



Integrated Electronic
Manufacturing Services



www.mades.es

# **Introducing MADES**

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- MADES at a glance
- Applications
- Our Services
- Building Customer Trust & Operational Excellence
- o Why MADES ?

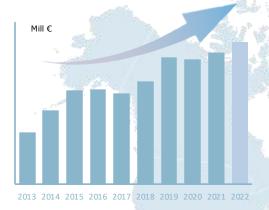


#### **MADES** at a glance

How

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> 12 % Compound Annual Growth Rate (CAGR)



 MADES Six Sigma: a process and culture of continuous improvement

Located at Malaga TechPark, major hub of Technology companies (Malaga, Spain)

What

- Major supplier of system level electronic assemblies
- Electronic Manufacturing Services
  - Design From Specs
  - Industrialization
  - Manufacturing
  - Testing & Integration
  - > Lifecycle Support

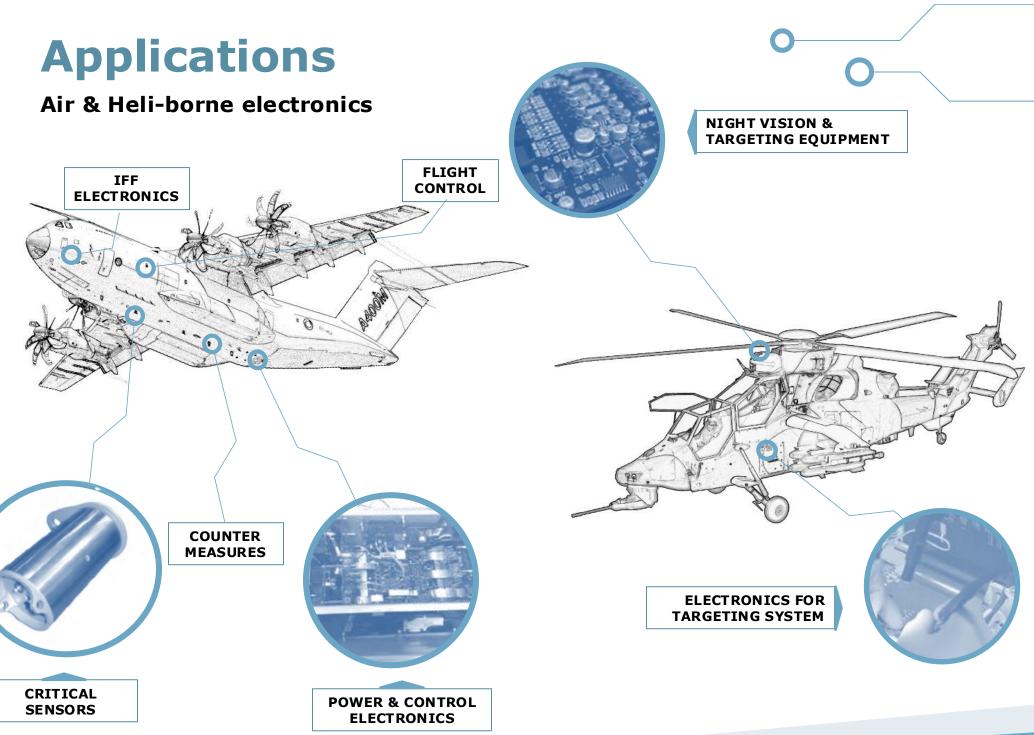


Where

- > Subsidiary of CICOR Group
- More than 120 highly skilled professionals: engineers, technicians and operators
- 35 years of experience delivering customer solutions
- Legacy HughesAircraft & Raytheon



