

Wherever it matters, our expertise transports you



With a history of more than 170 years in the railway sector, ANSALDO ATLAS MOBILITY combines the expertise of AVIARAIL, a specialist in embedded systems, and ANSALDO TRASPORTI, representing high technology and historical Italian railway know-how. Backed by successful technology transfer and exceptional human resources, we have inherited more than a century of know-how in railway design and manufacturing.

Our ambition is to become the leader in rolling stock in Africa and Made in Morocco. We support our partners particularly in the design, manufacture and maintenance of bogies and coaches. Our engineering team and our design center allow us to offer solutions with very high added value.

Our passion and commitment to sustainability and innovation allow us to meet the needs of our customers, with value-added transportation solutions. A response to the challenges of tomorrow by guaranteeing quality and certifications.



### **ECOSYSTEME FERROVIAIRE MADE IN MOROCCO**



**Partenaires** institutionnels











Fondateurs du consortium









Membres du consortium



- Soudure
- Peinture
- Traitement de surface



Qualification - CE et NM



**Fabrication** - Siège





Structure







- Carte électronique
- Retrofit



### **Fabrication**

- Package
- Traitement de surface



Fabrication/ingénierie

# OB

#### Fabrication

- Retrofit
- Assemblage



Essais

Matières





Design packaging



Retouche







Verre











Automatisme

- CVS



Engineering





**Partenaires** donneurs d'ordre

















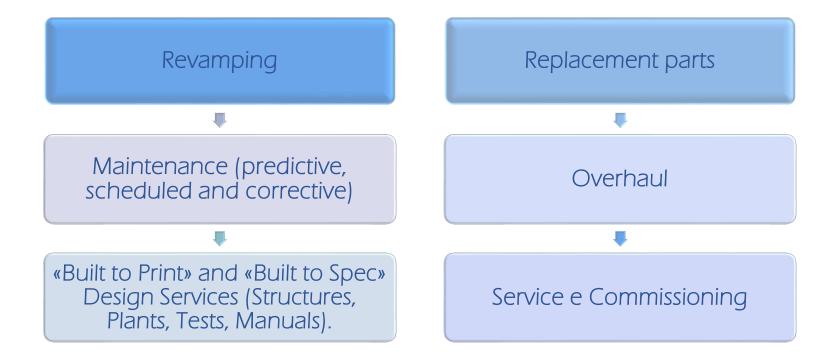






### About us:





We are able to develop and offer the market technological solutions that can also be supplied in the form of services, such as: installation, integration, management and maintenance of all railway and underground transport systems. This allows us to direct the offer to the changing needs of the market, guaranteeing dynamism and competence.



Business
Segment

# **Application**

### **Products**

### Clients

Main Line

Suburban/Regional

Electrical / Diesel Multiple UnitsLocos & Coaches

National and regional public operators

Intercity

Locos & Coaches (Electrical/Diesel MultipleUnits)

National transport **Authorities** 

High Speed

High Speed vehicles (220-300 km/h) Very High Speed vehicles (> 300 km/h) Public and private operators, leasing companies

Urban

Tranviaria and Trolleybus

Streetcars (totally low floor) Multimodal Trolleybus

Local Authorities

Mass Transit

LRVs high floor Heavy Rail Vehicles

### Ansaldo Trasporti Succursale Maroc







With a new factory in Casablanca, Ansaldo Trasporti has consolidated its global network with cooperation partners, strengthening its local presence and intercultural understanding, essential elements to execute transactions in an efficient and accurate goal-oriented.

