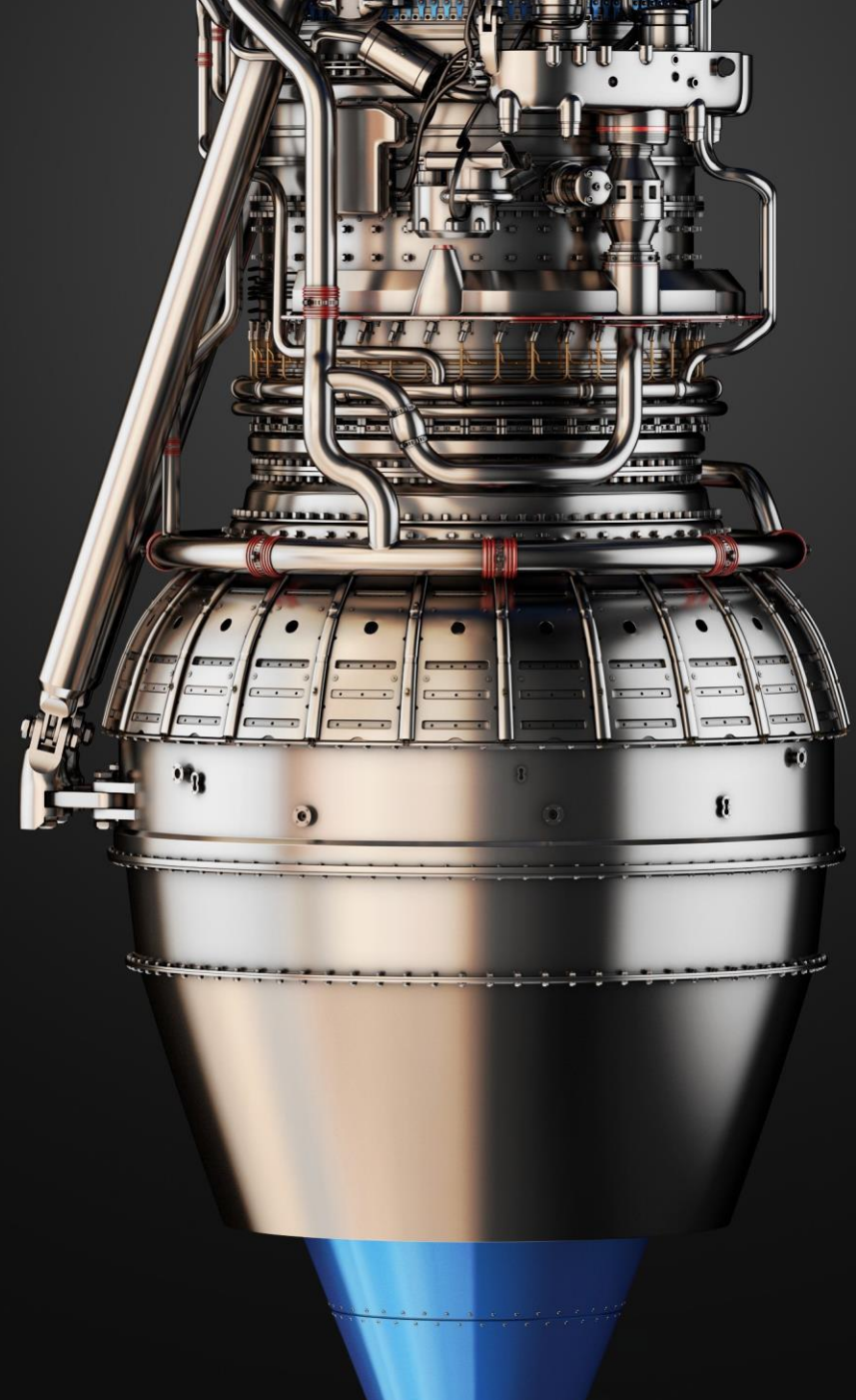


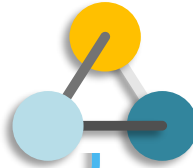


Corporate presentation



COMBINE

Resources
Skills
Tools



SYNERGIZE

Strategies
Mission
Goals



SHARE

Professionalism
Values
Passion



COMPLEMENT

Expertise
Experience
Talent



Dipolo arises from a joint venture between the Italian companies BSim and DACA-I and operates as a Siemens Digital Industry Solution Partner for the sale of simulation and test systems.

