



# MISSION

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## Our mission for the railway infrastructure

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The tendency to satisfying needs expressed by our clients, considered more as partners than as a market outlet is also reflected by a strong interest in the environmental sustainability of products and towards improving the quality of people's lives.

ECM is proud to contribute in a concrete and substantial preservation of the environment for future generations, both in terms of solutions provided to customers and in terms of close attention to the environmental impact of their production cycles.

## Advanced technological solutions

The advanced technological solutions and the constant awareness towards innovation that ECM puts into the development of its systems, represent the continuous improvement in the environmental impact of passenger and freight mobility by means of modernisation, efficiency, upgrading and enhancement of railway infrastructures.

Efficient and functional state-of-the-art railway signalling and control systems allow a faster and increased number of train movements, reduced power consumption and an increase in the volume of rail traffic with a consequent reduction in road, congestion and pollution both in the passenger and freight sector.

## Sustainability & Environment

ECM has always been aware of the health of its employees and has set its primary corporate target as the continuous improvement of its production cycle, both in terms of energy load, recyclable materials and the abolition of dangerous substances.

The Company has its own Environmental Management System that is certified to ISO 14000 and is undertaking to achieve compliance with the prestigious EMAS (Eco Management & Audit Scheme).



WHERE

The main facilities are located at Cantagrillo in the Municipality of Serravalle Pistoiese, province of Pistoia, a stone's throw away from the Montalbano hills, home to centuries-old genius Leonardo Da Vinci (Vinci, Leonardo's birthplace is only a few kilometres away). This is where the majority of design, production and testing takes place.



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#### The Genoa and Rome offices

The mission of the Genoa office is primarily focused on software development, whilst the Rome office offers an ideal location near to the national institutional bodies as well as the possibility of providing support and assistance to ECM's main customers.





# HISTORY

In 1966, ECM began working with the Ferrovie dello Stato, the Italian State Railway (today known as RFI). Over the years, it was this organisation that emerged as the company's main development driving force.

## Foundation

*Elettromeccanica CM*, as it was originally called, was founded in 1958 by Giulio Cappellini together with his sons Mario and Roberto (who still manage the company today) and began its growth and development with the production of electric power supply stabilisers for television equipment and various types of electric transformers, for both industrial and domestic use. As early as 1961-62 ECM began to supply its products to the Italian Navy. Materials produced ranged from transformers to direct current power packs as well as small ferroresonance inverters. In that period it also began production of small battery chargers for motor vehicle electricians and emergency back-up systems.

## First cooperation with the *Ferrovie dello Stato*

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The first supplies included low voltage transformers for the powering of relay based equipment and dc power supply packs. In the years that immediately followed, ECM dedicated all of its economic, design and manpower resources to the railway sector. It was during these years that the number of orders in the railway signalling power packs increased exponentially.

In the meanwhile, new needs were emerging in the railway transportation market. Consolidation of technology connected to safe automatic spacing of trains along the lines led the company to develop 1000 V ac power transmission systems. Towards the end of the decade, ECM designed and certified the new static junction boxes for the powering of level crossings. In the same period they began professional training to railway personnel on the use and maintenance of ECM products.



## Eighties and nineties

In a rapidly evolving world, during the 1980's ECM was still a driving force in technology and research that accelerated decisively during this decade. The company began offering the market with a range of new products dedicated to the world of railway signalling. Consequently the company developed modular power panels for relay based interlocking, three- phase static UPS power supply units up to 300 kVA, as well as low reactance sub transient emergency generators.

During the second half of the 1990's new optoelectronic light signals with LED technology were produced for level crossings and engineering work signals. It was in this phase that an extremely interesting technological sector opened up: diagnostics and remote controlling of railway signalling systems. During this period participation in the design and development of on-board power subsystems for the Eurotunnel project was very important.



## The new millennium

For ECM, the coming of the new millennium meant the expansion to greater levels. The most important and fundamental event was the passage from supplying high quality products to the ability of being able to design, supply, install and maintain turn-key systems such as the new ATP/ATC systems for the *Ferrovie Dello Stato*.

In the first few years of the new millennium ECM contributed to the total coverage of the RFI network with

train protection systems and SCMT and SSC equipping large numbers of railway lines with both systems and using their own products both for the trackside and on-board equipment as well as the application engineering capabilities for signalling. Progress in research in various sectors made it possible to create other products such as optoelectronic light signals of various types. In particular, research aimed at the migration of traditional halogen lamp signals to LED technology, with minimum impact on existing control systems.