

# VANE

M A T T E I M A G A Z I N E



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# 09

## **MATTEI SUZHOU**

Focus on China

## **R&D**

Mattei: the best for transit

## **PARTNERSHIP**

Mattei air in Portugal

## **PROMOIDEA**

Mattei on track with Superbike riders





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# Mattei: Green by nature

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Giulio Contaldi, CEO

The new Mattei Vision, characterised by a focus on the development, design and production of energy-efficient compressors, is proving to be a winning one; even in a very competitive marketplace.

In many ways, having been the pioneers and innovators in this field has allowed us to produce very high performing products; such as the Maxima high-efficiency series, the Optima variable speed range, and the recently launched Xtreme technology. These are compressors that have been able to capture a clientele who have efficiency and energy-saving objectives and place high importance on return on investments.

With these characteristics, we have also been able to deliver tailor-made solutions for specific applications, such as those in the electric bus and truck industries, in the field of compressed biogas for producing electricity, and in the ever more important field of waste heat-to-electricity generation.

Research at Mattei will never stop; be it breaking new records in air compressor efficiency, or developing state-of-the-art products to generate electricity from various sources of industrial waste, our mission is a clear one – invent, design and build products that will have a massive impact in reducing greenhouse gasses and their negative effect on our planet.





Francesco Tivegna, General Manager of Mattei in Suzhou, talks about the Chinese compressor market, three years after the inauguration of the new production and service site. It's a positive result, thanks in part to the great reliability of the "Made in Italy" Mattei compressors, in the face of fierce competition from Chinese manufacturers.

## FOCUS ON CHINA

"A younger and less predictable market for compressors, when compared to Europe and the United States, but one that is strong in growth and offering much encouragement for the future". In short, this is the picture of the Chinese industrial market for compressors according to Francesco Tivegna, General Manager of Mattei in Suzhou. "The level of competition from Chinese manufactures of rotary vane compressors has risen in recent years, especially with regards to small and medium sized machines, up to 30kW", says Tivegna. "In this niche, more often than not, there is less interest in energy-saving, leading to a sacrifice of quality and compressor efficiency, in favour of an extremely low price. In the top-of-the-range machines, larger than 30kW, the reliability of our compressors is much more appreciated. In general in the Chinese market however, screw compressors still rule the roost".



“In recent years, we have felt the competition of Chinese manufacturers with their strategy of undercutting prices, but the quality of the Made in Italy Mattei compressors is unrivalled when dealing with difficult industrial contexts that need a reliable and efficient product at extreme engineering levels.”

Francesco Tivegna,  
General Manager, Mattei Suzhou.

In China, Mattei makes use of two distribution channels, as Tivegna explains: “On the one hand, we are using an extensive network of distributors, who act as the interface with companies looking for standard industrial applications, allowing us to fully cover a vast geographical market, from north to south, which is also subject to great cultural diversities. Then, there is the market for special OEM applications, in which we supply the machines that are integrated into other systems. It is in this latter sector where we are experiencing a significant increase in demand; especially in the supply of equipment used to produce nitrogen, oxygen or hydrogen, which go on to be used in many Chinese hospitals”.

The main source of demand for Mattei compressors in China comes from the aluminium production sector: “It’s one of the most difficult of industrial contexts given the high number of critical factors: ambient temperatures close to 90°C, the considerable presence of dusts and chemical substances, as well as a very strong magnetic field which can interfere with the workings of the electronic apparatus.

In these cases, the quality of Made In Italy becomes priceless: our clients specifically request the air-ends from Italy, that will be specifically integrated into their specific industrial context.” continued Tivegna.

“There are other specific sectors that are showing interesting signs of growth for Mattei, such as the production of artificial snow cannons, or transit-related products such as electric buses. These eco-friendly transit solutions, which have also caught on here in China in a recent, big boom, are equipped with our dedicated compressors, unbeatable in terms of their compact size and noise-level”.

With its production and service centre in Suzhou, Mattei is able to serve the whole of the Asia-Pacific region; from Vietnam to New Zealand, through to Taiwan and Singapore: “In the Vietnamese market we are proposing our technology also in new applications, such as in machinery used for the laying of concrete when constructing mining tunnels and for general underground use” concludes Tivegna.







## MATTEI ON TRACK WITH SUPERBIKE RIDERS

Mattei compressors from the Classic range are working tirelessly on the Pirelli tyres at the most important motorcycling events on the European circuit. It's an operation that takes place on the innovative "mobile workshop trailers", developed by Pirelli, in collaboration with its strategic partner Promoidea.