In addition, Dipolo offers a comprehensive portfolio of engineering services and supports customers across a wide range of industries in all phases of product development - from concept design to validation.

Dipolo's experience in design and development is impressive, as proven by the successful completion of complex projects. The use of technical synergies, strategically smart sales techniques, and a tailored business model are the pillars that set Dipolo apart from the competition and make it an attractive partner for customers.



Partner

Digital Industries Software

SIEMENS



Dipolo

We engineer the future

We support our customers through design, simulation, testing, optimization and validation, helping them to get better, more reliable products to the market, faster.

Siemens Solution Partner

Dipolo is a trusted Siemens Digital Industries Software product distributor for: **Simcenter™ Amesim** simulation software and **Simcenter™ Testing Solutions**.

Engineering Service Excellence

Providing our clients with an array of **design, simulation and testing services**, to support their development process.



Partner

Digital Industries Software

SIEMENS



Corporate's structure

BSim Engineering



A team of **skilled engineers** with a **problem-solving mentality** and **strong experience** in the field of advanced engineering tools and solutions

>20

Years of experience



>130

Completed projects



>100

Customers



4

EU offices



Siemens Smart Expert Partner



Corporate's structure

BSim Engineering: Core activities



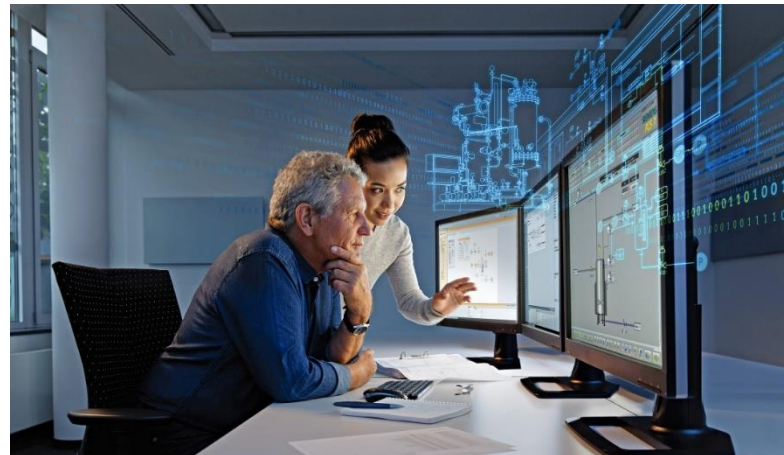
Engineering Service Provider

Our engineering know-how at your service. Simulation and testing-powered consulting for new product development or troubleshooting activities.



Simulation Software Distribution

Proud reseller of top-class Siemens simulation software, supporting companies select the right tools, learn how to use them, and fully implement them in the organization.



Testing Solutions Distribution

Providing companies with an unrivaled suite of testing solutions for durability, noise, and vibration engineering.



Corporate's structure

DACA-I Powertrain Engineering



Years of experience



Employees

22



EU offices

60

3



Battery testing facilities



We work alongside customers, partners and universities to **develop innovative projects**, especially in the **electrification and renewable energies sectors**.



R&D Department





Corporate's structure

DACA-I Powertrain Engineering: Core activities



Engineering Service Provider

In over twenty years of consolidated experience, DACA-I has become a solid reference in the Italian engineering scene by offering integrated services in various industrial sectors.



Power in Motion

We like to approach each new project with competence and resourcefulness. They represent the doors to new worlds that we love to explore.



Testing Solutions

DACA-I offers a very wide range of testing solutions in the fields of NVH, End of Line for vibroacoustic performance and Electronic Control Systems (Controls).