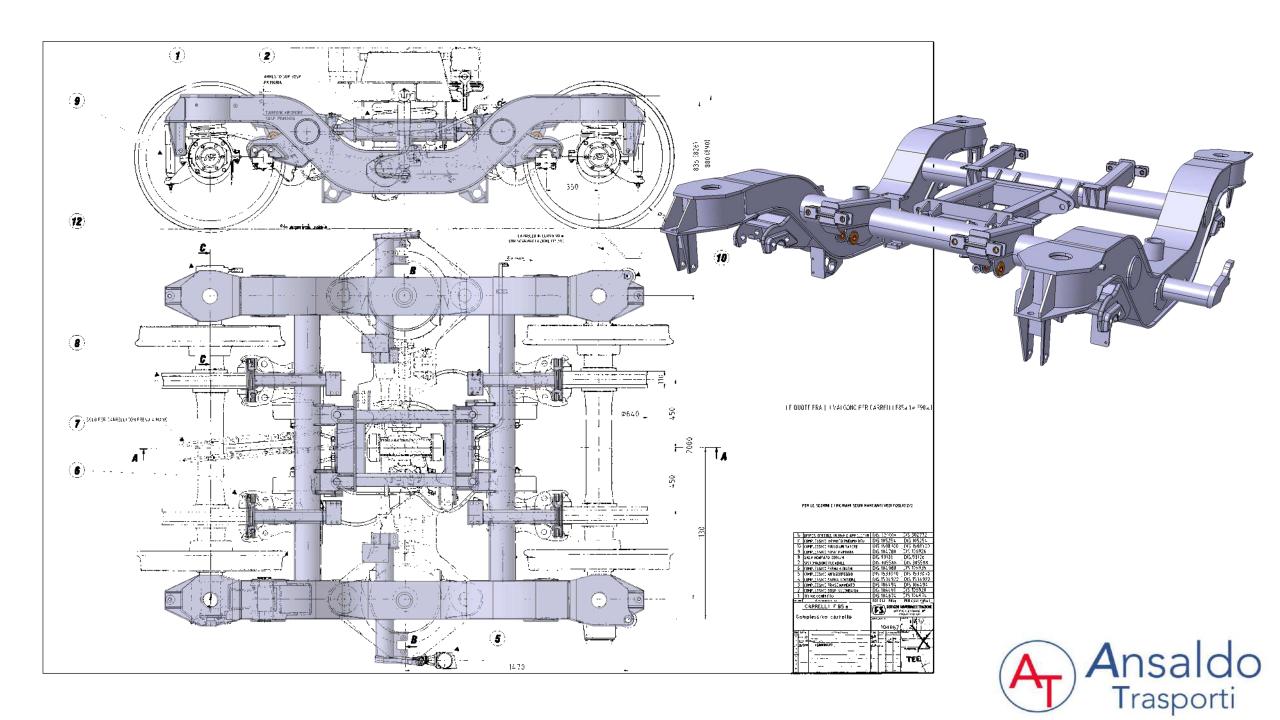
# Ansaldo Trasporti Succursale Maroc











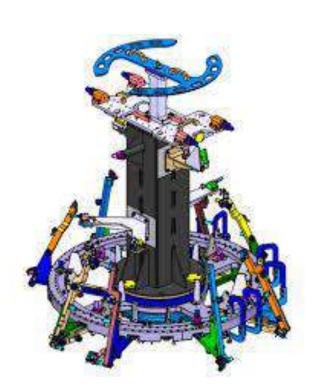


### Presentation:

- Moroccan company expert in the design and production of tools, test benches and machines, special equipment, MGSE (Mechanical Ground Support Equipment)
- Design, manufacture and distribution of clean electronic products (BETRONICS);
- Exclusive and strategic partnerships with world leaders (Leroy Automation, RS, DBT, Sterela);
- Supply, integration and design of electronic, electrical, mechanical and electromechanical assemblies and sub-assemblies for high value-added equipment;
- Development and distribution in Morocco and Africa of a wide range of industrial products.









# **Activities:**

- Transformation of equipment;
- System design and construction of electronics and mechanics;
- Test bench;
- Tools;
- Integration of industrial solutions;
- Supplies of industrial equipment;
- Energy management and transformation;
- System maintenance and repair;
- Automation, digitalization and supervision of industrial equipment.









# **Our achievements**

Analyse ultrasonique des rails

The ultrasonic inspection system is a state-of-the-art tool based on latest generation technological devices, is able to monitor full rail defects according to relevant international standards.

CARACTÉRISTIQUE	SPÉCIFICATION
Vitesse	80Km/h.
Température opérationnelle	-10°c à +50°C.
Conditions météo	Toutes conditions météo sauf neige couvrant le rail. Toutes conditions de luminosité.
Standards	UIC 712:2002 défauts du rail et UIC 725:2007 traitement des défauts du rail.
Communications	Collecte des données en local et à distance.