Compactness, silence, reliability and durability in intensive work-cycles: for these qualities, the Mattei rotary vane technology was chosen by Promoidea SpA for the supply of compressed air on the Pirelli vehicles specially-designed for the handling of the race tyres in the motorcycle sector.

Promoidea, based in San Marino, together with the support of RSSE srl, based in Rimini, have carried out the activity of Racing Service on behalf of the Pirelli giant in the motorcycle sector since 2002. With 27 employees and a turnover of over €3m per year, Promoidea has built up a lot of know-how when it comes to race-track environments. "We have always had a great passion for engines and this did not go unnoticed by Pirelli: with the support of our motor-racing services we have improved the brand positioning as an undisputed leader in Superbike. In 2014 Promoidea won the Pirelli award as the best Motorsport supplier; an award that filled us with pride", says Egidio Rossi, CEO of Promoidea. Since 2004 Pirelli has been the only tyre supplier for the World Superbike championship, and by their side, providing technical and logistics assistance, there has always been Promoidea.



This partnership has also given rise to the design of special-purpose vehicles for all tyre-related activities at European motorcycle races, from their transportation, to their inflation. "We have contributed to the creation of innovative, highly-functional vehicles which are used for the European races of the WSBK championship along with other prestigious events such as the great French classic Le Mans 24 hour or the Bol d'Or", continues Rossi. "On the inside we have also specifically designed trolleys that facilitate the handling of the tyres and optimise the storage space. This speeds up operations between one race and the next and reduces the total number of vehicles needed, reducing the environmental impact. Each year our technicians handle around 35,000 tyres".



"Reliability, compactness and quiet operation are the characteristics that convinced Promoidea to have Mattei compressors on board the special Pirelli trailers."

Egidio Rossi,  
CEO Promoidea Spa.



On board these innovative mobile garages, Mattei compressors contribute to “working” the tyres in record time. “Mattei has been with us since the beginning of this adventure in 2002. We preferred rotary vane technology for its unquestionable advantages, which have also made the Mattei compressors into a winning investment over time” says Rossi. “We supplied Promoidea with 16 ERC compressors from the Classic range. They are open-frame machines with a power of 2.2kW, specially designed for the auto motive sector” adds Flavio Molinari, Mattei Sales Manager for Italy.

“Firstly the Mattei compressors have very small dimensions which allows us to optimise space within the Pirelli vehicles. Each trailer is equipped with two Mattei compressors but we always carry an extra spare one on a mobile cart, in order that we can easily substitute it if required. Secondly the Mattei compressors are very quiet meaning we can reduce the noise levels, and consequently the stress levels, during the hectic race-days.



Finally, their great reliability allows us to operate them continuously without any drop in performance, for each and every race where we can be working for up to 14 hours consecutively, mounting, removing, inflating and balancing tyres”, explains Rossi.

“In addition to the silence owing to the lack of vibrations, our compressors deliver a superior, dry, clean air. Important characteristics in an intense working environment with long working hours such as the Pirelli trucks”, continues Molinari, “Furthermore, thanks to the direct coupling of the motor and the compression unit and the low rotation speeds, the Mattei compressors as well as being very efficient, reduce the number of required interventions and subsequent maintenance costs. Finally, all ERC series compressors are fitted with special modulating proportional intake valves which ensures the air supply is delivered at a constant pressure whatever the load conditions.



“To have been Pirelli’s partner in the motorcycle industry for so many years is a cause of great pride for Promoidea: Mattei compressors are a part of this success.”

Egidio Rossi,  
CEO Promoidea Spa.





The compressed air flow varies from 0 to 100%, thereby avoiding numerous stop-starts”.

“Over the years we have received numerous offers from other compressor suppliers, but we haven’t had reason to change. Since 2002 the Mattei compressors have always been reliable, requiring only periodic preventative maintenance interventions from the Mattei service centres. Today we buy original spare parts that our technicians can replace with ease thanks to the simplicity and accessibility of the compressor’s compact design”, concludes Rossi.







# MATTEI: THE BEST FOR TRANSIT

The Mattei rotary vane technology is the ideal solution for supplying compressed air in vehicular applications. The reasons are clear: unquestionable reliability, compact size of the air-end and incredibly low noise-levels. Thanks to these qualities, Mattei compressors are also ideal for use in electric vehicles.