Siemens DISW

A prestigious partnership

Siemens partners are selected through a thorough recruitment process and an extensive evaluation of their well-founded knowledge and experience in various sectors of the industry.

Thanks to its effective business model, Dipolo is proud to be a Solution Partner in the fields of system simulations (0D/1D) with Simcenter™ Amesim and vibroacoustic (NVH) Simcenter™ Testing Solutions.



Simcenter™ Amesim

Predictive engineering analytics

Simcenter™ Amesim is a 0D/1D system simulation software that allows the user to **virtually predict the dynamic behavior of any component or system.**

Acting as a **digital test-bench**, Simcenter™ Amesim supports both new product development, current design optimization and trouble-shooting.

Advantages:

- | Ensure correct sizing of new design
- | Predict dynamic performance in a range of scenarios
- | Tweak and improve design
- | Validate controls



Partner

SIEMENS

Digital Industries Software



Simcenter™ Testing Solutions

SW and HW to boost productivity and product innovation

Partner

Digital Industries Software

SIEMENS



Simcenter SCAPTOR

a complete, integrated solution for ADAS data collection



Simcenter SCADAS

data acquisition hardware



Simcenter Testxpress

sound and vibration analyzer



Simcenter Testlab

integrated solution for test-based engineering



Simcenter Anovis

End-of-Line testing during manufacturing



Simcenter Qsources

a comprehensive suite of innovative sound and vibration excitation hardware



Simcenter Sound Camera

to accelerate acoustic troubleshooting



Simcenter Soundbrush

a real-time testing solution that combines 3D sound intensity with visualization of the sound sources



Simcenter™ Testlab

Test data acquisition and analysis

Simcenter™ Testlab is a complete, integrated solution for test-based engineering.

It combines high-speed multi-channel **data acquisition** and data **management** for test-based engineering.

The Simcenter™ Testlab **software suite** is seamlessly integrated with the Simcenter SCADAS™ Data Acquisition **hardware systems** portfolio.

Advantages:

- | Support testing activities efficiently
- | Increase test facility productivity
- | Deliver accurate and reliable results, even with reduced prototype availability

Partner

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Simcenter™ Anovis

Testing solutions for production lines

Simcenter™ Anovis is the solution for **End of Line Testing**, **Non-destructive early detection of damage** due to **process monitoring Testing**.

One of the most important methods for quality assurance which allows to achieve high production quality at reasonable costs.

