



"Quality is making things
right when no one
is looking"



MILANO
GENERATORI S.R.L.





MODALITÀ DI SICUREZZA PER I MANOVATRICI DELLA CRUI

1. Assicurarsi che il carico sia correttamente ancorato e che il sistema di sollevamento sia in grado di sopportare il peso del carico.

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CONTENTS

01

- 5. Who are we?
- 7. Our Mission

02

- 10. 24/7 Availability
- 10. Ordinary maintenance of gensets
- 12. Straordinary and corrective actions
- 13. Diesel power plants
commissioning
- 14. Thermographic analyses
- 15. Insulation and impendance
measures
- 16. Electrical network analyses
- 17. Vibration analyses
- 18. Industrial engine emission
analyses
- 19. Resistive load banks rental
- 20. Offshore Service

03

- 21. Sales

04

- 22. Safety

05

- 24. References

06

- 26. Where?



01 WHO ARE WE?

MILANO GENERATORI S.R.L.

Milano Generatori s.r.l. was born from a reality with twenty years of activity in the sector of industrial construction, electrical and power generation plants.

Despite the experience gained in this sector, the company's vision is oriented towards **specialization in the field of electrical power generation and more specifically of generating sets.**

This company manages to be professional and dynamic at the same time thanks to the specialization of its technicians divided between electrical and mechanical to be able to work on the main gas and diesel-based generation units.

Our company works every day to grow and remain constantly updated, inspired by the standards of the leader companies in terms of safety, quality and variety of services, to offer to our Customers.

OUR STRENGTHS

- Helpful staff;
- Solution best suited to the Customer's needs;
- 24/7 availability;
- Times optimization;
- Service punctuality;
- "Turnkey" service;
- No operational geographic constraints.





OUR MISSION

"Our first responsibility is to those who decide to make use of our service, whatever we do it has to meet their demands and above all must be of high quality and at the right price;

In order to grant it, our employees and contractors work in group in which everyone is considered as an individual, and dignity and rights of each one are respected;

One of our first duties is to make up for the mistakes we made; we strongly believe that a single person's mistake can't be admissible, and only a collective solution to problems is considered;

By analyzing the job done we must try to improve ourselves in order to provide optimal and safe service for our customers;

Safety and the rule of art are pivotal points for our working group; The way we act is finalized to maintain in good condition the property that we have the privileged to use, preserving the environment and natural resources;

Our employees must have the opportunity to experiment new ideas to improve our service and the quality of their working life;

Working with these principles will allow to get a fair economic and moral profit;

We do not tolerate any form of corruption."

Daniele Orsini





02 SERVICES

Generators are good alternatives to be used in the event of situations where electricity from the traditional grid is lost.

For this reason, it is important to pay proper attention to the maintenance of the machines and to rely on qualified personnel, able to guarantee a correct overhaul of the machines and to provide assistance also through analyses carried out with the appropriate instrumentation.

Milano Generatori offers its customers a 360° technical assistance service, both for emergency and continuous service generators operating in multiple industrial environments (telecommunications, healthcare, oil & gas, Off-shore, ATEX classified environments), both nationally and internationally.



MOST RELEVANT SERVICES

- 24/7 on call service in Italy;
- Instrumental analyses;
- Generating sets and industrial engines ordinary maintenance plants;
- Electrical and mechanical assistance activities;
- Engine repair and overhaul activities;
- Pre-commissioning and commissioning of gas and diesel generators;
- Revamping of management and control systems;
- OnShore and OffShore services.

24/7 AVAILABILITY



Nowadays, promptness and speed of intervention are two of the most important aspects of an optimal service.

We have set up a technical assistance service with telephone **availability 24 hours a day, 365 days for year**, composed of qualified and trained technicians to intervene and solve problems related to generators and plants.

We intervene 4 hours* from the call with suitable equipment for the verification and resolution of major faults.

