WAMGROUP®
NEWS
The Most Trusted Brands in Bulk Solids Handling & Processing, Waste Water and Renewable Energy

WAMGROUP®
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WAMGROUP® MEETS HI-TECH

Stefano Cavicchioli (62) was only a teenager when he first joined the Officina Meccanica Marchesini Vainer in 1974. Equipped with a diploma from a technical college he was offered the post of foreman for the assembly lines of valves, dust collectors and the new gear reduction units, which had just been introduced to the market. The big change came in 1991 with the foundation of a new affiliated company for the production of engineering polymer components, whose management was entrusted to Cavicchioli. In the meantime, TECNO CM has developed into the group's hi-tech kitchen, from which numerous new developments have emerged.

Newsletter You should be retired.

Cavicchioli I'll retire when I will no longer be able to unlock the door to the factory. Look at this (shows a yellowed wage packet), this was my very first payroll in November 1974. The company is my passion, it's my life.

Newsletter With TECNO CM you moved from steel to plastics.

Cavicchioli It all started with a visit at the Powder Show in Chicago. Vainer Marchesini came home inspired by the idea of making innovative components from engineering polymer for his products.

Newsletter How did he get the idea?

Cavicchioli Thanks to the properties of polymers, you can realise design solutions that would be too costly if made of metal or even impossible to make. Moreover, polymers are versatile. Depending on the recipe, you can make them highly resistant to abrasion and corrosion, or you can make them elastic, whatever the application needs.


Stefano Cavicchioli

"I cannot remember a single week in my professional life during which Marchesini did not call in to discuss a new idea with me."

Newsletter This certainly requires solid know-how.

Cavicchioli It takes years if not decades of research and testing. With our 25 years of experience in this field, we can now enjoy a competitive advantage that provides our customers with products of the highest quality.

Newsletter So you're done?

Cavicchioli Never. Once we have developed a new component—like, for example our nanofibre filter elements—there is the constant challenge to make them better and cost less (smiles). Besides, I cannot remember a single week in my professional life during which Marchesini did not call in to discuss a new idea with me.

WAMGROUP®
STRONG ETHICS, WINNING SPIRIT.

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EDITORIAL

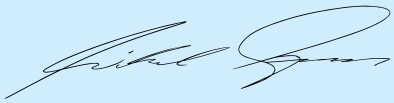
Dear Reader,

Who would have expected such a thing, a pandemic that overrides everything?

With the 2012 earthquake in Italy, WAMGROUP® had a special experience with natural disaster; and thus, also with the recovery after the catastrophe. The parallels are evident. To keep spirits high is top priority. Another is constant, proactive communication with customers and stakeholders, which describes in an open and honest way the state of affairs and at the same time reassures.

The global nature of the crisis means that people worldwide are forced to experiment with alternative ways of working and modern tools for coping with their jobs. In times of business disruption, smart working from home has become common practice at WAMGROUP® and will very likely—to a certain extent—have a say in our way of working in the future. In this sense, life after the pandemic has already started for us.

Best wishes,



Michael Grass

WAMGROUP®
Public Relations Manager

WHY WE CAN'T DO WITHOUT PLASTICS

Prof. Dr. Kim Ragaert

Kim Ragaert is an Associate Professor at the Centre for Polymer and Material Technologies of the University of Ghent in Belgium. In a lecture entitled PLASTICS REHAB, she impressively contrasts the current demonisation of plastics with the convincing benefits of plastics in reducing CO_2 emissions. View her talk by scanning the QR code on the right.

"We are being told that by 2050, there will be more plastics in the oceans than fish. The question is why? Do we blame plastics or the people who pollute the environment with plastic waste? It is true that plastics don't degrade in the environment, but metals and glass don't either. Plastics are a resource and you don't want to waste resources but recover and recycle them. Less than two grams of plastic package extend the shelf life of a cucumber by eleven days. A steak wrapped in plastic film can be preserved for up to 26 days. In this way you avoid food waste and prevent CO_2 emissions five times as high. Plastics are strong lightweight materials with half the density of glass and the same density as paper. With plastics it is possible to make very thin packaging. If we decided to replace plastics with alternative materials like paper, glass or aluminium, the amount of materials and energy required and resulting CO_2 emissions would explode."

Although the current controversy is basically about packaging plastics, the negative image of plastics unfortunately also reflects on engineering polymers. And that is unfortunate, because components made of engineering polymers have been giving WAMGROUP® products extraordinary features and properties for almost 25 years that could be achieved with alternative materials only at extremely high costs or would simply not be feasible in the first place. The development and use of machine components made of engineering polymers, some of which have offered revolutionary technical solutions, opened new markets and applications for WAMGROUP® setting new trends in various industries.

TECNO CM

Engineering Polymers vs Metals

Ponte Motta, Italy, Spring 2020

TECNO CM workshop

TECNO CM is not involved in plastic packaging. TECNO CM specialises in metal replacement through engineering polymers, a term first used by the automotive

SEPCOM® screw press separator outlet

industry, where plastics usage has been rising steadily since the second half of the 20th century (source: "Plastics in the Automotive Industry" by James Maxwell, Woodland Publishing Ltd.).