NVH End of Line Testing

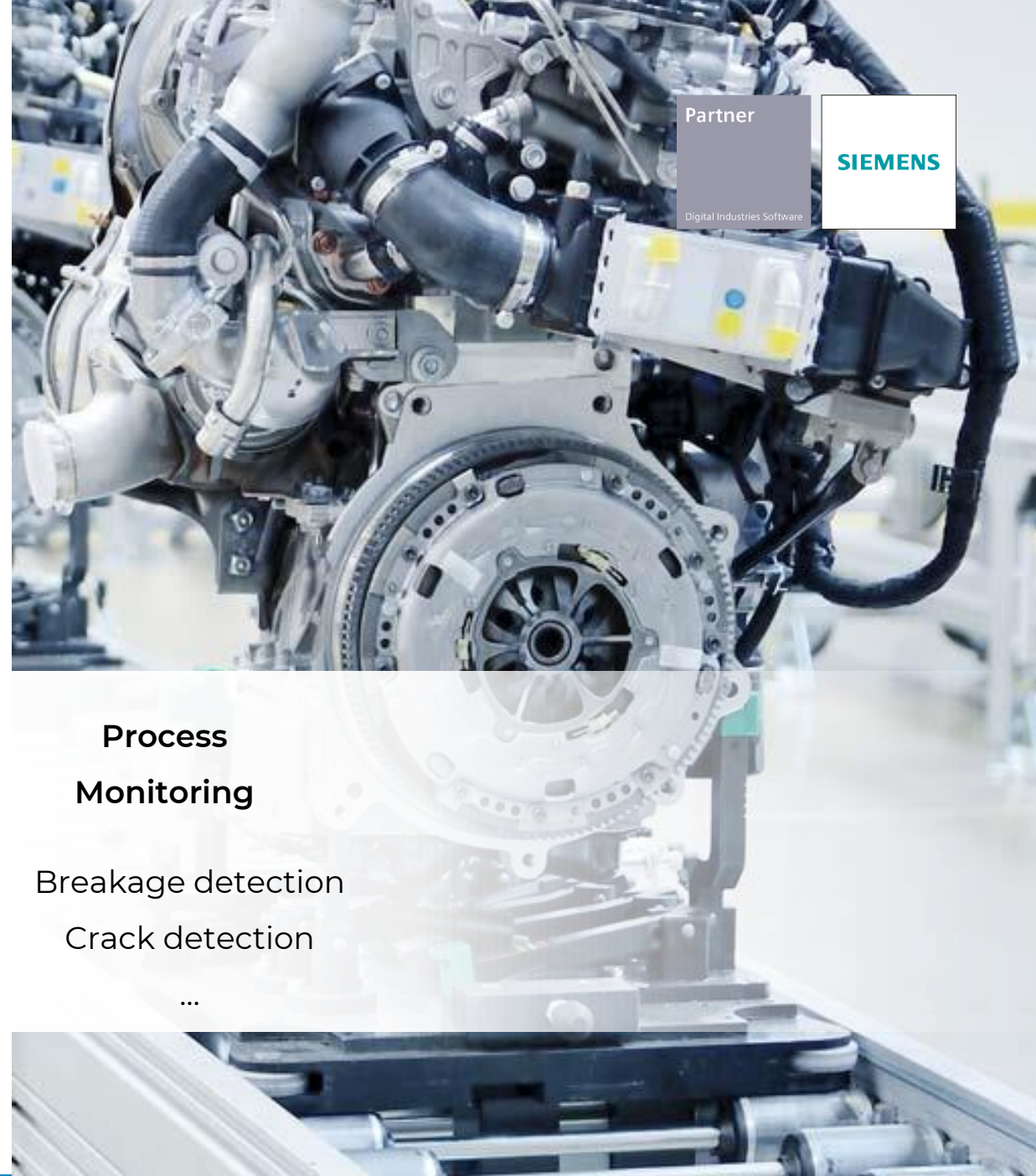
Fault identification
Go/no go decision

Non-destructive Testing

Resonance test
Cracks, porosity, density,
...

Process Monitoring

Breakage detection
Crack detection
...



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Engineering services

Dipolo is **the partner to rely upon** during every phase of product and process development.

The assets available to us, are the **deep knowledge** and **skills** of our professionals, **high flexibility** to match customer requirements and **constant attention** to technology evolution.

Thanks to the **know-how** and **experience** gained and consolidated over the years, we offer customized technical solutions both insourcing and outsourcing.



