 0575 67951 R.A. – Fax +39 0575 679535
infoline +39 335 6164180
www.mbelettronica.com