* reference time of Northern Italy areas

ORDINARY MAINTENANCE OF GENSETS

Inside the plant, the generator is one of the equipment that is called to intervene **in emergency situations** (remaining idle the rest of the time). The idle condition of an electric diesel machinery is often underestimated.

Efficiency and operation are directly related to the degree of care and maintenance of the generator. For this reason, regular maintenance, programmed to monitor the correct operation of the unit, guarantees the safety and safeguarding of things and people.

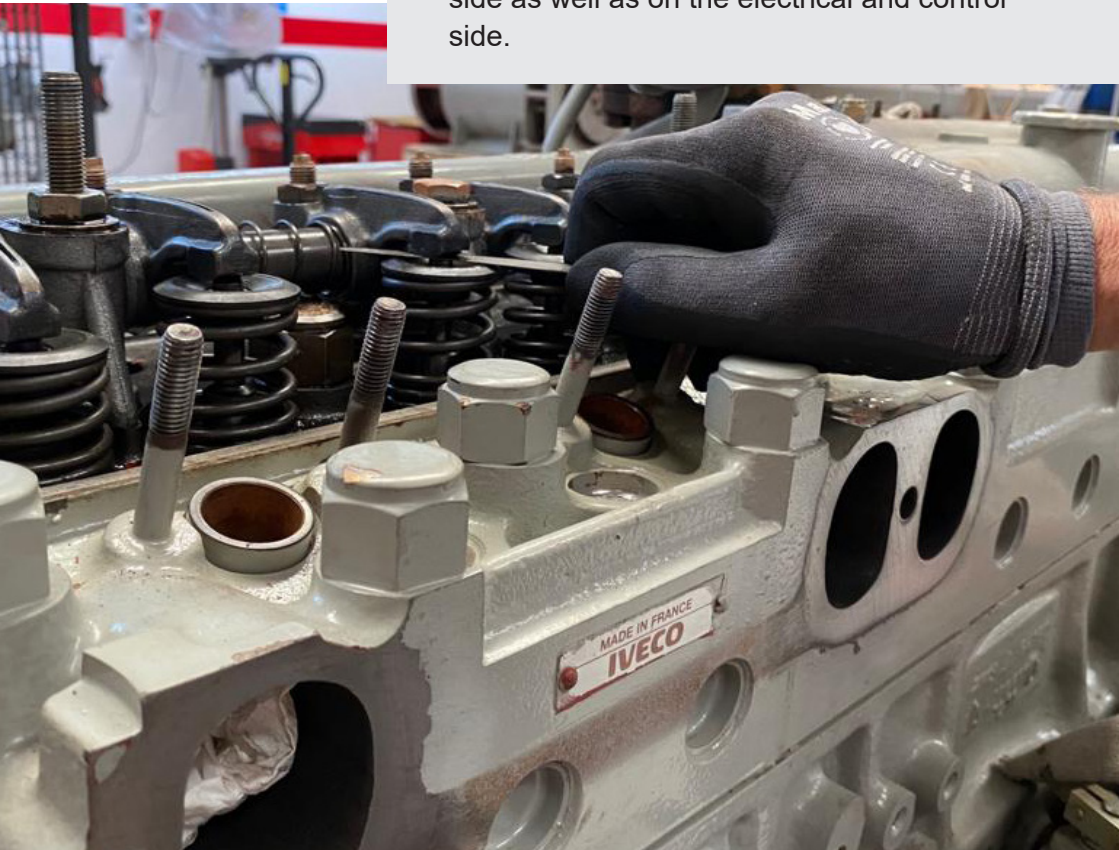
We are able to provide complete maintenance packages for generators,

as we are equipped to carry out interventions on the engine part, as well as on the electric and control part.

Our technicians carry out checks, according to internal reporting, to ensure that each part of the machine receives the right attention.

The control and **verification reports** have been developed over the years to deal with all the problems encountered during maintenance and/or interventions. Our flexibility also allows us to satisfy the customer in the event that additional controls and/or the use of specific reporting are required.