The high quality components, and simplicity of design of the Mattei rotary vane compressor are the main factors that put this technology above and beyond that of a screw compressor. There is also an excellence in performance that is especially prevalent in extreme operating conditions, such as most rail applications.

All the components of a Mattei compressor are produced using an exclusive cast iron blend, which avoids problems relating to thermal expansion differences, whilst maintaining high levels of efficiency even under variable operating temperatures.

The design is simple and compact: the air-end consists of a single rotor which rotates offset inside of a cylindrical stator.



The rotor has longitudinal slots into which the blades slide. The compressor is connected to the motor via direct coupling, with a standard rotation speed (1500rpm / 50Hz) allowing the vanes to remain adhered to the edges of the stator, and thus forming the compression pockets.

Simplicity of design, limited use of components, and the low rotation speed are what makes the differences compared to screw compressors; especially in terms of reliability. In particular, the absence of thrust or rotating bearings, due to the absence of axial thrust components, eliminates the need for frequent servicing.

The rotor moves freely between two bushes, that are kept lubricated, keeping all metal parts separated. A Mattei rotary vane compressor working in rail applications will guarantee over 35,000 hours of operation with original blades and bushes. In the same application, a screw compressor must be serviced and have components replaced every 12,000 hours of operation. They are fitted with roller bearings, for the positioning of the rotor and for the thrust of the axial thrust bearings; and undergo high levels of wear due to the high rotation speeds, which is also a source of additional noise.

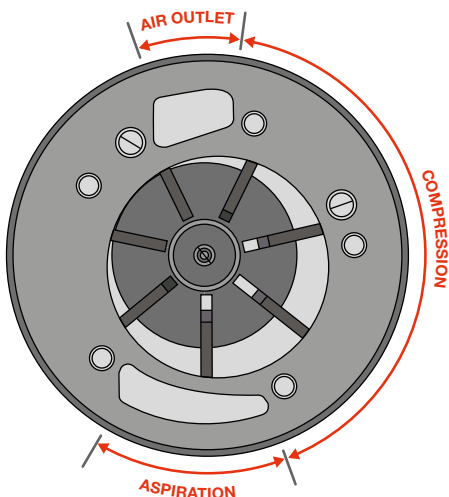


The integrated design, limited number of components, direct coupling and low rotation speeds make the Mattei rotary vane compressor both safe and reliable over time.



Mattei's experience over the last 50 years in transport applications has also allowed us to create a very popular product for electric vehicles. The compact and lightweight design dimensions make it easy to install in confined spaces. And the low noise-levels are up to 50% quieter when compared to a screw compressor. Near-silence is an essential prerequisite of hybrid and electric vehicles, so much so that Mattei technology is the choice of electric bus manufacturers, to supply their pneumatic systems such as those for braking and suspension. Other technological details which make Mattei perfect for use in electric vehicles are the full compliance with industry standards, dedicated maintenance kits that will deliver the lowest lifecycle cost, no required maintenance for up to five years of use, and the innovative and patented anti-condensation system that prevents the emulsification of oil.

As a result of the superior construction characteristics of its compressors, Mattei offers an extended warranty of up to 10 years on the air-end, subject to correct maintenance and use of original spare parts and lubricants. In the same period a screw compressor would require up to two full overhauls.





The range of original Mattei V-LIFE lubricants, specially designed for rotary vane compressors, ensures durability of the machine and performance over time, whilst properly cooling and sealing the machine during operational use. It also increases the efficiency of the compressor and minimises the overall lifecycle cost.

## FOR THE HEALTH OF YOUR COMPRESSOR, SIMPLY V-LIFE

Efficient management of a compressor starts with correct lubrication. In fact it is one of the most important factors to ensure optimum machine operations, through continual delivery of high performance, efficiency and reliability.



Mattei has developed a full range of V-LIFE lubricants specifically designed for the needs of rotary vane compressors and the different types of application and environment where they will be used. There are many advantages: higher detergent capacity, superior oxidation resistance, increased thermal exchange capabilities and reduced carbon deposits.

Lubrication is fundamental for many reasons. The majority of industrial compressors, for the production of compressed air, demand a lubricant that cools the machine during operation and maintains the compression seal. Typically compressor operating temperatures will increase by 10K, resulting in a loss of energy of 1-1.5 percent. Correct lubrication rebalances the temperature by removing the excess heat generated and reducing energy consumption. In addition the correct viscosity of the oil at operating temperature, prevents the metal components of the compressor from coming into contact with each other, eliminating the risk of wear which can cause malfunctions and machine breakdowns, whilst preventing against the dangers of corrosion.