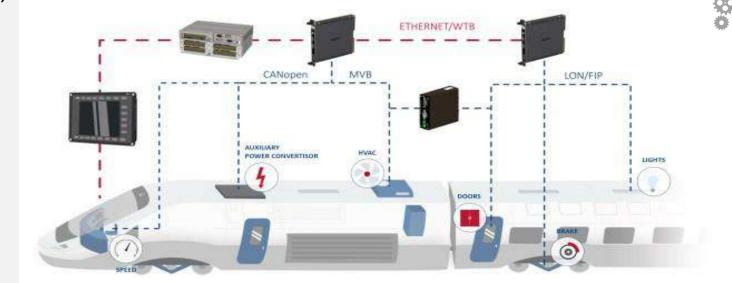
### Our achievements

TCMS (Train Control Monitoring Systems)

The TCMS range includes RIMO products (computers), BRIO products (SILO or SIL2 input/output modules), SLG products (Serial Line Gateways). They are designed to integrate into EN50155 TCMS on-board railway architectures and integrate into SIL2 architectures. They carry out local automation, interface and control specific equipment connected by serial link or CAN: air conditioning, doors, brakes, auxiliaries, fire safety.







# Our clients

- PME et Grande Entreprise privées;
- Administrations;
- Ambassades;
- Offices nationaux;
- Banque.



































# Our partners

- Supply of on-board aeronautical and railway electronic equipment;
- Supply of vehicle charging stations;
- Manufacturer of tools and capital goods;
- Manufacturer of automation products for harsh environments;
- Distribution of industrial products;
- Rail and airport installers;
- Monitoring solution developers;
- Supplier of railway rolling stock.





























IIA is the leading Italian bus manufacturer able to
design, build, market and service
a wide range of vehicles for local public transportation,
from 8 to 18 meters in length with traditional power supplies as well as
green tecnologies.



# CITYMOOD 12e

The Citymood 12e, is the only electric 12m bus entirely designed and built in Italy.

Menarinibus, starting from the well-established Citymood platform with over 1,500 units produced, has developed a city bus that takes electric mobility to the next level.

The Citymood 12e is a zero-emission bus not only in traction motor design but also in its air conditioning and auxiliary systems.









In the historic plant in Via San Donato, a team of mechanical, electronic, industrial and environmental engineers is engaged in constant research activity aimed at refining existing technologies and developing new ones.

A production line dedicated to prototypes allows all necessary tests to be carried out on new technologies.

The Logistics Center and MooVe's Remote Service provides service and spare parts to all our vehicles wherever they are operating from.











Thanks to the restructuring and modernization of the facilities, the production line and the plants, the Flumeri plant has increased its production capacity to become a state-of-the-art plant.



The site is also equipped with a cataphoresis plant, one of the most important ones in Europe.

# **OUR RANGE**



VIVACITY range: 8-9 mt

CITYMOOD range: 10-18 mt

### All vehicles benefit from:

- Fully lowered floor
- High strength welded carbon steel bodywork
- Different supply systems: Diesel, CNG, LNG and Electric.
- Cutting-edge engine and components
- Customized versions to clients' specifications

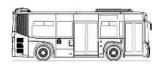


# **VIVACITY**

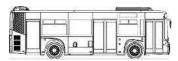
- Leader in the mid-size segment category
- High load capacity with comfort and maneuverability
- Ideal for city centers and urban contexts characterized by traffic congestion conditions







8 mt | 61 seats



9 mt | 75 seats

Powered by Diesel |CNG(2022) | Electric (2022)



# CITYMOOD

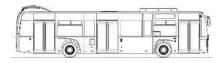
- Perfect for every scenario
- Highly customizable thanks to various configuration options
- Maximum capacity thanks to the articulated version (18m)



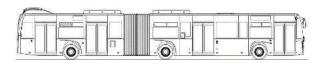




10 mt | 90 seats



12 mt | 107 seats



18 mt | 151 seats

Powered by Diesel | CNG | LNG | Electric (2022)



# **SHAREHOLDERS**





42,76%

Italian Ministry of Economic Development Agency for business developments, production growth and innovation



