

The Chronicles

thrice-yearly newsletter with featured news and recent updates of Pettinaroli Group worldwide



**EIGHTY-FIVE YEARS
OF SUCCESS**

PROJECTS

Inside European
& southeast Asian
"green buildings"

PRODUCTION

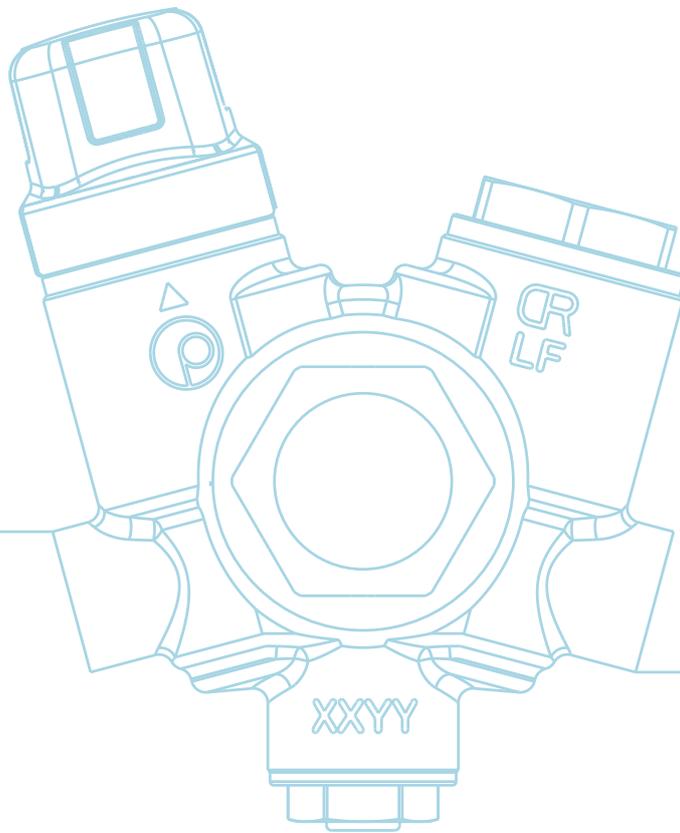
Automated warehouse
costruction work underway

SUSTAINABILITY

An effective action
to protect the Orta lake



Happy
Easter



T.B.V.
series



PETTINGOLI

EDITORIAL

by Laura Fortis Pettinaroli - President

Dear Collaborators, Customers, Suppliers and Friends. Once again, the new year has started positively for Fratelli Pettinaroli, which today proudly approaches the celebration of its **85th anniversary** since its founding, back in 1938. I cannot deny that countless memories related to the long history of our company surface in my mind every single day, so that it is inevitable for me to go back over the many events and adventures I have lived throughout my 78-year career.

Memories sometimes painful, of hard compromises and sacrifices; but in most cases **joyful recollections** of friendly faces, of challenges successfully achieved and milestones proudly celebrated. On June 2, 1984, I was honored with the "**Order of Merit for Labor**" by the former President of the Italian Republic, Sandro Pertini: certainly a title that few businesswomen could boast at the time in Italy.

Later, in 2012, I was awarded the honor of "**Officer of Labor of the Italian Republic**". However, I jealously guarded these certificates in a drawer of my desk for years, until my great-nephew and some co-workers insisted on displaying and framing them on the occasion of the company's 80th anniversary in 2018. When they persistently asked why I kept my certificates in a drawer along with those of my brother-in-law **Mario** ("Order of Merit for Labor" - 1983) and my husband **Giuseppe** ("Order of Merit for Labor" - 1960, "Commendator" - 1999), I answered them by reminding that "**being comes before appearing**" and that "**substance always counts more than form**". These are in fact just some of the valuable lessons I have always tried to hand down over these long years to my nephews and niece (**Ugo, Maria Pia and Giulio**) great-nephews (**Marco, Luca, Francesca, Matteo and Andrea**) and all my co-workers, who have in fact always proved to be humble as well as dedicated and willing persons.