A range of original lubricants developed by Mattei to deliver a consistent operating performance level of your rotary vane compressor.

The lubricant also serves as a sealant, ensuring the perfect compressor seal; avoiding losses that can compromise performance.

Why can you trust an original Mattei V-LIFE lubricant? Because their superior quality guarantees the maximization of the compressor running time, minimising the total lifecycle cost of the machine and delivering a performance to meet the needs of your operation. The choice of lubricant therefore becomes crucial for reducing both maintenance and energy costs.

Due to their particular composition, Mattei V-LIFE lubricants have excellent compressor cooling properties combined with high flow rates and an effective yield. They also have high thermal conductivity, allowing the compressor to function at reduced temperatures and with greater efficiency, even in the presence of high operating temperatures. They are characterised by a high flash point, thus avoiding problems with their usage and storage. Their composition loosens and melts the deposits left by previous fluids, ensuring that foams are not produced, reducing the effects of transportation of impurities, which guarantees fewer contaminations of the fluid and consequently, lower maintenance costs.

With regular use of the Mattei V-LIFE range of lubricants, you also benefit from the Mattei MyCare 5 or 10 year extended warranty for the compression unit.





## MATTEI AIR IN PORTUGAL

Almost 30 years of collaboration and more than 2,000 compressors installed throughout Portugal: this is the result of the fruitful partnership between Mattei and its local distributor, Rubete Equipamentos Industrias SA. Very diverse industrial sectors have been penetrated; from manufacturing to automotive, and from textiles to the production of foundry moulds.

Since 1989 Mattei has partnered with Rubete Equipamentos SA for the distribution of its rotary vane compressors across Portugal. "The meeting with Mattei came about thanks to another Italian compressor supplier who, aware of the high reliability and efficiency of rotary vane technology, proposed us as a possible partner for the Portuguese market.





After almost 30 years we can say that their instinct was a good one: since then Rubete has installed more than 2,000 Mattei compressors in many highly diversified industrial sectors, from manufacturing to automotive,” says Rubens Garcia, Managing Director of Rubete Equipamentos Industriais SA. Established by Francisco Garcia in 1980 as a company specialising in the production of piston compressors, Rubete soon switched its core business towards the supply of complete solutions for compressed air in industrial environments. Today, Rubete’s head offices in Porto extend over an area of 17,000m<sup>2</sup>; it employs more than 50 people and generates a turnover of €5.5m. Thanks to an extensive sales network across Portugal, its islands, and also some parts of Spain, its presence within the compressed air market continues to grow. The Mattei partnership with Rubete includes not only the sale of compressors but also the after-sales customer service.



“Continuous training of service technicians is one of the primary objectives of Mattei. The efficient servicing combined with the quality of the components guarantees unlimited life for Mattei compressors.”

Rubens Garcia,  
Managing Director, Rubete Equipamentos Industriais SA.

This strong company focus on customer service, in addition to the undisputed quality of rotary vane compressors, is particularly valued by the Portuguese industry, as confirmed by Rubens Garcia: “Our technicians offer impeccable maintenance and service thanks to their continuous vocational training provided by Mattei, who place a lot of importance on up-skilling staff in terms of technological innovations. Our warehouse is always stocked with original Mattei spare parts. Using these, you can take advantage of the extended warranty on the compression unit, and by performing periodic maintenance checks a Mattei industrial compressor has an unlimited lifetime”.

Within the range of compressors offered by Rubete, only those of Mattei come with rotary vane technology. “Rubete boasts decades of experience in the compressed air market. We have remained loyal to the exclusive rotary vane technology of Mattei, for the indisputable simplicity and compactness of design, the reliability and silent operation of the compressor, due to the small number of components and low rotation speeds, which also deliver great energy and cost efficiencies” concludes Rubens Garcia.




There are numerous Mattei compressors installed at Cefla Finishing, a world leader in painting, decorating and finishing of wood, and they are used to power the pneumatic utilities that service production.

## MATTEI: PERFECT PARTNER FOR FINISHING

Founded in 1932 as a cooperative company specialized in electrical and thermo-hydraulic plants, today Cefla is a multi-business group, that has made its heterogeneity a strong point. Evidence of this is a turnover of more than 450 million Euro and almost 2,000 employees, distributed throughout the production pole in Emilia Romagna, where it has its headquarters, and over thirty locations throughout the world, half of which are production sites.