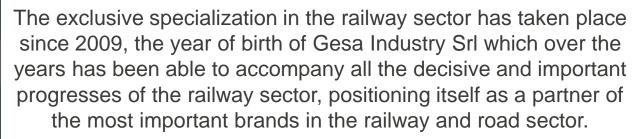
28,65%

Participated from Italian Ministry of Finance and Economics, Key player in Aerospace, Defense and Security with integrated solutions for Airspace, Land, Sea and Cyberspace



28,59%

Turkish vehicles manufacturer operating in more than 20 different countries around the world. Yearly Capacity: +18.000 vehicles





Thanks to continuous research on materials, careful study of passenger needs and the use of cutting-edge production and control technologies, Gesa Industry effectively responds to the demands of the national and international market, positioning itself as a partner and point of reference for the big brands in the railway sector.



The company evolution has led Gesa Industry to an important reengineering of company processes: internalisation of new workflows, design and development, engineering of production systems and structural and physical expansion of the operating offices.



With the acquisition of the "Ansaldo Trasporti" brand, the company began a new growth path and laid the foundations for new forms of international success in the railway industry sector.







TOILETTE IC901 -ANSALODBREDA

COACH TRENITALIA - ANSALDOBREDA



ELECTRICAL CABINET - TAF MOROCCO



GESA INDUSTRY





GEL COATING - IIAUTOBUS



COMPLETE DASHBOARD SX - IIAUTOBUS



TOILETTE - MCNE

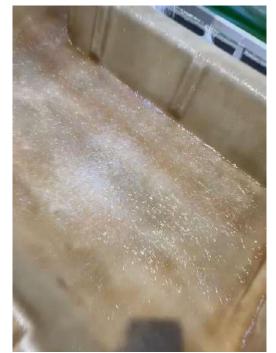


**REAR LINING SX - IIAUTOBUS** 

















### > Clients:

> ANSALDOBREDA



GESA INDUSTRY

> TRENITALIA



> EAV



➤ EURORAIL



> CAF Italia



CAF Spagna





> ANM (mezzi di superficie)



SKODA



> COPERATIVA PROGRESSO E LAVORO





Human Resources in company have decades of experience and have worked with leadership roles for worldwide orders placed by major car builders.

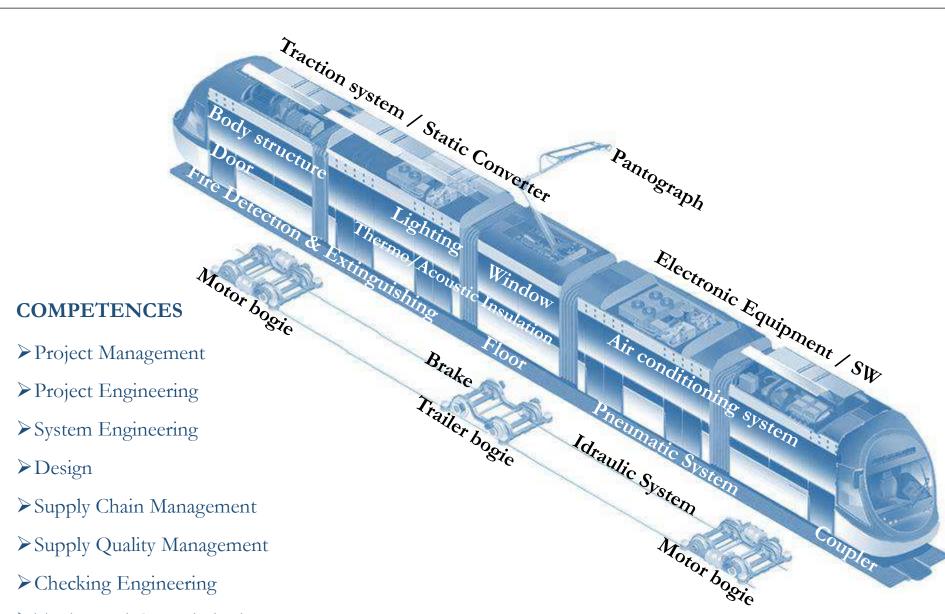
The completeness of expertise and skills within **SBF** organization gives the possibility to offer a global and integrated support maintaining a smart and flexible engineering service.