When

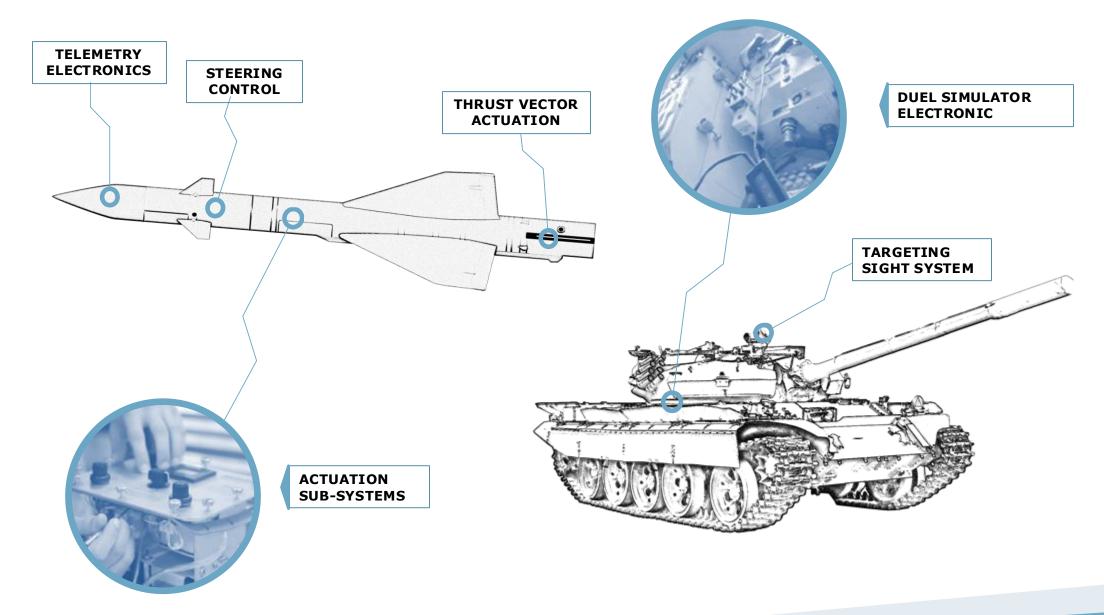


<sup>\*</sup> Actual platforms are examples for explanation purposes.



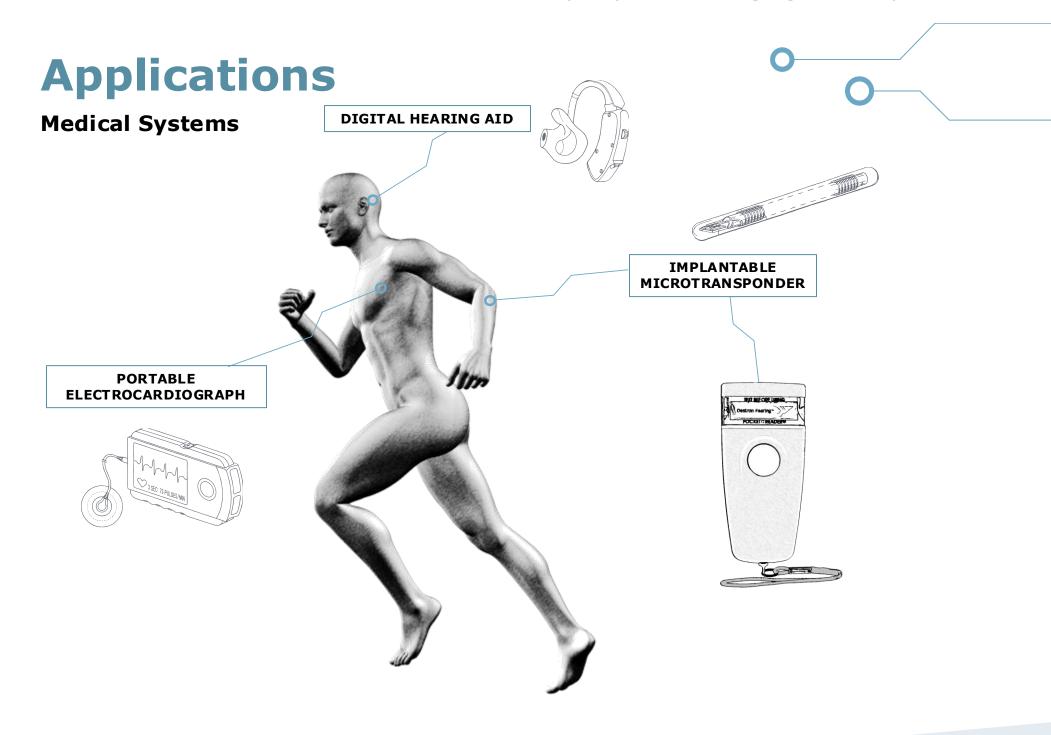
# **Applications**

#### **Missile & Tactical Surveillance Systems**



<sup>\*</sup> Actual platforms are examples for explanation purposes.