“Using the Mattei heat recovery kits, savings are implicit, since the kits permit heating water for sanitary or process purposes.”

Flavio Molinari,  
Head of Sales for Mattei Italy.



The strategic vision and long-term planning, together with the financial solidity and continuous investments in technology and product and process innovation are the values at the roots of Cefla's success. Thanks to this company philosophy, the group has developed in five business areas: Cefla Systems (civil, industrial and energy systems), Cefla Shopfitting (interior decorating and custom solutions for sales points), Cefla Medical Equipment (for the dentistry and medical sector), C-LED (specialized in the development of LED technologies) and Cefla Finishing (world leader in painting, decorating, wood finishing, digital printing on wood and its derivatives).

In particular, Cefla Finishing manufactures “ready for use” lines for the wood market, but is also a point of reference in technologies for the finishing of glass, plastic, fiber cement, composite materials and metal. Always in the forefront in dedicated technologies, Cefla Finishing chooses Mattei compressors to generate the compressed air for pneumatic utilities that serve the production sites.

“Mattei has been present in Cefla as a supplier of compressors since at least 1996 - comments Claudio Cavini, Maintenance Director for the Cefla plants – Mattei was recommended to us by our Business Unit that deals with installations, that already used Mattei machinery in its work sites, obtaining positive results in terms of customer satisfaction.

This choice was fully confirmed over time. “Mattei compressors have proved themselves to be efficient both in reliability and work life – continues Cavini – and also the running costs have proved to be very low. These are the competitive advantages that make the difference”.

There are nine Mattei compressors installed in Cefla, mostly from the Air Centre series, with an average power between 55 and 75 kW.





## CASE HISTORY

"These are both air-cooled fixed and variable speed compressors – explains Flavio Molinari, Head of Sales for Mattei Italy – They are particularly quiet, thanks to the soundproof cabin, allowing them to achieve noise levels of between 64 and 76 dB(A). They are also extremely reliable and designed for heavy-duty industrial purposes at constant pressure. The AC Series compressors are equipped with a modulating intake valve, which assures the output of air at constant pressure, as well as also allowing them to operate without any tank".

Cefla Finishing has also purchased an Optima 75 model, that adjusts its operations to suit the load profile requested by the network. This is possible thanks to the Mattei inverter, managed by means of the MaestroXS electronic controller.

Molinari also underlines the advantage of the limited maintenance costs of the machines supplied to Cefla: "The absence of roller and thrust bearings, to support the rotor, permits avoiding expensive overhauls on the compressor group and allows for hundreds of