We are able to provide 360° maintenance packages for gensets as we are equipped to carry out interventions on the engine side as well as on the electrical and control side.



STRAORDINARY AND CORRECTIVE ACTIONS

As a result of extraordinary failures, components need to be **replaced or repaired**. In these situations, the method of operation may be different depending on the problem and the age of the machine:

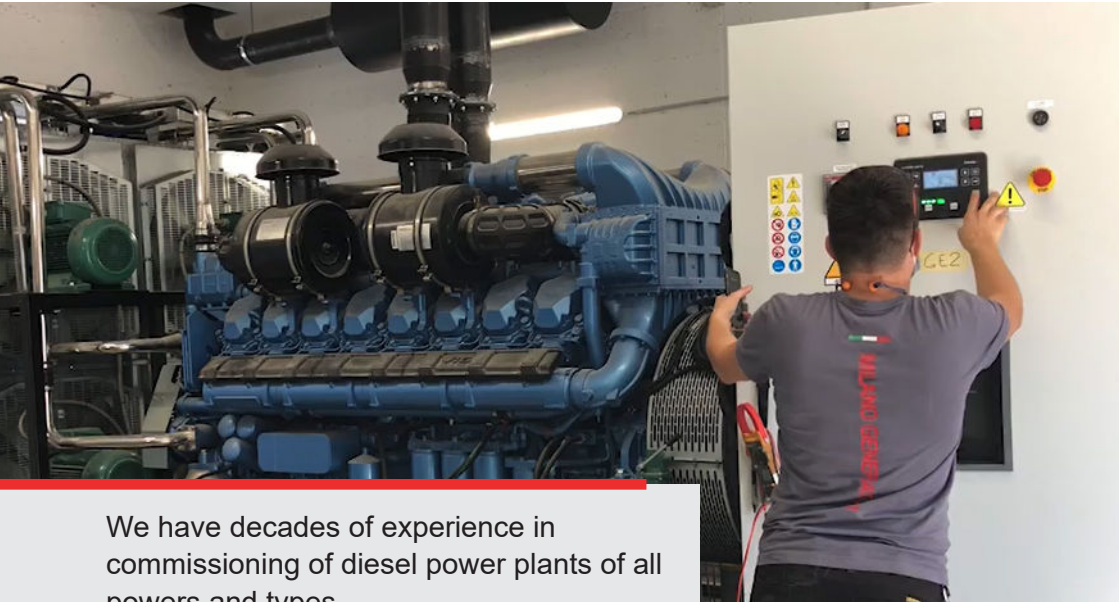
- Repair on site without need of spare parts;
- Replacement of the damaged part(s) with a new or equivalent one;
- Modifying the damaged part of the system;
- Revamping.

We support the Customer with the replacement of electrical and mechanical components.

We are able to supply spare parts from leading manufacturers in the industry.



COMMISSIONING OF DIESEL POWER PLANTS



We have decades of experience in commissioning of diesel power plants of all powers and types (from island to grid-parallel power plants).

Factory testing is a very important phase in which the manufacturer verifies that the generator unit operates regularly and according to the highest standards. However, the test conditions do not fully reflect those of actual operation in the plant.

For this reason, an efficient commissioning, allows to verify the interface between the generator and the Customer's system, **performing all the real tests of operation**, to ensure the efficiency of the entire system.

For this purpose, we use specific equipment and instrumentation.