During this 85th anniversary year, on several occasions we will have the pleasure of welcoming employees of the various branches and the many groups of historical partners and new customers from all over the world. I am always proud to see that every person who walks into the company is often impressed by the tidiness and cleanliness of the interiors and gardens, as well as the **professionalism** of our employees and the **efficiency and modernity** of our production facilities. Next, I would like to extend, as usual, my sincerest wishes for a Happy Easter to all of you in Italy and abroad, and I also wish to address a special thanks to my niece, **Maria Pia Pettinaroli**, for always being close to me with thoughtfulness and attention throughout all these years, both in the office and outside of the workplace, also continuing to run our Administrative Department with competence, care and great professionalism.

Happy holidays to all and Happy Birthday to Fratelli Pettinaroli!

on behalf of the whole Pettinaroli Family

'23

S

PR

ING

TABLE OF CONTENTS

Pettinaroli Projects

- 08 Tour Hopen - Paris
- 10 Ratchayothin Hills - Bangkok
- 11 TIKTOK: New headquarters - Dublin

Exhibitions

- 12 ISH - Frankfurt
- 13 AHR - Atlanta
- 14 HVAC R Expo Saudi - Riyadh
- 14 ACREX India - Mumbai



The exhibitions

Among the events in this early 2023, stand out the international trade fairs in Frankfurt and Atlanta, and HVAC-focused events in India and Middle East.



Sustainability

Pettinaroli, along with other companies and local governments, is amid the signatories of the "Lake Contract," which was created as an active commitment to the protection and constant improvement of the Lake Orta ecosystem.

Cover story pag.16

Eighty-five years of success

On the occasion of the company's 85th anniversary, we interviewed the second generation of the Pettinaroli family. Together with them we tried to retrace a key part of the company's history.

I AM Pettinaroli

15 Pettinaroli Staff new entries

Cover story

16 Eighty-five years of success

Sustainable business

19 The "Lake Contract"

Production insights

20 Automated warehouse construction work underway

21 Jomar warehouse reorganization

TSM

22 Trivalent chrome:
TSM sets up a specific plant



THE RENOVATION OF THE ADRIA TOWER, IN THE CENTER OF LA DÉFENSE DISTRICT IN PARIS, HAS STARTED. THE BUILDING WILL BE RENAMED HOPEN TOWER UPON COMPLETION OF THE PROJECT

PARIS LA DÉFENSE TOUR HOPEN

Built at the turn of the 1990s and 2000s in the center of the La Défense in Paris, the **Tour Adria** will undergo a major renovation. The 56.000sqm, forty-story building will be completely modernized following work being promoted by Primonial REIM France, its owner since 2013.

This major upgrade will make the tower less energy consuming and will enable it to compete with cutting-edge buildings recently built in the surrounding area. In fact, the property aims to obtain **HQE, BREEAM and Well** energy certifications. In the words of the contractor, "work is being done to provide the tower's guests with modern, energy-efficient spaces characterized by comfort and harmony."

Upon completion (set for 2024), the skyscraper will acquire three more floors than its current configuration, and the office area will be increased from 56.000sqm to 61.880sqm. In total, including technical and service areas, the former Tour Adria will develop an area of over 67.000sqm and will be renamed **Tour Hopen**.

SUPPLY DETAILS

Pettinaroli France, selected as the supplier for the project by Lefort Francheteau and Tunzini, arranged for the order more than **4.000 703RSFQ mini manifolds and 12.000 fittings**. The customer's specifications required finding a solution for angular mounting of distribution manifolds on six-way valves to feed radiant ceilings via Push Fit pipes.

A PROJECT SO PRESTIGIOUS AS IMPORTANT FROM THE SOCIAL POINT OF VIEW

Tour Hopen's project proves to be as attentive to energy sustainability policies as it is to social ones. In fact, the components of the connection kits supplied are mounted in a pre-assembly workshop located in the municipality of Grande Synthe: the particularity of this plant is that it hosts working personnel with **disabilities** with the aim of fostering their integration on a social level, through work and the manufacture. This initiative, promoted by contractor Vinci Energies, means that the project gains a strong **social value** by pushing toward a dimension in which the industrial and professional spheres become a way to generate an increasingly equal and inclusive culture.