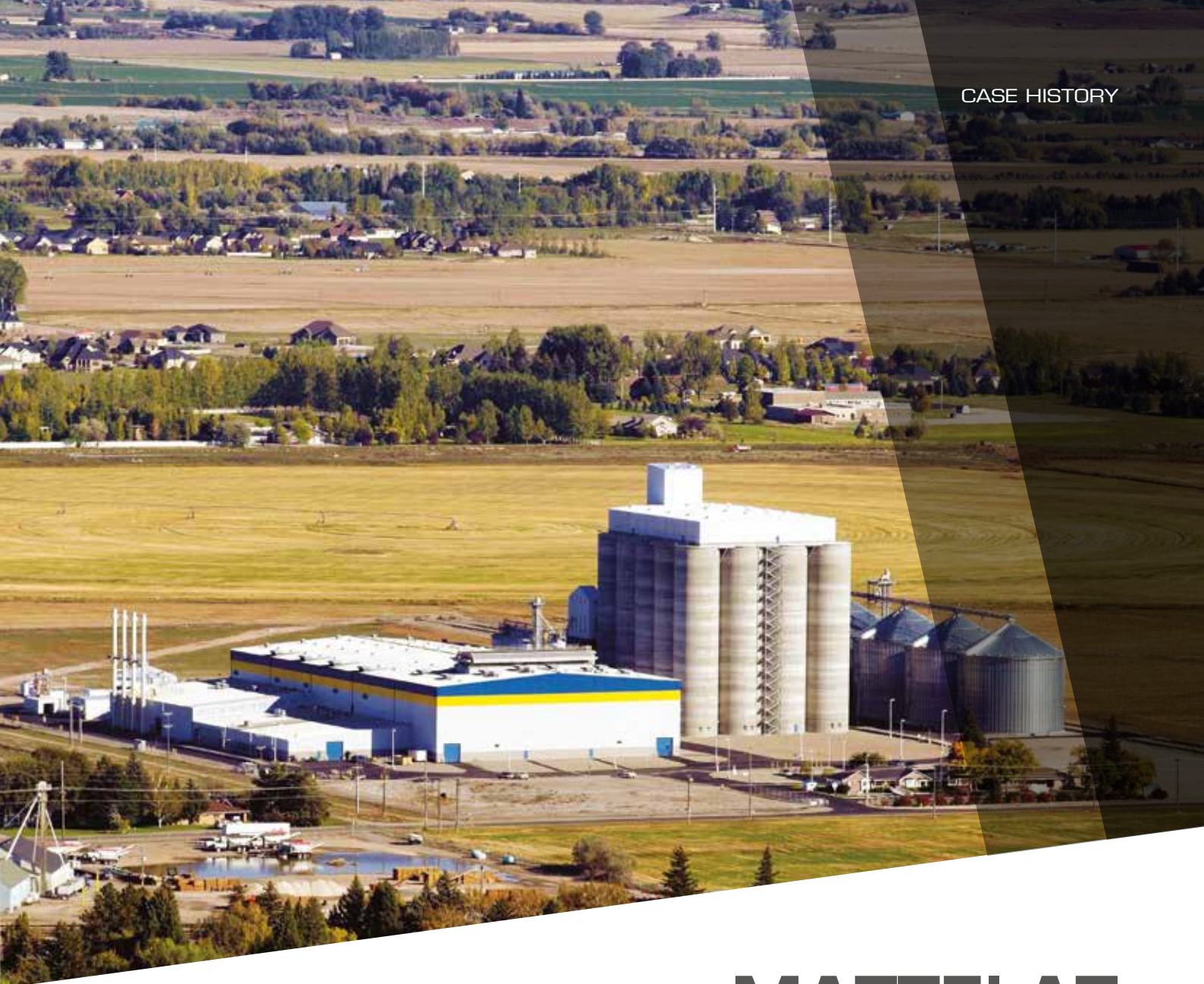
thousands of work hours with no need of particular interventions".

Two compressors (AC55 and Optima 75) are also equipped with a Heat Recovery Kit, which produces hot water at 70°C, for sanitary and heating purposes. "A considerable portion (about 80%) of the energy utilized to compress the air

is normally dispersed in the form of heat – explains Molinari – Mattei has provided for a Heat Recovery Kit which permits heating water for sanitary or process purposes. The Kits, which are composed of water-oil heat exchangers, a thermostatic valve and a special hydraulic system, can be integrated into the air-cooling system of the machine, which in turn makes for a self-regulated oil temperature control which is also self-protected from any drops in water supply or overheating".







# MATTEI AT FULL THROTTLE!

The American company, Glauber Equipment Corporation, has put in place a system for the treatment of biogas, which has made use of the Mattei compressors dedicated for gas applications. The systems, purchased by Belgian company Waterlau, are destined to be part of a much larger project, commissioned by the Mexican beer giant, Grupo Modelo.

From Italy, to the US, passing through Belgium to finally arrive in Mexico. The journey of the Mattei compressors to be part of this innovative biogas recovery system is certainly a long one.

Glauber Equipment Corporation (GEC) is an American company, based in Lancaster (NY), specialising in the design and production of gas, air and fluid handling systems that meet the needs of a wide range of industries; from food to textiles and also chemicals.

## CASE HISTORY

With extensive experience gained over more than 50 years, GEC offers both standard and highly-customised solutions as well as a full after-sales service. Founded in 1960, with its innovative solutions GEC is the industry leader on the north-east coast of the United States.

The other player in the project that involves the Mattei compressors is the Belgian company Waterlau, a specialist in the implementation of environmental solutions for industry and local government services, covering air, water, waste treatment and the sector of energy recovery.

The collaboration of GEC & Waterlau was born out of an important project for Grupo Modelo, the largest Mexican beer producer with a 63% local market share and exports extending all over the world of its brands such as Corona, Modelo and Pacifico. Today Grupo Modelo is a subsidiary of the Belgian multinational, Anheuser-Busch InBev, the world leader in the production of alcoholic and non-alcoholic beverages.

"GEC has a dedicated division (called Glauber Packaged Systems) of specialised engineers producing tailor-made systems for the project needs of our customers all over the world", says Peter Glauber, GEC President, "Waterlau contacted us with a requirement for one of our systems to be integrated into a digester destined for the Mexican production plant of Grupo Modelo. In the industrial process of beer production, organic waste can be used to profitably deliver the gas requirements. How? Thanks to equipment such as that produced by Waterlau, which recover methane using the anaerobic digestion process to generate biogas. GEC is proud to be part of their system and this international project, which helps to optimise resources in industrial processes by reducing waste".