Engineering services

Technical expertise

Testing

- NVH
- End of Line (NVH)
- Battery Testing

Design

- Project Setup
- Detailed Design
- Reverse Engineering
- Project Management

CAE

- OD/ID System Simulation
- CFD
- BEM
- FEM

Electronic Control Systems

- Calibration and validation of control units

Partner

SIEMENS

Digital Industries Software

AVIATION AND AEROSPACE

AUTOMOTIVE AND GROUND VEHICLES

ENERGY AND MECHANICAL INDUSTRIES





Engineering services

Simulation

Partner

Digital Industries Software

SIEMENS

Pre-design

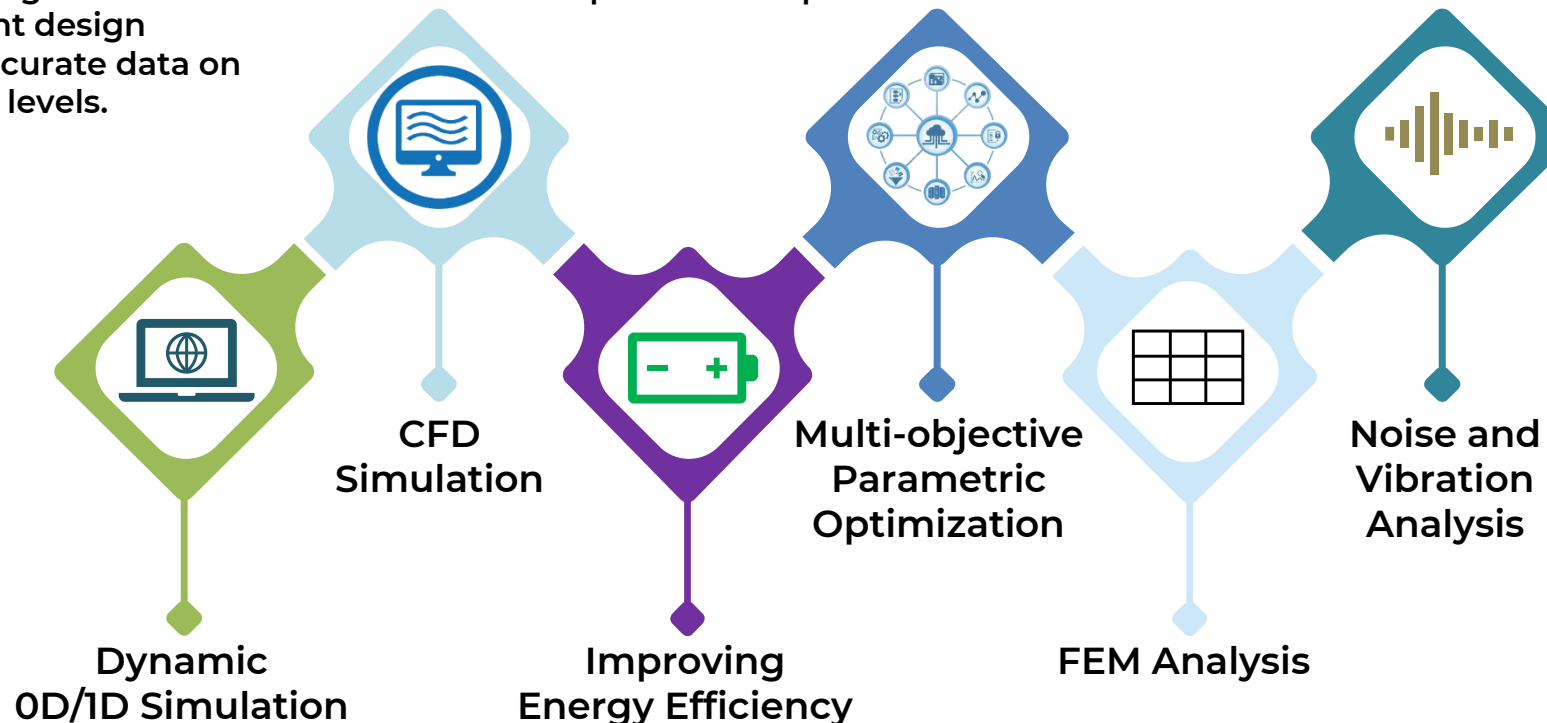
Define new designs, by employing predictive simulation and using 0D/1D simulation tools. Evaluate the technological trade-offs between different design proposals and get accurate data on project performance levels.

Design Simulation

Fine-tune of product designs with simulations of the dynamic performance (time or frequency domain), 3D-CFD simulations, FEM analysis or multi-objective parametric optimizations.

Virtual Validation and Troubleshooting

When a product does not respond correctly to certain conditions of use, these can be digitally recreated to explore the root causes of technical problems and optimized performance through virtually validated alternative proposals.



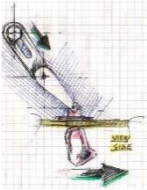
Engineering services

Concept and Design

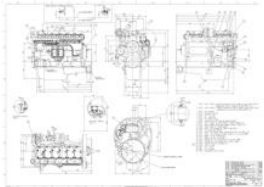
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- Determination of the objectives and needs of the client
- Setting and feasibility studies
- Concept design



- Drawings and stack-up analysis
- Assembly plans
- Check, modification, validation and release
- Data Management

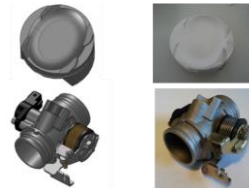


- Functional requirement checks
- Lay-out and positioning
- Optimizations (materials, processes, weight...)