THE ADVANTAGES OF CHOOSING PETTINAROLI

The supply of Pettinaroli products proved to be an advantageous and **winning choice** right from the design stages. Through a close cooperation with the customer, Pettinaroli France's technical team was able to provide a sample of the product supported by a **detailed installation and operation diagram**. In this way, the customer was able to evaluate in advance the worthiness of the proposed solution, resulting in significant time savings in these preliminary stages of the project.

A UNIQUE SOLUTION ON THE MARKET

What also made the difference in the choice of the supplier was the **uniqueness** of the proposed solution. Pettinaroli France was the only one to be able to offer a mini manifold with sphericoconical connection and "right or left" mounting option, which **facilitates installation** on both sides of the six-way valve; In addition, the offer also included the supply of female Push Fit RWC connectors.



On the left and above: Rendering of the Hopen Tower in the center of the La Défense neighborhood. (Credits: defense-92.fr).



RATCHAYOTHIN HILLS

Dynasty series PICVs in the new Thai skyscraper

Urban Holdings Co has invested 2.6 billion baht in the development of a major mixed-use project in Bangkok, Thailand. Named Ratchayothin Hills, the 32-story skyscraper will be built on an area of about 18.000sqm designated for **residential** use. Adjacent to the first building will stand a second block for **commercial** use, which will aim to meet the high demand for office space in the face of currently rather limited vacancy in this area of the metropolis.

WHY CHOOSE PETTINAROLI?

The customer previously worked with a **well-known competitor**, experiencing severe plant operation problems caused by impurities in the water that ended up **clogging the balancing valves**. Moreover, the PICVs supplied by the competitor, being non-inspectable, precluded the possibility of maintenance, forcing the customer to request a new supply. Pettinaroli was thus able to offer the **ideal solution** to address this issue.



DYNASTY: THE TRUMP CARD

Due to the resistance of its **dirt-free cartridge**, which is capable of operating in heavily contaminated water, **Dynasty** immediately proved to be the ideal solution to be offered to the customer. Series 92 PICVs also, being **easy to inspect** and maintain, have been the winning asset for the success of the project from a technical point of view.

SUPPLY DETAILS

The delivery of more than **200 Dynasty PICV 92 series complete with thermoelectric actuators** is currently underway for the completion of the project. The supply of the batch will proceed alongside the construction of the building, which is scheduled for completion by the end of 2024.



On the left: The rendering of the Ratchayothin Hills (credits: jll.co.th) and the construction sit. Above: A Dynasty with actuator supplied. Below: Rendering of Tik Tok new headquarters (credits: irishtimes.com).

DUBLIN'S DOCKLANDS TIK TOK: NEW HEADQUARTERS

Chinese-owned social media giant **TikTok** has signed an agreement to lease a building located in Sir John Rogerson's Quay, set to become its new operational headquarters in the Irish capital.

The deal will see the social media platform lease a space of approximately **8.000sqm** (formerly home to an old warehouse) and located at the foot of a six-story building along the River Liffey.

SUPPLY DETAILS

Pettinaroli UK, through its well-established commercial partnership with **Kane Environmental**, was chosen as the supplier of more than **1.000 0X4 Xterminator** kits including 91-series EvoPICV balancing valve with actuators and fittings.

BEYOND CUSTOMER EXPECTATIONS

The customer required to work with a specific budget and timeline but, above all, with a **strict schedule** of product delivery in specific weeks, depending on the progress of the work. Pettinaroli UK ensured to provide what was requested according to the customer's deadlines, even managing to **bring forward part of the order** from what was initially planned. The project turned out to be another major success thanks to the efforts of the UK team.



FRANKFURT ISH 2023

The leading international trade fair for the HVAC & Water sectors celebrates an impressive comeback above expectations

FRANKFURT AM MAIN

Four years after the last edition, **ISH** was back in presence March 13-17 at the historic Messe Frankfurt venue. Although the German show has always represented one of the most relevant events for the **HVAC & Water** sectors, not even industry insiders would have expected such a large audience response, which recorded well **over 150.000 attendees** over the five days.

Pettinaroli came to the event in full force, counting on the presence of all its sales and technical managers at the booth. Three

exhibition desks were dedicated to **EvoPICV** balancing valves, **PCS** hydronic kits, metering and **Alpha IP** home automation systems. A special "green space" was reserved for the new "Lead Free" brass alloy **FilterBall**. Also on display was a "wall of news" dedicated to the new range extension of the **Dynasty** series (with DN40 up to 9.000 l/h and MxM threaded variant), the new **TBV** thermostatic valves and the **EvoMAGic** series of magnetic dirt separators.