Key words: Excellence in Rolling Stock; Experience; Expertise; Professionalism; Dynamism; Synergy; Speed; Efficiency; Quality; Flexibility; Integration of competences

#### PORTFOLIO OF CORE COMPETENCES

Testing and Commissioning





#### **ACTIVITIES**

- ➤ Product Design and Development
- Standard Assessment
- ➤ Data Management
- ➤ Virtual Prototyping
- ➤ Computer Aided Design CAD
- ➤ Structural FEM Analysis
- ➤ Comfort CFD Analysis
- ➤ Noise and Vibration NVH Analysis
- ➤ Material and Technologies
- ➤DFE Design For Environment
- ➤ Fire Engineering
- ➤ RAMS/Safety Assessment
- ➤ Risk Analysis

### **ENGINEERING GLOBAL SUPPORT**





#### **TENDER**







MOCK UP REALIZATION

TESTING & COMMISSIONING

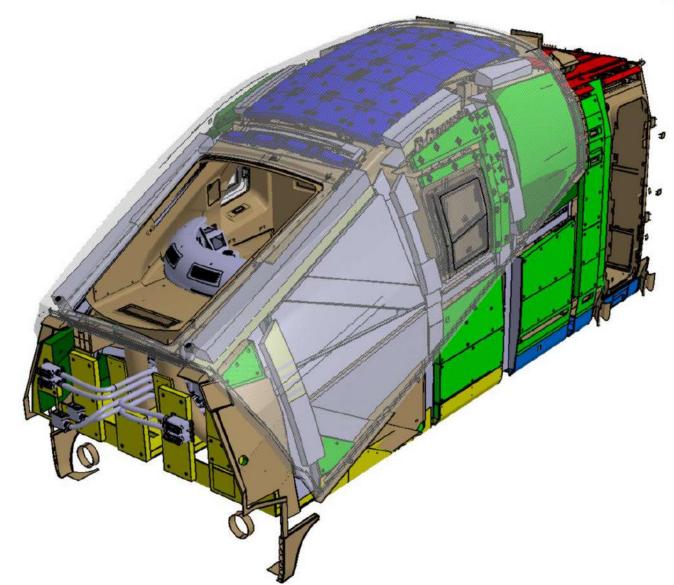




SAFETY ASSESMENT AND HOMOLOGATION

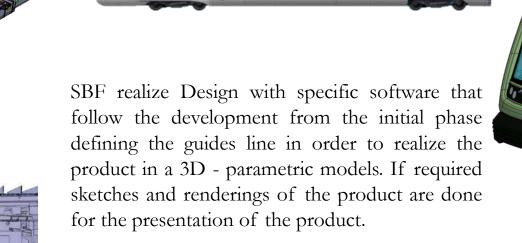
**SERVICE** 



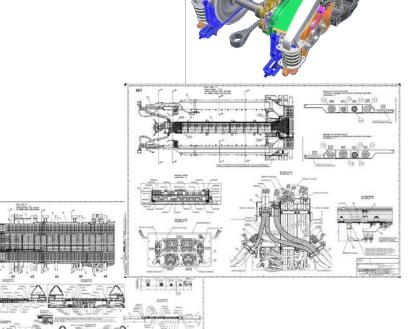


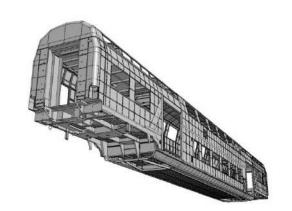
### PORTFOLIO OF CORE COMPETENCES: Focus DESIGN