At the heart of the system developed by GEC are the Mattei compressors, with their Made in Italy technology: "For the gas compression we needed a compact and easy to integrate machine and we found the solution with Mattei rotary vane technology. Their great efficiency and unquestionable reliability were the other factors influencing our choice" explains Glauber.



**"An indisputable strength of the Mattei compressor is its compactness, enabling easy integration into existing systems; added to which you have great efficiency and unquestionable reliability."**

Peter Glauber,  
President of Glauber Equipment Corporation.

"We recommended GEC take our range of gas compressors designed for special applications of gas compression, be it sour, sweet, or bio gasses. We provided two G135E units to meet the customer's specific pressure requirements, in which a third unit is added as a back-up function, that can be deployed when the workload is greater; or in the event of malfunctions or failures, thus avoiding the risk of system breakdowns" says Dale Mays, OEM & Distributor Sales Manager, Mattei Compressors Inc.

"Compressors play a key role in the entire process of methane recovery and as a result we chose a partner of indisputable quality in Mattei. During the anaerobic digestion phase, the Mattei compressor supplies the biogas at the required level to be used in boilers for the fermentation of beer", adds Glauber.







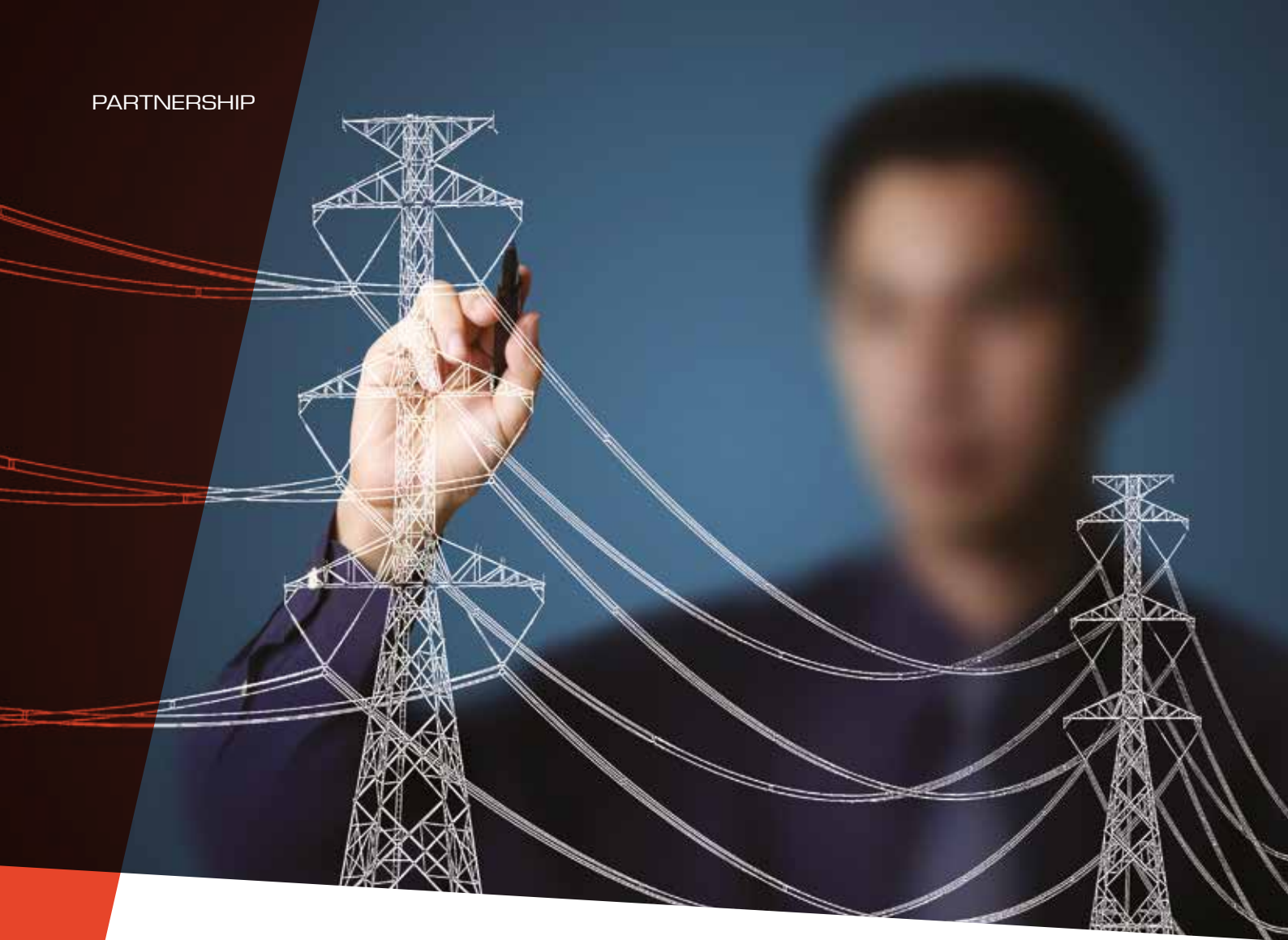
“The full range for gas applications includes compressors from 4kW up to 200kW and is available as stand-alone units for OEM applications or according to specific customer requirements.”