A video recap of the event by **Luca Pettinaroli** is available on Fratelli Pettinaroli LinkedIn profile.





AHR 2023

ATLANTA

On February 6-8, Jomar Valve and HCl attended the AHR Expo in Atlanta, Georgia. This event is the essential experience for the **HVAC-R** industry, attracting manufacturers, suppliers, tradespeople, and innovators from around the globe each year.

THE 2023 EDITION

An exhibitor for over 25 years, Jomar's experience this year was no exception: three days of an electric atmosphere, exciting innovations, fantastic networking, and important connections. **Matt Bianchi, Alberto Calderano, Diana Cheruvil, Tyler Diaz, Zack Fromm, Luca Pettinaroli, Rick Rank, Giorgio Simonotti, and Adam Stier** represented the Jomar brand at the booth, showcasing its latest valve solutions, including the all-new lead free **FilterBall** as part of the **RecircSetter™** assembly.

Also our **HVAC-R** North American company Hydronic Components Inc. attended the event with a small booth managed by **Nick Miller, Brian Aichele and Jeff Reardon**, where they could showcase our newest range of hydronic packages.

Above: Alberto Calderano, Giorgio Simonotti, Luca Pettinaroli, Adam Stier, Rick Rank, Matthew Bianchi, Zack Fromm.

On the left: Luca Pettinaroli, Ugo Pettinaroli, Alberto Calderano, Federico Poletti, Henrik Kristiansen, Kim Svaneborg Pedersen, Stefano Richetti, Einar Leo Ottosen, Stefano Vicario, Andre Bekke, Aldo Ruga.



HVAC-R EXPO SAUDI

Above from left: Shehab Eddin Al Khatib, Umesh Nair and Paolo Montafia.
Below from left: Umesh Nair, Mathirajan Jeevarathinam and Riccardo Provini.

RIYHAD

Established in 2016 with the mission to best prepare Saudi Arabia's HVAC-R sector, as part of its major development plans, HVAC-R Expo Saudi is currently the **leading industry event** in the Arab nation. The 2023 edition was held in the capital Riyadh from February 18 to 21.

Pettinaroli took part in the show as an exhibitor with a booth focused on PICVs and HVAC Kits. **Umesh Nair, Shehab Eddin Al Khatib, and Paolo Montafia** were in charge of the exhibition space and met with the many interested industry professionals.

ACREX INDIA

MUMBAI

ACREX India has been back in attendance in the Indian metropolis from March 14 to 16. The fair has been **Southeast Asia's most important convention** for years for the Refrigeration, Air Conditioning, Ventilation and Heating fields.

450 exhibitors from more than 40 countries attended the event, among them Advance Valves. **Umesh Nair and Riccardo Provini** were present at the booth of Pettinaroli's Indian business partner, meeting with local buyers and presenting them the wide range of Pettinaroli HVAC solutions.



Pettinaroli STAFF

new entries



Emma Spencer

*Inside Sales
& Quotation Specialist*

Emma brings her enthusiasm and interpersonal skills with key accounts to help Pettinaroli UK's customer service team in responding even more effectively to their day-to-day needs.



Mylène Murey

Warehouse specialist

Mylène joins the staff of Pettinaroli France as a warehouse operator managing construction sites order in particular. Her organizational qualities will be crucial in her new role.



Zack Fromm

*Specifications Manager
Central Region*

Zack will be responsible for managing the contact with engineers and contractors. He brings to Jomar's a successful career in sales, with 15 years of experience in plumbing and fire systems distribution.

EIGHTY-FIVE years of SUCCESS

1938 / 2023: PETTINAROLI CROSSES THE 85-YEAR-IN BUSINESS LINE

2023 marks Pettinaroli's achievement of a prestigious milestone: eighty-five years in business. Trying to summarize such a long history in a few lines would have been an effort likely to be incomplete from the start. Therefore, in the attempt to resume at least part of this glorious story, we decided to rely on the words of those who, like Ugo, Giulio and Maria Pia Pettinaroli, have been an active part of it for years in the role of protagonists.