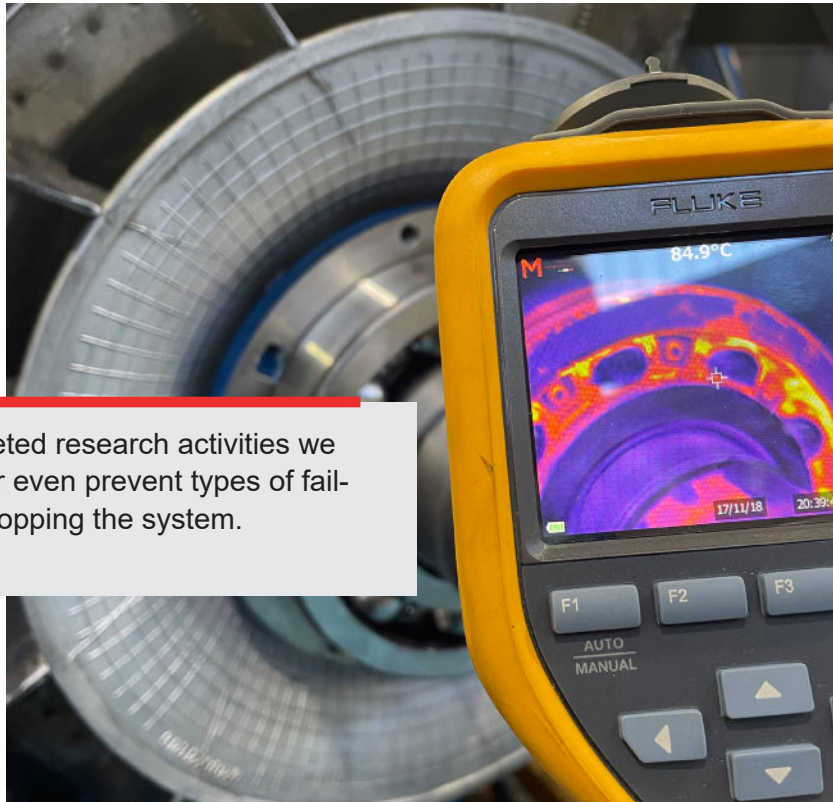
THERMOGRAPHIC ANALYSES

Industrial thermography is, one of the best predictive and preventive monitoring of plants of various kinds.

With this type of industrial investigation, **it is possible to analyse the behavior and the state of a generator**, both as regards the mechanical part and the electrical part:

- Engine cooling problems;
- Identification of a cylinder lack of combustion;
- Bearing overheating;
- Improper electrical connections;
- Undersizing of the cable and false contacts in the terminal block.

These are just some of the problems that can be encountered through this type of analyses.



Through targeted research activities we can identify or even prevent types of failure without stopping the system.

INSULATION AND IMPEDANCE MEASURES

The quality of insulation changes over the years due to the electrical, mechanical and environmental stresses to which electrical equipments are subjected.

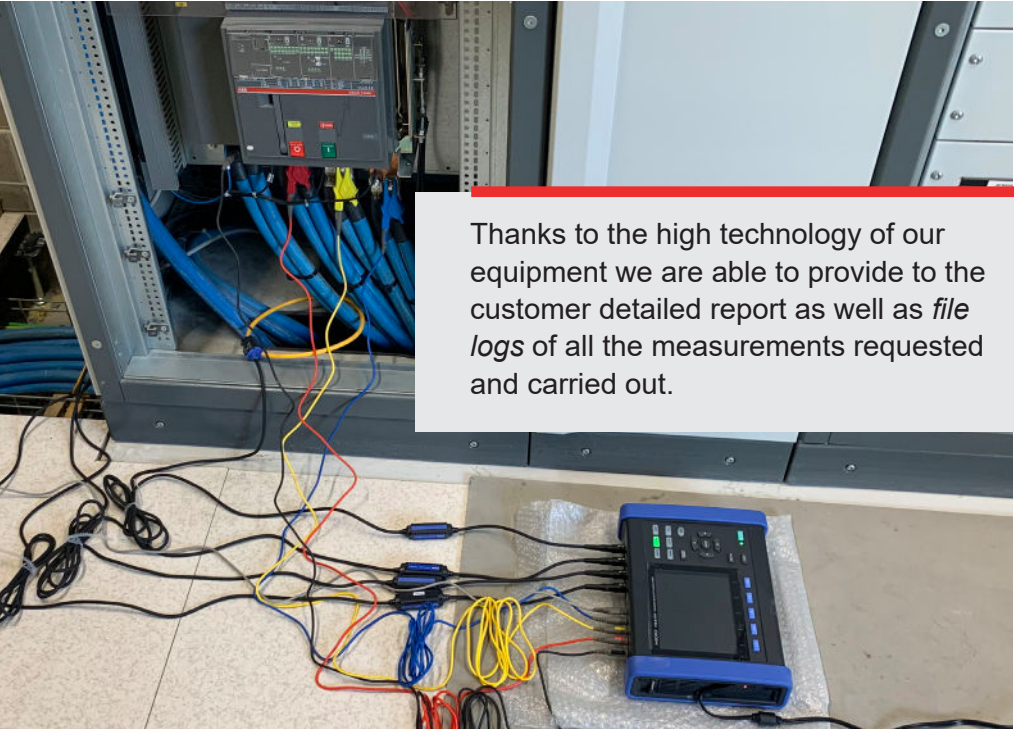
In addition to the measurements carried out during testing on new or reconditioned equipment, **the periodic verification of the insulation and impedance** of the electrical power components allow a preventive analyses aimed to detect the early degradation of the characteristics of the equipment before they reach insufficient levels and cause damages to the same and/or to the system.