SINT™ body of MBW micro-batch feeder

Unfortunately, engineering polymers cannot be obtained from renewable sources. They are neither biodegradable nor compostable nor recyclable. Moreover, for our promiscuous production we need about 60 different types of raw granular materials. We use both commodities and compounds to make engineering polymers and create recipes or formulas for generating of approximately 2,000 product codes.

DUSTFIX™ inside view

In 1991, we started with ten polymer formulas for the manufacture of disc coatings and gaskets for WAMGROUP®'s butterfly valves with one machine for each casting. Resistance to abrasion, chemical aggression and UV rays must be taken into account in the formulas. Currently, we provide three macro-families of polyurethane and polyamide components divided into 15 different recipes.

It takes months and sometimes years of research and field trials to find the right formula. To be ahead of the pack major investments are essential. In the past five years alone, WAMGROUP® has invested over three million euros in its "hi-tech kitchen".

TECNO CM's primary task is to optimise the components it manufactures in terms of quality and cost-effectiveness. To achieve this constantly newly set goal again and again the future challenges consist in the constant awareness of having to keep on researching and developing, in paying utmost attention to the selection of raw materials, and, being a specialist in engineering polymer products, in always trying to involve the granule suppliers. Furthermore, we must keep a sharp eye on facilitating differentiated disposal of waste materials.

SINT™ pipe elbows

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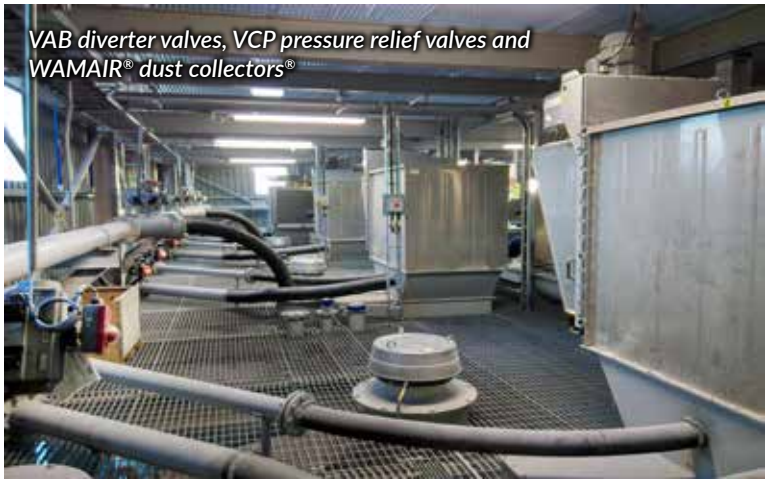
Flanged bin activator gasket

Dust Collection in Limestone Quarry

Killough Thurles, Tipperary, Ireland, January 2020



VAB diverter valves, VCP pressure relief valves and WAMAIR® dust collectors®

Killough is a limestone quarry, which has recently invested in a new milling system for grinding, drying, classifying and screening limestone that is the raw material for the company's wide range of powders and grits. Apart from a number of heavy-duty and extra heavy-duty screw conveyors, WAM Engineering, the Group's UK subsidiary, supplied six WAMAIR® and four WAMFLO® dust collectors, as well as eight VCP-type pressure relief valves.

The mining and quarrying sector offers great opportunities for WAMGROUP® products. Dust filtration, in particular, is an issue that quarries all over the world have to address nowadays.

WAMFLO® dust collectors

www.wamgroup.co.uk

A Hopeful Look at China

The World, Spring 2020

The year 2020 began with a major bang. The beginning of the second decade in the new millennium should have been a year of departure for new goals and saw WAMGROUP® ready for it. Everything would turn out differently. While the western world was still recovering from its New Year hangover, it was already becoming apparent that in 2020 it would probably be impossible to celebrate a Chinese New Year. A previously unknown virus was to blame, which would go on to change the world in unanticipated ways. After two months of delayed lockdowns, we are all looking to an uncertain future in the hope of a vaccine and an early recovery in the global economy.

WAMGROUP® companies from all countries look with particular interest to their colleagues in China, where people have learned to live and work with the virus until further notice.

Thank you, guys, for leading the way. *Andrà tutto bene!*

Dust Filtration at its Best

Robotic POLYPLEAT™ production

Since the very beginning, TECNO CM produced for WAMGROUP®'s dust collector division filter elements in addition to engineering polymer components. Indeed, the volume of filter elements took and still takes up by far the largest part of TECNO CM's production. In the meantime, the annual numbers of both cartridges and POLYPLEAT™ are in the six-digit range.


Stefano Cavicchioli with the Italian Minister of Infrastructure, Paola De Micheli, on her visit at the WAMGROUP® headquarters in Ponte Motta in January 2020

A decisive step in the further development of filter elements came in 2016 with the investment in in-house nanofibre treatment of the filter fleece. Nanofibre elements work according to the principle of surface filtration. The dust particles are deposited on the filter surface (i.e. the nanofibre network) instead of penetrating deeply into the filter medium. This is possible because the nanofibre network is much more closely meshed than ordinary polyester fleece. Due to the significantly improved degree of filtration of the nanofibre compared to polyester fleece, dust emission values can be significantly corrected downwards—in cement silo dedusting, for instance, from previously 10 to less than 1 mg/Nm^3 residual dust.