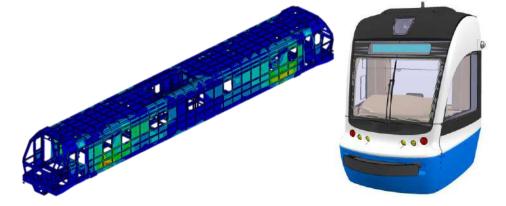




The principal Software uses are AutoCad, CATIA, Creo, Inventor, ANSYS (for the



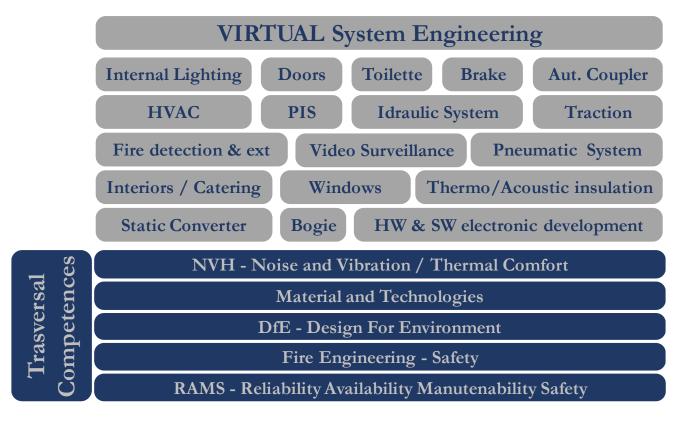


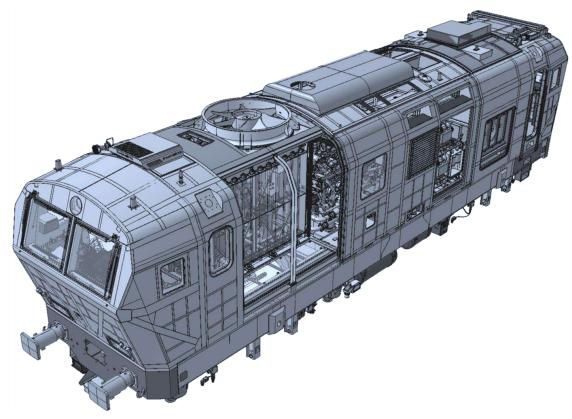


structural Analysis calculations).

#### PORTFOLIO OF CORE COMPETENCES



























**GRUPPO FERROVIE DELLO STATO ITALIANE** 





















EuroRail is a company in the train business, created by the participation of specialists of the sector with more than 50 years of experience.

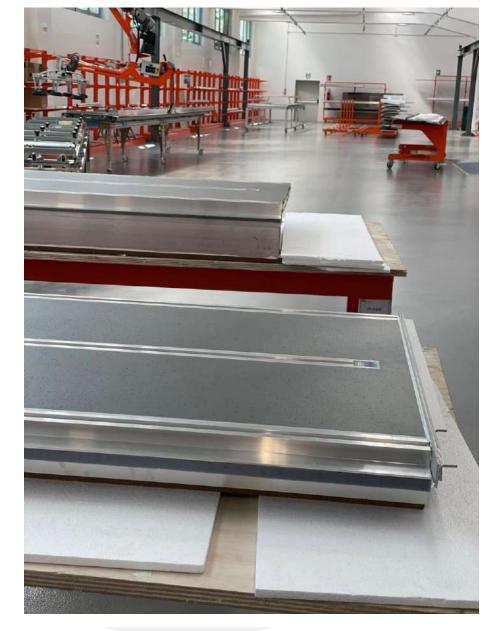
The objective of the company is to support the customer from the conceptual phase of engineering to the development of detailed engineering and high-quality products and offering a complete and reliable service.

We can manage the complete floor system thanks also to the collaboration with the main industry leaders.













# **PRODUCTION**

EuroRail is located in Prato (Italy), the production is divided between the production of sandwich panels, the accessories (tables, dividing walls, internal doors,.....), and the production of complete flooring systems.

Each step of production is controlled according to a control system, using the latest industry 4.0 systems.

This helps us to be able to control the history of each piece also over time.

We collaborate with the leaders of the various materials necessary for the production of the floors. A high quality of the products produced ensures a long service life of the floors and all its components.





# PRODUCTION PROCESS

### Sandwich panels

Own production of sandwich panels and possibility to mix various materials and various geometries



### Various glue stations

Controlled gluing process and use of state of the art technologies



# Complete flooring systems

Production of prefabricated floors with thermal acoustic insulation, insertion of aluminum profiles, heating systems and other accessories.