THE WORDS BY UGO PETTINAROLI (CEO)

How do you think the market has changed the most from the time you joined the company to date?

From personal relationships with customers and friends, based on mutual trust and the traditional "handshake," we have moved on to increasingly complex and professional relationships. It must be said that, with an export market grown from a dozen countries to the current 60-plus, and with 7 branches and dozens of area managers operating worldwide, it would indeed no longer be possible working otherwise.

What was the most difficult challenge you overcame during your years within the company?

It is honestly difficult to choose between dozens of major challenges won over all these years. Perhaps the most demanding and legally challenging one was the negotiations, lasted more than a couple of years, for the 100% acquisition of the two operating branches in the U.S., Jomar and HCl and the third company, M&P Capital, responsible for the main logistics facility in Warren, Michigan.

In a world going through years of political and economic uncertainty, what are the market goals for Pettinaroli in the medium to long term?

Pettinaroli Group's goals in the medium/long term are to consolidate existing markets and strengthen branches, with the aim of coming to control 90% of the worldwide distribution of our Made in Italy products.

Your fondest memory related to the company?

Of course in more than 45 years in this industry, the memories are countless. Perhaps, among the most pleasing, are those related to the achievement of the UK's BSI's Kite Mark in the mid-1970s. We were the first company outside the UK able to achieve that prestigious recognition and the related quality certification thanks to a completely new range built according to strict British standards. I also recall with pride the ability demonstrated by all our divisions in generating a complete range of innovative products for the North American market in the late 1980s. More recently, the most pleasing event has been the gradual entry into the company of the members of our third generation, who represent the future and continuity of the Group in the coming decades. The synergy and willingness to work together, despite the obvious and clear generational differences, are a strong incentive to achieve new goals, such as that of the 85th anniversary since our founding (back in 1938), which we are celebrating this very year.

THE WORDS BY GIULIO PETTINAROLI (COO)

What differences do you see in production from your first day in the company to the present?

Manufacturing systems have changed enormously over the last few years. Traditional machinery has given way to mechatronics and robotics. Even the raw material we use, which has remained unchanged for decades, has undergone a radical change mostly dictated by "environmentally sustainable criteria." The content of lead in brass alloys (which allowed machinability) has dropped to progressively lower values. These factors forced us to learn a different kind of "knowledge" and set a new approach to production.

What do you think will be the challenges that Pettinaroli will have to face in its production departments in the near future?

In production, the challenges ahead will involve logistics and flexibility. Regarding logistics, we have been planning for some months (and work has finally started) an automated warehouse with a capacity of 12.000 pallet slots. As for flexibility, on the other hand, we are including machines, both in the turnery department and in assembly, that are more and more adaptable to productions with fast tooling.

How has the focus on sustainability affected choices on a manufacturing level? What investments has Pettinaroli planned to make in this regard in the near future?

All of our products are designed in compliance with current standards in the areas of sustainability and reduced environmental impact. Even at the manufacturing level, all our cycles are designed to reduce or eliminate both consumption and the use of harmful or non-recyclable materials. In addition, right in these days, we have outsourced the extension of the existing photovoltaic system to bring the electricity production up to 1 Mw.

Your best memory linked to the company?

In life as in work there are always good moments and others not so much! I would put among the bests the company anniversary celebrations, which were unique occasions to meet with employees, collaborators, suppliers and customers of the entire Pettinaroli Group.

Above: Laura Fortis Pettinaroli and Ugo Pettinaroli during the BSI certification ceremony in 1975.

Bottom left: Maria Pia, Ugo and Giulio Pettinaroli with the plaque received by employees during the 75th anniversary celebration in 2013.

Bottom right: Maria Pia, Ugo and Giulio Pettinaroli at the 50th anniversary ceremony in 1988.



THE WORDS BY MARIA PIA PETTINAROLI (CFO)

Compared to when you started your journey in the company, how much has administrative management changed?

In the 1970s everything was much simpler and easily managed. Bureaucracy and complications have unfortunately taken over in recent decades. Law Decrees, which sometimes even appear difficult to be fully interpreted, follow one another and further stress administrative management. The numerous deadlines for returns and tax payments impose continuous attention, precision and the employment of much personnel. That is also because precision and fairness have always been the hallmark of Pettinaroli administrative management.