Such non-destructive tests are very useful for to verify the safety status of alternators and electric motors.

We are able to cover insulation testing and impedance measurement on a wide range of equipment thanks to multiple dedicated test instruments.



ELECTRICAL NETWORK ANALYSES



Thanks to the high technology of our equipment we are able to provide to the customer detailed report as well as *file logs* of all the measurements requested and carried out.

Both in civil and industrial sectors, the quality of the energy supplied by the distributor plays a important role for the correct functioning of the equipments and the costs on charge of the customer.

In order to verify the quality of the electrical network, it is possible to **monitor the sensitive electrical parameters** of the electrical energy to have a clear view of the network and its possible disorders.

This measurement also makes possible to evaluate, when necessary, the consumption of the system in the way to make some evalutaions between the type of the supply and the real needs.

VIBRATION ANALYSES

All rotating machines, during their nominal operation, generates vibrations at values and frequencies, which can be measured using specific instruments. When the vibrations measured are out of predetermined range in frequency or amplitude, we are in the presence of a fault that could affect machine operation and lead to failure.

Periodic monitoring and analyses of vibration measurements allow the identification of the anomaly and thus the forecasting of the probable period of failure. In this way, it is possible to plan the timing and modalities of the maintenance work, with obvious savings in time and costs.

We are able to perform vibration measurements with portable online instrumentation at predetermined intervals to monitor deterioration and/or anomaly over time.



INDUSTRIAL ENGINES EMISSION ANALYSES



Thanks to dedicated training, we are able to carry out analyses in accordance with current emission regulations.

The use of a combustion analyzer for industrial emissions is a useful tool for adjusting a diesel or gas engine to its optimum operating parameters. This makes it possible to get as close as possible to its optimum performance, while complying with existing regulations on air emissions.

The **exhaust gas analyses** may be carried out:

- During commissioning;
- Regular intervals in maintenance;
- For solving problems in production processes.

RESISTIVE LOAD BANKS RENTAL



With our transportable fleet we can cover load tests in any logistical situation for generators with a power output of up to 1,000 kVA three-phase.

During routine maintenance, the machine can often not be switched on, providing it with an electrical load to be fed, or, if a load is available, it can only cover a small percentage of the total capacity of the unit.

It is **necessary to test the loaded machines** in order to carry out fully reliable tests aimed at guaranteeing the correct operation of the machines under emergency operating conditions.

This requirement arises in order to verify the correct operation of the machine, which can only be verified when the mechanical parts are brought to rated thermal speed.

Our load banks allow safe testing and allow you to reproduce all load curves and criticality of the system highlighting any problems not found with low load operation.

SERVICE OFFSHORE

To provide more and more specialized services, we have the necessary requirements to work on platforms, of any type.

