

the Chronicles



Dear readers,

Another year has come and gone so fast and we are now approaching the celebrations of the company's Eightieth Anniversary. **Eighty years of history**, from the foundation in 1938: the pride of a goal that only a few companies have ever had the chance to achieve.



I like to remember how Fratelli Pettinaroli was back in September 30th 1945, my first day of work at the company. Look at it today: an international group with a recognized brand in more than fifty countries all over the

world. I also remember every single challenge, sacrifice and difficulty that my husband Giuseppe, his brother Mario and I had to face in a dynamic post-war Italy, where the conservative farming mentality often hindered the growing industrial fervor. During those years, when we needed more space to expand our production facilities, we had to turn to the local farmers to buy their plots of land. "The entrepreneur who wanted to snatch the land and the work from the farmers, in order to build a factory": this was certainly not well-perceived by the local rural mindset. Nevertheless, the taps and fittings' manufacturers such as Fratelli Pettinaroli soon turned out to be a new proactive force that completely transformed our territory. Today it is

one of the most important districts in our industry, which provides jobs to more than 30.000 people in Italy alone. The strong cultural and social change that we witnessed in the 1960s reminds me of the challenges that we are all facing today:



Industry 4.0 and the new technologies, which should not be seen as threats for the workforce, but as new opportunities for social improvement.

These are only some of the difficulties, problems and challenges which we successfully faced and overcame in these eighty years of history, always with the will to grow and to improve, never forgetting our **origins** and our **family values**. Among these ethical principles, I would like to remember the most important three, that turned Pettinaroli into what it is today:

1. never give up,
2. do not put off till tomorrow what you can do today,
3. honesty and rectitude.

This extraordinary anniversary could never have been achieved without the invaluable contribution of our employees and collaborators, as well as our strategic customers and suppliers. Therefore I want to conclude by thanking all of you, because **teamwork** has always been, and I am sure will always be, the key ingredient of our journey and success.

Our very best wishes for a Merry Christmas and a Happy New Year 2018!!

Laura Fortis Pettinaroli – President
On behalf of the whole Pettinaroli family





No Brexit but “Brentry”: welcome Pettinaroli UK!!

In Autumn 2017 a British flag has been raised by Pettinaroli Group. After more than fifty years of strong and close cooperation, we are delighted to announce that Marflow Hydronics has been acquired by Fratelli Pettinaroli SpA. The result of such acquisition is the new brand: **Marflow Hydronics Pettinaroli UK**.



As specialist solution providers for the balancing, controlling and metering of water distribution systems in the HVAC industry, Marflow Hydronics has been dedicated to creating and supplying innovative and efficient products to meet the rapidly changing needs of buildings and users alike bringing together bright ideas, innovative concepts and intelligent valves to achieve first class solutions that provide customers with product excellence, and a future proofed, fully supported system.



*Marflow Hydronics Limited
Britannia House – Austin Way – Hamstead Industrial Estate
Birmingham B42 1DU - UK*

The flow of materials

at **MARFLOW HYDRONICS PETTINAROLI UK**



Goods inwards.



Internal stock.



Systems' assembly.



Production workshop.



Having worked together for more than fifty years this acquisition is a natural progression for the two companies. One notable collaboration resulted in the 'Xterminator': a complete off the shelf solution 40mm valve set incorporating a PICV, an innovative pioneering product in the HVAC field. Pettinaroli hold a number of the British Quality Standard certificates including ISO 9001, ISO 14001 and ISO 50001.



Pettinaroli Group will be gaining a highly skilled team of British engineers and Marflow Hydronics' already extensive portfolio of products will expand to offer the whole Pettinaroli range. The acquisition will be mutually advantageous offering greater stability to the two companies particularly in light of the uncertainties of Brexit. More information are available at: www.marflowhydronics.co.uk.



Marflow Hydronics Pettinaroli UK: the British know-how together with Italian engineering!



Our kits for HVAC systems.



Tests lab.



Offices.



Customer service.



FEBRAVA Show 2017: a new platform in Brazil

With 20 editions, FEBRAVA is the most important event in the HVAC-R chain in Latin America, covering every sector in this market. The ideal location for buyers, installers, distributors, wholesalers and engineers to do business, enhance their technical knowledge and get a first-hand look at the newest launches, trends and innovations in the market. A biennial show that hosts in each edition an average of 30.000 visitors from all over the world, attracted by more than 600 brands.



20th INTERNATIONAL
REFRIGERATION, AIR CONDITIONING, VENTILATION,
HEATING AND AIR TREATMENT FAIR

Running from Tuesday 10th to Friday 13th September 2017, in the 20th edition of FEBRAVA show 275 exhibitor-companies displayed their offer of products. Pettinaroli was there for the first time with a completely new booth, presenting our **Evo-series** including PICV, PCS kits, flexible hoses, six-way valves, and launching officially our new range of **VRF valves** for refrigerant gas applications.