Thanks to millions invested in hi-tech manufacturing automation and a Kanban scheduling system for lean manufacturing in the years following the 2012 earthquake, TECNO CM's filter elements offer unrivalled quality and reliability in toughest operating conditions.

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Nanofibre treatment of filter media in TECNO CM's white room

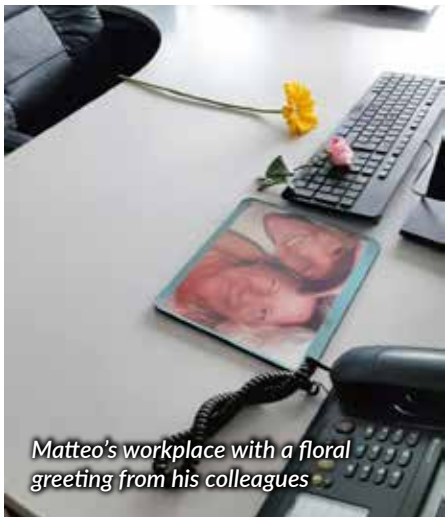
Matteo Miselli (* 5th June, 1976 † 7th March, 2020)

After joining WAMGROUP® on 24th February, 1997, Matteo Miselli dedicated himself to the area of dust filtration in which he acquired a high degree of competence over the years.

Matteo was not only recognized by his colleagues for his extensive specialist knowledge, he was also extremely popular for his winning nature.

When he found out he was seriously ill, he did not seem overly impressed and was able to speak freely about it. Even during the heavy therapy phases, he preferred to come to Ponte Motta and devote himself to his work.

Matteo, who leaves behind his wife and a son, will be remembered by friends and colleagues as someone who loved life and never gave up the fight against the disease, a fight that, sadly, he could not win in the end.



Matteo's workplace with a floral greeting from his colleagues

A Ministerial Visit to WAMGROUP®

Ponte Motta, Italy, 24th January, 2020

On tour through the Modenese lowlands, the Italian Minister of Infrastructure and Transport, Paola De Micheli, paid a most welcome visit to the WAMGROUP® headquarters in Ponte Motta. Vainer Marchesini had the honour of leading the minister through various manufacturing departments and the Technology Centre in Ponte Motta. The Minister congratulated Marchesini on restarting the site in such a short time after the 2012 earthquake and stressed the importance of investment in research.

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Vainer Marchesini showing Minister De Micheli WAMGROUP®'s first fax machine from 1978

Vintage Car Rally in the Lowlands

Ponte Motta, Italy, 19th October, 2019

Putting the WAMGROUP® Technology Centre in Ponte Motta on the map by holding events of popular interest is amongst the goals of WAMGROUP® communications. The Group's vice president, Roberto Marchesini, had the idea of inviting the Historic Motor Club of Soliera to a guided factory tour of the Ponte Motta premises.

There was a lot to be amazed at. Cars of different brands and eras were lined up in front of the show-room with their owners happy to provide information. The guests also had a lot to see during their several-hour visit to the production and showroom. An event to remember.

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Getting around the factory


Cristina Severin of WAMGROUP® Communications guiding a tour of the showroom

MVM - BRIDGEHEAD TO NEW OPPORTUNITIES

Castelnovo Bariano (Rovigo), Italy, 16th November, 2019

MVM factory in Castelnovo Bariano

Marcello Marchesini, Mayor Massimo Biancardi and Orlando Verzola cutting the ribbon

Lorenzo Verzola, who prefers to be called by his nickname, Orlando, is one of those characters that you will only find on the banks of the *grande fiume*, the river Po. People there, rather than talking, prefer doing. When asked to give a talk on the occasion of the inauguration of WAMGROUP®'s latest manufacturing plant, MVM, he initially shied away from the opportunity claiming he wasn't used to talk in front of people. When the day finally came Verzola grabbed the microphone and gave a talk from the heart without a script, as spontaneous as one can imagine.

Orlando Verzola looks back on a life in the workshop with the smell of metal shavings and welding smoke. When the Marchesini family offered him to start a new venture with MVM as a bridgehead in the transformation of special screw conveyors into industry-specific standards he didn't think twice about accepting the challenge.

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NEXT ISSUE PREVIEW

The Burj Khalifa in Dubai in the colours of the Italian flag in March 2020 in a spirit of solidarity during the Corona pandemic

In 2004, WAMGROUP® decided to open a trading subsidiary in the UAE, as it offered businesses a strong enabling environment: stable political and macro-economic conditions, a future-oriented Government, good general and ICT infrastructure. Dubai was not a casual choice. As a gateway to all neighbouring countries in the Middle East, the branch quickly became a hub for the delivery of the Group's products to customers in a wide range of industries. Thanks to the intensive construction activity in the region, in the first decade of the new millennium, WAMGROUP®'s classic products for concrete and asphalt production initially occupied a dominant position. Read more in the next issue.

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