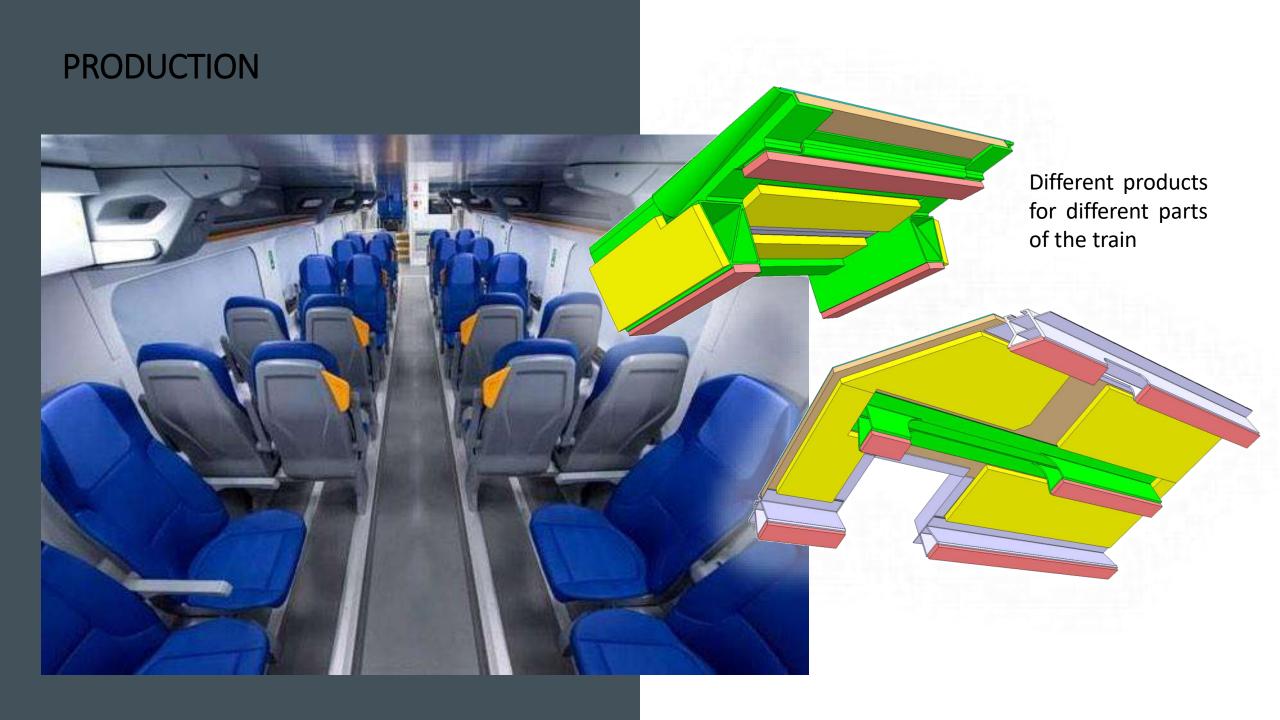
RESEARCH AND DEVELOPMENT

EuroRail cares about the new trends and new technologies which are the success of its customers, the companies that compose it, invests substantial capital in the research and development of new technologies and materials in the railway sector, as well as in the continuous search for engineers and technicians specifically trained for the production and realization of rolling stock supplies, in order to guarantee cutting-edge solutions for its customers.









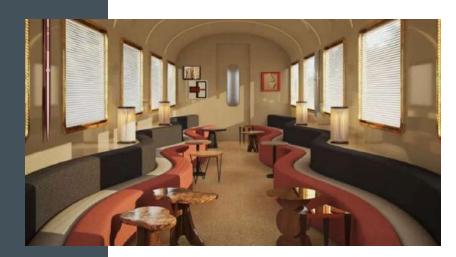
# TRENO "DOLCE VITA"

### Working on the Engineering and Interiors Solution









# I.C.O. SUD® fluid power engineering

### The history

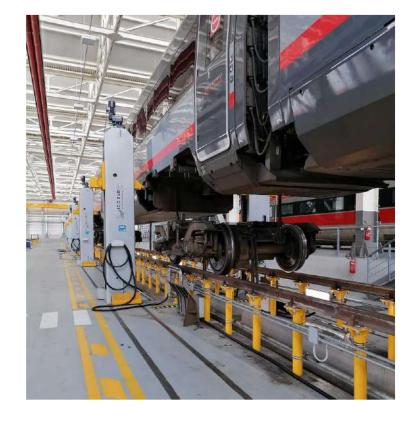
Developed in the late eighties as a representation and sale company of components for the industry, the I.C.O SUD stood out for its outstanding specialized technical expertise in production lines and Plants, which guaranteed a rapid and solid growth. The natural vocation of the Campania region in the railway industry supply chain has made the I.C.O. SUD a partner of historic companies in the construction of railway vehicles (AnsaldoBreda, Sofer, Firema) since the early 1990s. Collaborations with the most important international railway vehicle manufacturers has allowed the I.C.O. SUD to develop advanced technologies, equipment and solutions specific to the railway sector.