What has been the most complex moment in your experience with the company?

We faced the greatest challenges following the acquisition of the foreign subsidiaries with the control of them and the preparation of the consolidated balance sheet. Lastly, a complicated stumbling block, not yet completely overcome, was the implementation of the new Business Central information system, which from last year heavily engaged all departments, not just administration.

From an administrative point of view, what are the new challenges on the horizon? In this respect, how do you look at the advent of sustainability balance sheet in the coming years?

There are several challenges on the horizon: certainly accelerating management simplification by making the best use of software packages, putting in place digital archiving avoiding paper waste, managing the operations of the new automated warehouse, thinking about the construction of Model 231, and rightly drawing up the sustainability balance sheet. The new procedures and the all-round sensitivity we will need to have will improve the quality of relationships in the company and the impact with the environment and the territory.

The fondest memory you have linked to the company?

There are so many good memories of my life in the company: the achievements, the milestones reached, the inspections happily passed, the certifications obtained with compliments from Inspectors, etc. However, the gratitude and satisfaction of employees and collaborators provide the inspiration to start each new working day with undiminished passion and enthusiasm.



SUSTAINABILITY



THE "LAKE CONTRACT"

THE ENVIRONMENTAL DISASTER AND RECOVERY

The surrounding heavy industrial development and the absence of preservation policies made Lake Orta the scene of an environmental disaster until the early 80s. Subsequently, in the early 90s, the lake community worked to remedy this situation. Through the implementation of the "**liming**" process, that consists in the addition of carbonates to the lake's water to neutralize its acidity caused by industrial discharges, Lake Orta has continuously improved its condition year by year, until obtaining a "**blue flag**" from the FEE (Foundation for Environmental Education) in 2021 for the cleanliness of its waters.

AN EFFECTIVE ACTION TO PROTECT ORTA LAKE

To protect the efforts made to restore this place, Pettinaroli joined other companies and local authorities in signing a "**lake contract**". Thanks to this partnership, all participants rallied to preserve the lake by committing not only to not pollute it but also to finance (sometimes through access to European funds) numerous initiatives aimed at maintaining and, where possible, constantly improving its condition.

THE GOALS:

- Ongoing assessment of the hydrogeological situation
- Improvement of water and sediment status
- Redevelopment of abandoned factories in the area
- Enhancement of the landscape pertaining to the lake
- Encouragement of sustainable use of the lake
- Incentivizing the care of the surrounding areas
- Educational and training moments to develop the culture of protecting the lake and its territory

Above: Aerial view of Lake Orta.

Side page: Family photo in 1980

From top left: Maria Pia, Giulio and Ugo Pettinaroli, Laura Fortis Pettinaroli

From bottom left: Mario and Giuseppe Pettinaroli.

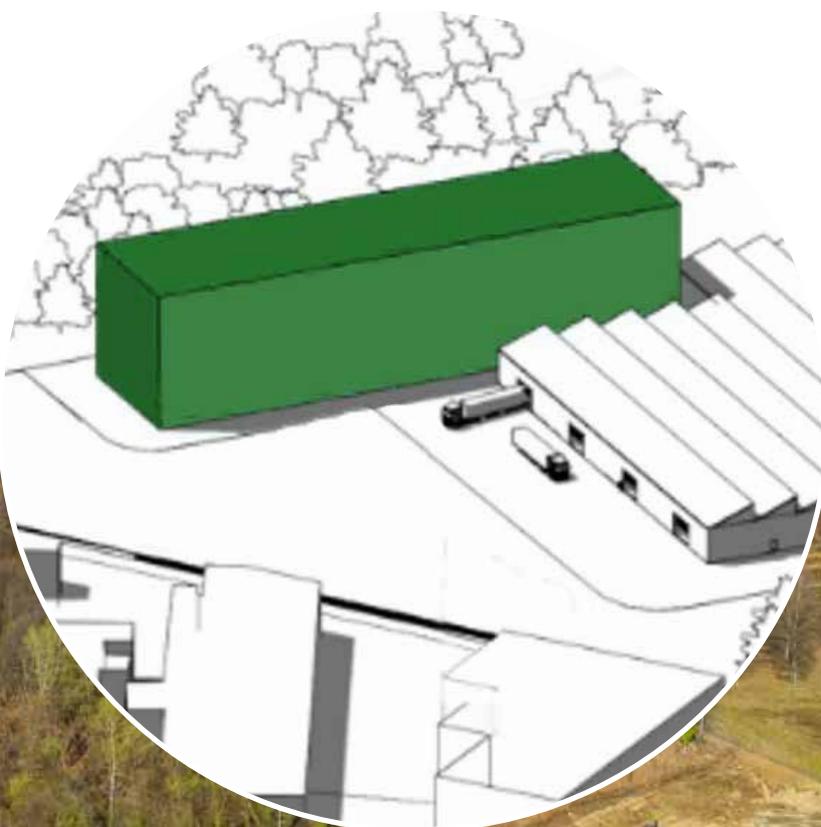
AUTOMATED warehouse construction work underway