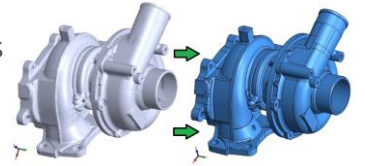
- Cost analysis
- Cost reduction
- Support for prototyping



- Industrialization
- Product design maintenance



- Modeling standards and norms
- Converting of 2D images or drawings into 3D models
- Reverse Engineering

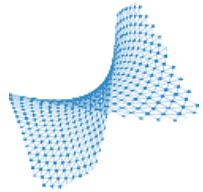


- Check lists
- PLM data management
- Virtual assembly check through digital and visual mock-up



- BOM (bill of materials)
- Design methodology
- Standardization of small parts (screws, bolts...)
- Final checks pre-release





Structural Dynamic Testing



Acoustic Testing



Durability Testing



Dynamic Environmental Testing

**Test-based
Engineering**

Rotary Machinery Testing



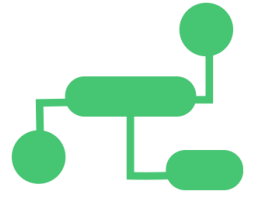
Transfer Path Analysis



Model Based System Testing



Analytics & Collaboration



Engineering Services

Battery test facilities

At our headquarters in Naples, Italy, we have set up **high and low voltage test equipment** and instruments for **battery packs, modules and cells**.

With our battery test facilities, we aim to **test** and **validate** the vast majority of electrochemical batteries intended for various uses and applications, preeminently lithium-ion batteries.

Below are some examples of **battery testing solutions** that we can perform at our facilities:

- | | |
|--|---------------------|
| Static capacity | Cold-cranking |
| Capacity fade | Thermal performance |
| Hybrid power pulse characterization (HPPC) | Energy efficiency |
| Self-discharge | Lifecycle |
| | Calendar life |

Partner

Digital Industries Software

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Customers and References

Partner

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AEROSPACE

- Avio
- Deutsche Aircraft
- Elettronica
- Leonardo Aircraft Division
- Magnaghi Aeronautica
- Mecaer Aviation Group
- Microtecnica
- Odys
- Oma Foligno
- Otomelara

- Automobili Lamborghini
- AVL
- Benelli
- Bonfiglioli
- Brembo
- Brevini Fluid Power
- Carraro Drive Tech.
- Casappa
- Case New Holland
- Centro Ricerche Fiat
- Cesab
- CNH Industrial
- CNR-Imamoter
- Continental Automotive Italy
- Dana Italia
- Dana Rexroth
- Dayco Europe

VEHICLES

- Denso
- Dinoil
- Ferrari Auto
- Ferrari F1
- FEV Italia
- FKT
- Getrag Magna
- GM Powertrain Europe
- IVECO Group
- Landi Renzo
- LMS
- Lombardini
- Magneti Marelli
- Maserati
- Merlo Project
- Metatron
- M.T.M.
- MV Agusta

- Odys
- Oerlikon Graziano
- Piaggio
- Pierburg Pump
- Salvagnini Italia
- Same Deutz-Fahr Italia
- Scuderia Toro Rosso
- SRAM Germany
- STC
- Stellantis
- Valeo Italia
- Walvoil
- Webasto Italy
- Yanmar R&D Europe

MECHANICAL INDUSTRY

- Ansaldo Energia
- Centro Servizi Tecnico
- Comet
- emz-Hanauer
- Gerhard Geiger GmbH
- Manitowoc
- Odys
- Ronchi Mario
- Rotork Fluid Systems
- Sacmi Imola
- Salvagnini Italia
- Tetra Pak Solutions



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