Our technicians have the certificate of the course **BOSIET**, Basic Offshore Safety Induction & Emergency Training, necessary requirement for development of the **offshore** activities. Therefore they are enabled to work on platforms anywhere in the world, thus being able to provide an ordinary and extraordinary maintenance service to all generators far from the mainland.

Our technicians have participated in BOSIET courses and updates, which allow them to work on platforms around the world.



03 SALES

As Official Service Partner for the Baudouin engine brand and the Marelli Motori alternator manufacturer, we have access to a direct and preferential channel for the supply of spare parts with possible installation on request of the customer.

We are also able to procure original and equivalent spare parts, both for electrical and motor components, as well as for the other major industry brands.

In addition, we handle the major manufacturers of generators so that we can supply machines in configurations standard up to 1,000 kVA. We also supply control units for the management, protection and control of generators of the main brands of the sector covering almost all plant needs:

- Generator sets on the island with manual or automatic start;
- Generators to rescue the power grid with switching logic management;
- Generators to rescue the power grid with parallel return;
- Generators in parallel with the possibility of managing the starting sequence depending on the load;
- Complex installations involving two or more of the situations listed above.



MarelliMotori
Powering the future®

04 SAFETY

SAFETY FIRST

Since the birth of the company, Safety requirements by D.Lgs 81/08 have always been met.

With the growth of work and specializations, despite our small reality, we felt it necessary to start the procedures for achieving the **certification of Safety OHSAS 18001:2007** in 2016.

With the change of regulations and the standardization of certification in **ISO 45001:2018**, we have adapted our procedures.

At the same time, we have also added **Quality Certification ISO 9001:2015**, in order to have 360° guarantees for our Customers. The standards required by the international ISO standard are subject to periodic internal audits and an annual audit by the DNV certification body.





05 REFERENCES

MAIN REFERENCES

A

Aggreko Italia s.r.l.
Aggreko South East Europe s.r.l.
AMC Service s.r.l.
Agrotis s.r.l.
APCOA Parking Italia S.p.A.

B

BT Italia S.p.A.
Bouygues InTec Italia S.p.A.

D

Dalmine S.p.A.

E

Energean Italy S.p.A.
Effeci Tecnoimpianti s.r.l.
Elmet s.r.l.
Elettromeccanica Galli Italo SpA
Eurogen Power s.r.l.

I

ICRI s.r.l.
Intergen S.p.A.
ITELYUM Purification S.p.A

L

La Meridiana s.c.s.

N

Novelis Italia S.p.A.
Nuova Rotegum s.r.l.

C

Casa di Cura La Madonnina
C.G.M. Gruppi Elettrogeni s.r.l.
CGT S.p.A.
CGTE S.p.A.
Comune di Segrate
Compagnia Tecnica Motori S.p.A.
Cummins Italia S.p.A
Cummins Deutschland GmbH
Charles River Labroatories Italia s.r.l.
Cristoforetti

F

FAR Polymers s.r.l.
Famar Industries s.r.l.
Facile.it S.p.A.

G

Green Power Systems s.r.l.

M

Marelli Motori s.r.l.
MT Milantractor S.p.A.
Motordelta s.r.l.
Mondorevive S.p.A.
Milani Giovanni S.p.A.
Mosaico s.r.l.
MZ Termoidraulica s.a.s.
Magil Construction Corporation
Moteurs Baudouin

O

OCREM s.r.l.
Officine Giuliano S.p.A.
Orefice Generators s.r.l.
OQ Refineries LLC
OQ S.A.O.C.

T

T.E. Tecnologie per l'Energia s.r.l.
TEA S.p.A.
Tenaris S.A.
Tokheim Sofitam Italia s.r.l.
Tecnoelettra s.r.l.
Telema S.p.A.
T.M.G. s.r.l.
Tarquinio s.r.l.

#

2R Impianti s.r.l.

P

Ponti S.p.A.
Piomboleghe s.r.l.