*Alberto Calderano (Sales Manager) and Paolo Montafia (Product Manager)
at FEBRAVA show 2017.*

A trade-fairs' full report of Pettinaroli Group in 2017

AHR – Las Vegas (USA)
January 30th - February 1st / JOMAR



Climatización - Madrid (Spain)
February 28th - March 3rd / EUROCOBIL



ISH – Frankfurt (Germany)
March 14th - 18th / Pettinaroli S.p.A.



NPGA – Nashville (USA)
April 21st - 23rd / JOMAR





See you at our next events in 2018!!

We look forward to meeting you at our next worldwide trade-fairs in 2018. Here is the full list of the events where you can find us.

AHR – Chicago (USA)

January 22nd - 24th / Jomar Group



MCE – Milan (Italy)

March 13th - 16th / Fratelli Pettinaroli S.p.A.



NPGA – Atlanta (USA)

April 6th - 8st / Jomar Group



CGA – Winnipeg (Canada)

April 9th - 12th / Jomar Group



NORDBYGG – Stockholm (Sweden)

April 10th - 13th / Pettinaroli A/S



ISH CIHE – Beijing (China)

May 22nd - 24th / HEITZ (Pettinaroli - Möhlenhoff - Maincor)



CONSTRUCTECNICA – Asunción (Paraguay)

May 23rd - 27th / Enving - Hidroingeniería



REFRIAMERICAS – Panama City (Panama)

May 30th – 31st / Fratelli Pettinaroli S.p.A.



AGA – Washington DC (USA)

June 26th - 29th / Jomar Group



ASPE – Phoenix (USA)

September 28th - October 3rd / Jomar Group



AHR México – Mexico City (Mexico)

October 2nd - 4th / Cosielsa



VVS – Odense (Denmark)

April 26th - 28th / Pettinaroli A/S



ISH CIHE – Beijing (China)

May 18th - 20th / HEITZ

2017.5.18 - 20 Beijing, China



REFRIAMÉRICAS – Panama

June 1st - 2nd / Pettinaroli S.p.A.



FEBRAVA – San Paulo (Brazil)

September 10th - 13th / Pettinaroli S.p.A.





“Pasito a pasito”: our ongoing projects in South America

So far, 2017 has been a very good year for our projects in South America. Thanks to the dedicate and careful work of our local staff and distributors in various Latin countries, we managed to approach some very important sites.

Felix Bulnes in Santiago de Chile (*figure 1, 2*) has been the most important project we got this year. This facility is indeed the largest hospital that has ever been built in Chile and is currently still under construction. Up to now, we have already delivered 3.000 units of 91 EvoPICV series with actuators for fancoil terminal units, but we are still waiting for the next steps in 2018, where our mission will be to install larger PICVs up to 8”.



Figure 1: Felix Bulnes Hospital in Santiago de Chile.

Another important project we have been involved in since January 2017 is the construction of **Tocumen International Airport - Terminal 2** in Panama City (*figure 3, 4*). Here we managed to specify Jomar/Pettinaroli brand, selling about 150 butterfly lug-style valves (ranging up to 20”) together with almost 1.000 ball valves. It will be extremely important for us to pay attention and focus on this project in the near future, in order to try to get also the upcoming orders of balancing valves.

Remaining in the Caribbean area, we would like to shed the light also on two prestigious hotels where, at the beginning of this year, we installed our manifolds for sanitary water distribution and our fittings: **Hotel Excellence** in Punta Cana (*figure 5*) and **Hotel Barceló El Embajador** in



Figure 2: Felix Bulnes Hospital - work in progress.



Figure 3: Expansion of Aeropuerto Internacional de Tocumen - Terminal 2 (Panama).



Figure 4: Aeropuerto Internacional de Tocumen - Terminal 2 - work in progress.



Figure 5: Hotel Excellence - Punta Cana (Dominican Republic).



Santo Domingo (figure 6), both in Dominican Republic. Such projects were won and specified through our Spanish customers.

Moreover, other luxury hotels worthy to be mentioned, where Pettinaroli Group left its mark in 2017, are **Hotel Marriott Medellin** (figure 7) and **Hotel Conrad Karibana** in Cartagena de Indias (figure 8). In these two Colombian buildings, Pettinaroli sold 234 EvoPICV (models 91, 93 and 83) and 326 complete hydronic kits with flexibles hoses and individual insulation-cases.

Moving southward, we must mention the recent project won in Paraguay. For all the football lovers, we are proud to announce Pettinaroli took part in the renovation of **Conmebol** headquarters in Asunción - Paraguay (figure 9), the oldest continental confederation in the world. Conmebol is the continental governmental body of the football associations in South America. It is one of FIFA's six continental confederations and , responsible for the organization and governance of the major football international tournaments in South America. Fratelli Pettinaroli S.p.A. managed to sell in this building all our complete range of dynamic balancing valves.