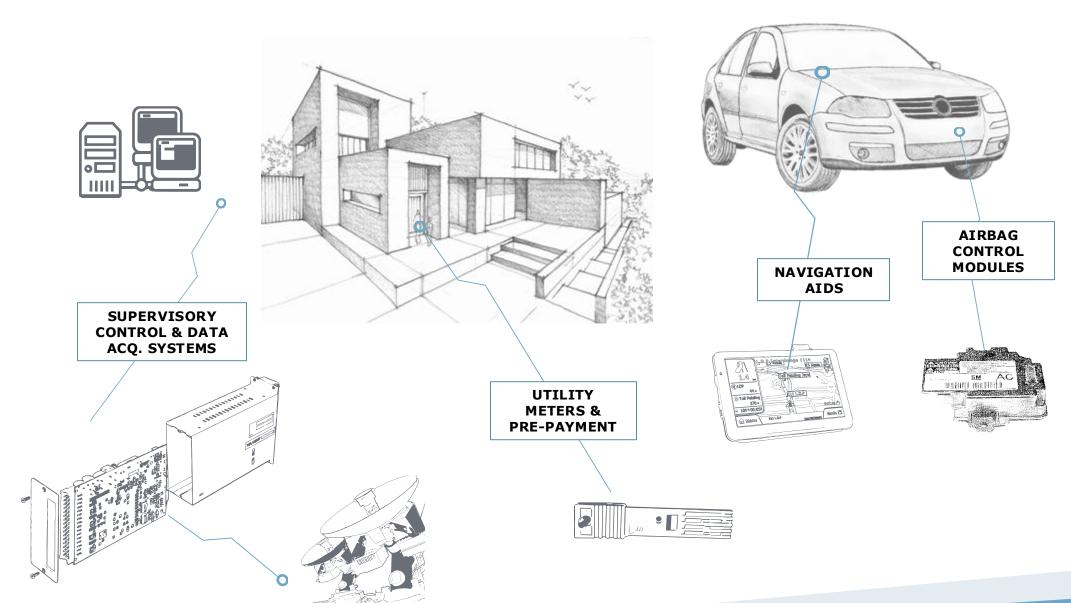


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# **Applications**

#### **Industrial Systems**

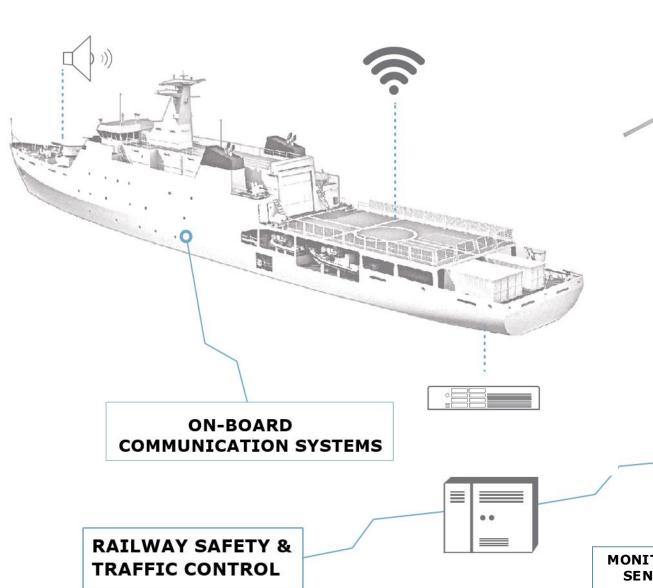


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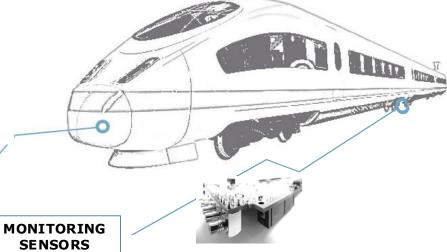


# **Applications**

Naval, Railway and New Space









<sup>\*</sup> Actual platforms are examples for explanation purposes.