THE MASSIVE PROJECT IS SCHEDULED TO BE COMPLETED BY THE END OF 2024

SAN MAURIZIO D'OPAGLIO

After a long and complex bureaucratic process, the construction site for the **new automated warehouse** at Pettinaroli's headquarters on Via dei Pianelli has finally been started.

The project involves the construction of a building that will add nearly **3.000sqm** of useful space for the storage of components and finished products. This will also allow the assembly area to be **reorganized**, having more than 5.000sqm of space freed from the current warehouse. Building work is set to be completed by the end of 2024.



Above: The construction site started at the San Maurizio d'Opaglio facility.
Top left: The design of the new Pettinaroli automated warehouse.
Side page: The recently reorganized Jomar warehouse

JOMAR REDESIGNS THE SPACES OF ITS WAREHOUSE

Optimization work aimed at a even better service performance

WARREN

The Jomar warehouse was recently reorganized through a new pallet rack layout and a different management mode designed to adopt **First-In/First-Out** inventory flow. The area design was meticulously reconfigured, allowing the storage of a large number of pallets within an extremely small space. This process resulted in **optimized performance**, increased warehouse capacity and improved safety for operators. In addition, the new configuration has led to faster and more efficient order fulfillment with consequent **further improvement** of the already excellent customer service.



TRIVALENT Chrome

TSM sets up a specific plant

HEXAVALENT CHROME AND HEALTH

Hexavalent chrome (also known as Cr VI) is an element that has been essential in the treatment of metal surfaces for decades. For some years, however, its **harmfulness** to the health of operators has been recognized by major agencies and bodies such as the U.S. Environmental Protection Agency and the World Health Organization. This awareness has also had **consequences** from the point of view of its deployment in industrial applications. Since 2013, for example, as stated within Regulation (EU)

No. 348/2013, hexavalent chrome has been included in Annex XIV of REACH and identified as a carcinogen and mutagen.

TRIVALENT CHROMIUM DEVELOPMENT IN TSM

Since its acquisition in 1982 and following the numerous renovations and expansions carried out at the Gozzano site, TSM has not limited itself to applying the best existing technology. Driven by what is the philosophy of the entire Pettinaroli Group, the company has invested extensively in the development of **innovative treatments** aimed at improving the performance of coatings by decreasing their impact on the entire supply chain, which includes the environment, operators and end users of the products.

Therefore, starting March 2023, TSM has started the manual plant dedicated to chrome plating with **trivalent chrome (Cr III)**. Trivalent chrome has long been identified as the possible alternative to hexavalent chrome for industrial purposes. Unlike the latter, in fact, trivalent chrome is **not harmful** to the health of supply chain operators during processing.

LIMITS OF TRIVALENT CHROME AND TSM SOLUTION

Typically, the main limitation that has slowed the spread of Cr III, lies in the difficulty of obtaining an **aesthetic result** of the same level as that offered by hexavalent chrome plating. At TSM, thanks to continuous research and development work, this finish has been thoroughly studied, being able to obtain results that are **more than appreciable** when compared with more traditional hexavalent chrome plating.

For technical information or inquiries TSM can be contacted at: info@tsmgalvanocromo.it

PETTINAROLI
GROUP

The Chronicles