S

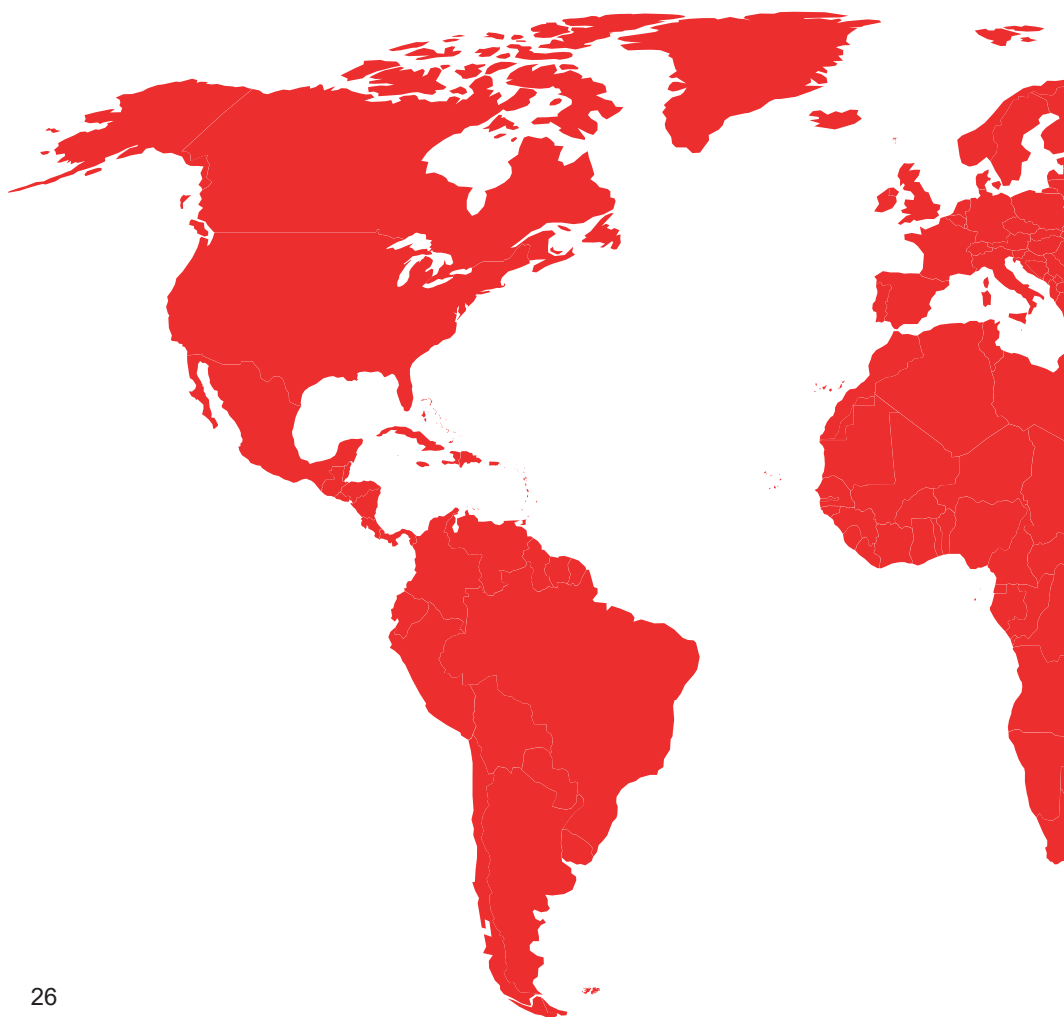
SICES s.r.l.
STAE s.r.l.
SIME s.r.l.
Seram S.p.A.
Sauber s.r.l.
Studio Adamino s.a.s.
SKF Industrie S.p.A.

V

Valiant Shipping S.A.
Valtellina S.p.A.
Vetroasfalto S.p.A.

06 WHERE?

MILANO GENERATORI ALL OVER THE WORLD





NOTES

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MILANO GENERATORI S.R.L.



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