#### **Our Services**











#### PRODUCT LIFECYCLE SUPPORT

Full Supply Chain Management. Extended Warranty, Obsolescence & Counterfeit contingency, REACH, Repairs & Logistics Support



## **Development from Specs**



- From Specs through detailed Design and prototyping to volume production and life-cycle support
- Design partner integrated with Manufacturing to minimize time to market & cost
- Internal resources & best selected collaborators to optimize manufacturing, testing and product performance



#### **Industrialization**



# FAST-TO-MARKET From Design to Prototypes & Qualification











Specs

Design

Rapid Prototyping Product Qualification

Industrialization



### **Manufacturing**



- Surface Mount Technology, Convection and Vapor Phase ovens, Wave Soldering,...
- Process Control: IPC trainers, 3D Paste Inspection, 3D Automatic optical Inspection, 3D X-Ray,...
- Waterless cleaning, conformal coating and bonding using different materials and processes
- Leading supplier of Electronics Manufacturing Services



### **Testing & Integration**



#### PRODUCT RELIABILITY

High frequency testing High power system testing

#### PARAMETRIC ELECTRICAL TEST



- In-Circuit Test
- Flying Probe Technology

#### **FUNCTIONAL TEST**



- J-Tag Boundary Scan
  - Complete systems or CCAs
  - General Purpose or Product-Specific customized platform

#### **ENVIRONMENTAL STRESS SCREENING (ESS)**



- Wide range of Environmental Screening
- Thermal cycling and shocks
- Stability assurance under humidity conditions



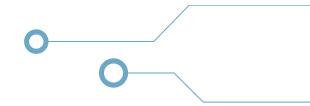
## **Testing & Integration**



- Customer's Virtual Factory at MADES' premises
- Electro-mechanical Assemblies
- Complete Box-Build Cables & Harnesses
- Development of custom-made equipment & Special Processes Automatization



## **Product Lifecycle Support**



- Counterfeit
- Import/Export Compliance: EAR / ITAR
- Conflict Minerals, REACH
- Obsolescence Monitoring
- Equipment control & calibration

- Subcontract Development and Management
- Spare Parts, Repairs

**ENGINEERING** 

- FOD, ESD & MSL Programs
- RoHS / No RoHS Control

PROGRAM MANAGEMENT

INTEGRATED SUPPLY CHAIN

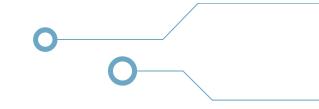
ECN, Configuration Control

QUALITY

- Production Planning
- Traceability
- Design Upgrade
- Mission Assurance Plan



# **Program Management**



**Project Planning** 



Risk Management



### **Operational Excellence**



- Center of Excellence for Electronic Manufacturing Services
- State-of-the-art technology and continuous investment in talent and R&D
- National and International Operational Excellence





















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#### **Demonstrated Performance**



Since:





















AS9100 2009



NATO AQAP 2110 2009



2014

#### 2024

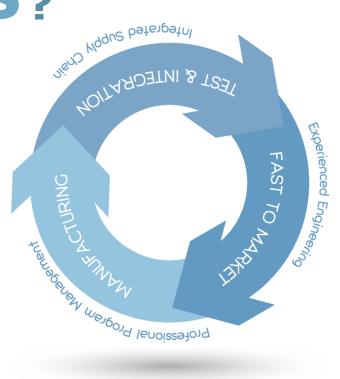
**ISO 14001** − Environmental • **ISO 45001** − Health&Safety • **AEO** − Authorized Economic Operator

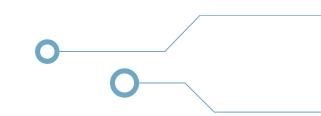


On Time Delivery		
MADES	>99,5 %	
Industry Target	98 %	
Industry Standard	>96 %	

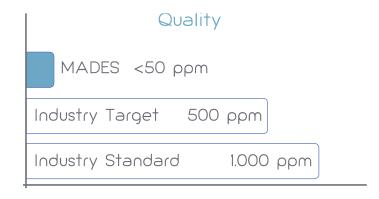


Why **MADES**?





- Mature and strong processes, compliant with industry policies and certifications
- o Proven experience in major multinational programs for over 30 years



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