Dale Mays,  
OEM & Distributor Sales Manager of Mattei Compressor Inc.



“The versatility of our gas compressors was fundamental, as it made them easy to integrate into the existing systems”, continues May – “Other well-liked features are their super-sized filters, which allows you to have a high levels of air purity, and the three-stage oil separation which guarantees a longer life for the filtration elements in addition to lowering lubricant consumption”.

The system delivered by GEC to Waterlau in February 2017 is currently awaiting final completion before being delivered to Grupo Modelo in Mexico.



Reliability, quality and innovative technologies are values that both Mattei and the UK engineering firm, TP Group, know well and have contributed into the partnership that led to the upgrading of the Mattei Xpander. It's all about the innovative, patented heat-recovery system; a completely original development on the industrial landscape, which improves energy efficiency.

## FIRST TO MARKET

Mattei Xpander was one of the most interesting technological innovations on display at the recent ComVac 2017 exhibition. It's an ORC-based (Organic Rankine Cycle) system that allows you to produce electricity, to be used in isolation or returned to the electricity grid, by recovering heat from the hot oil of the compressor's lubrication circuit.



The ambitious goal of the project required a significant level of dedication from Mattei, who singled out other qualified partners from the first phases of development, and also with the involvement of some Italian universities. “The development of the 3kW Mattei Xpander system was entrusted to the British engineering company, TP Group (TPG), after a meeting in 2015 at a compressed air technology conference. What convinced us to choose TPG was their expertise and technical experience within control systems and the transport of gases. TPG already had the technical solutions that allowed the Mattei Xpander to be brought to market rapidly” says Stefano Murgia, Head of Research & Development at Mattei. TPG, headquartered in Farnborough, Hampshire, puts technological innovations and strong client and supplier relations as its main strengths. “We are a specialist engineering group with a particular focus on areas such as aerospace, defence, energy and industrial processes” underlined Simon Branch, Head of Development - Energy & Process. “Our systems are designed to work in extreme conditions, thanks to the exceptional levels of quality and reliability.

To achieve this, we use state-of-the-art construction techniques and materials, which allows us to be ready to tackle the new technological challenges that our customers offer us. Mattei Xpander was one of these”.

“At the heart of the success of this ORC system there are complimentary aspects: on the one hand, the potential of Mattei rotary vane technology, with its great qualities of reliability and energy efficiency; whilst on the other there is the profound knowledge of TPG in the planning and design of these systems honed over years of experience” continued Branch.

From the technological point-of-view TPG took care of the optimisation of the thermal systems: “Thanks to TPG contributions we were able to obtain a 20% improvement in terms of electrical output from the ORC system. Mattei Xpander is now an industry first; we are proud to be first-to-market” states Murgia. “At ComVac we presented this very interesting solution for the energy optimisation of compressed air systems. Mattei Xpander has above all, a very wide range of applications, in that it can work with any system equipped with an adequate heat source”.

“The strength of the collaboration with Mattei rests in the common belief that these new technologies can provide clean energy at affordable prices”, concludes Branch “Transforming wasted energy into a reusable asset is an on-going challenge that you can win with innovative and reputable projects such as Mattei Xpander”.



“Transforming waste energy into a reusable asset is an on-going challenge that you can win with innovative and reputable projects such as Mattei Xpander.”

Simon Branch,  
Head of Business Development - Energy & Process, TP Group Ltd.





# MAXIMAXtreme

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