In addition to its many years of experience in the railway industry, I.C.O. SUD also operates in other industries:

- AUTOMOTIVE AEROSPACE MARITIME ENERGY IRON AND STEEL
- FOOD & PACKAGING TECHNICAL SUBCONTRATTING

Since 2008 the company has implemented the Research and Development division, to study and implement solutions and cutting-edge applications for industry, valuing the perfect combination between the long experience, the design and engineering activities, and the innovation of product and process.

Today the company occupies an area of 5000m2, equipped with 10 + 5ton overhead cranes and a team of specialized professionals and technicians and an organizational structure for the marketing, design, construction and maintenance, managing and fulfilling with high competence all the requests, the critical points and specific characteristics of each customer.







## **Special machines for railway equipment**

I.C.O. SUD designs, builds and installs special equipment for the maintenance of railway rolling stock.

The strengths of the organization are:

- The design and construction of every single part of the machine by internal staff;
- The installation and commissioning at the customer's site is carried out by specialized technicians;
- The provision of a complete and high-quality set of services for the design of machines and plants, thanks to a team of technicians with deep experience in plant design and the use of CAD 2D and 3D technology and FEM stress analysis software;
- The offering of any automation system for machines or equipment, including the design of hardware and software for managing electrical equipment, which is carried out by the company's specialized staff.

For the railway industry, I.CO. SUD, thanks to the expertise gained in complex and high-tech structures, designs and builds:

- Mobile Elevating Platforms for work on the side of vehicles and roof (PEMP)
- Equipment on rails for dismounting underframe components
- Fixed work platform for roof access
- Special equipment for processing operations and components







### **Services**

Design and construction of metallic carpentry welded structures, machines and special equipment, made through the use of professional and highly specialized personnel using 2D, 3D CAD technology, FEM and stress state for steel structures simulators.

- Ordinary and extraordinary maintenance activities for machines and plants, overhauls, retrofitting and regulatory adaptations of industrial machines and systems.
- · Research and Development of high-tech processes in the industrial field.
- Spare parts and supplies of components for hydraulic, pneumatic, lubrication and vacuum systems.

For the railway industry, in addition to the many years of experience in the construction of special machines and equipment, I.CO. SUD also offers:

- Technical assistance
- Consulting
- Regulatory analysis
- Maintenance
- Overhaul services





### **Quality, Safety and Environment**

Quality, environment, safety and management of the special aspect of welding represent the pillars of business development. These aspects have been, over time, valued by obtaining the respective Management System Certifications.

Since 2004, ICOSUD has successfully achieved the **UNI EN ISO 9001:2000** certification, which in the following years has been updated and implemented to adapt to the updates of the legislation. Since 2011, the company has also been certified for the welding process in accordance with **UNI EN ISO 3834-2:2006** and for product certification **UNI EN 1090-2:2011**. Since 2014 the Company has achieved the certification of its own efficient environmental management system UNI EN ISO 14001:2004 and the one for occupational safety certifications **BH OHSAS 18001:2007**.

To date, the I.C.O. SUD therefore has 4 active and certified management systems for the Quality and Environment aspects, Occupational Safety and Welding

- UNI EN ISO 9001:2015 Cert. 92854-2011-AQ-ITA-SINCERT issued by DNV GL -Business Assurance;
- UNI EN ISO 14001:2015 Cert. 169009-2014-AE-ITA-ACCREDIA issued by DNV GL -Business Assurance;
- UNI EN ISO 45001:2018 Cert. 169217-2014-AHSO-ITA-ACCREDIA issued by DNV GL Business Assurance:
- UNI EN ISO 3834:2021-2 Cert. ITI000167 issued by Bureau Veritas Italia S.p.A.

To these ones is added the Certification of Steel Structures:

• UNI EN 1090:2018 - 2 - Cert. N. 1370-CPR-1368 issued by Bureau Veritas Italia S.p.A.