Figure 8: CONMEBOL - Confederacion Sudamericana de Futbol - Asunción (Paraguay.)

We apologize if we could not include here all our projects in South America. Our deepest gratitude goes to all our distributors, agents and staff who work hard every single day in order to bring home as many projects as possible. Thank you all.



Figure 6: Hotel Barcelò El Embajador - Santo Domingo (Dominican Republic).



Figure 7: Hotel Marriott Medellin (Colombia).



Figure 8: Hotel Conrad Karibana (Cartagena de Indias - Colombia).



Jomar Group: from the vendor program to the domestic market

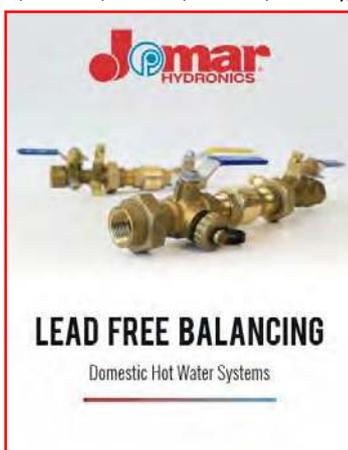
Jomar joins MCAA (www.mcaa.org), the **Mechanical Contractors Association of America**. MCAA serves the unique needs of approximately 2.600 firms involved in heating, air conditioning, refrigeration, plumbing, piping, and mechanical service. It includes the Mechanical Service Contractors of America, the Plumbing Contractors of America, the Manufacturer/Supplier Council, the Mechanical Contracting Education and Research Foundation, and the National Certified Pipe Welding Bureau. It is indeed another challenge for Jomar Group into a more and more difficult market of the plumbing sector.



Moreover, Jomar has been accepted into the **WinSupply Preferred Vendor Program** (www.winsupplyinc.com). Winsupply Inc. is a leading supplier of residential and commercial construction and industrial supplies and equipment, headquartered in Dayton, Ohio. The privately-held company has more than 570 wholesaling locations in 45 states and offers entrepreneurs the unique opportunity to own a meaningful part of the local business.



Jomar turns also its focus to **domestic hot water balancing**. The new Lead Free Terminator G, and the Terminator Recirculation Assemblies are launching currently and showing very promising results and feedback from the market. The Terminator Recirculation Assemblies allow Jomar with the flexibility to provide the contractor with any end connection they desire (NPT, SWT, MNPT, Union, F1807, F1960, Press), as well as options for a drain, check valve and strainer for their domestic hot water recirculation balancing needs. In consideration for further development in this lead free balancing line is a lead free automatic flow stick, and a thermostatic option as well. Domestic water balancing is becoming more prevalent in US engineering specification and Jomar is preparing to be a strong player as the market develops.



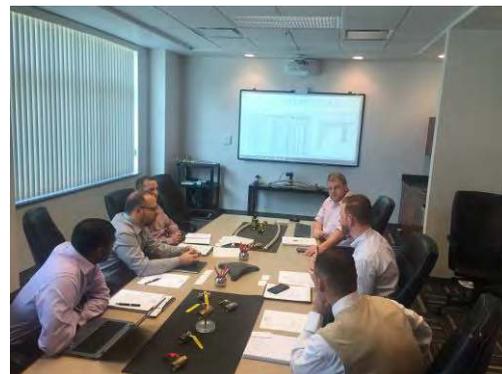
HCi paves its way to the market of PICV in North America

We are proud to announce that Hydronic Components Inc. (HCi) hires **Jeff Reardon**. With 10 years of experience in our industry, Jeff is now the new Eastern Regional Sales Manager at HCi.



HCi is currently working diligently with Johnson Controls to finalize and launch the new relationship with **JCI North America** as their supplier of PICVs, valve and actuator assemblies.

The JCI release to sales was earlier in November and the feedback from their sales staff and over 75 locations was very positive. With the help of Pettinaroli technical team, HCi is building our inventory in Michigan to support what is expected to be a great OEM customer.





A career of a lifetime in Fratelli Pettinaroli S.p.A.

On Friday evening, September 29th Fratelli Pettinaroli S.p.A. held a small but significant party internally, to celebrate our purchasing manager, **Franca Giacomini**, next to her retirement. Franca began her career back in 1975, starting working in the sales division first and gradually paving her way in the purchasing division.

Pettinaroli family and staff expressed their gratitude to Franca for these 42 years of adventure together, with our very best wishes for a well-deserved and relaxing retirement.



On that same occasion, we also celebrated another very important event: the 72 years of activity of our president, **Laura Fortis Pettinaroli**, whose working career began back in 1945 as the very first employee in Fratelli Pettinaroli. Wishing her all the best also for the years to come, Pettinaroli family awarded Mrs. Laura with a dedicated little gift: a lifetime achievement award.



The yearly convention of our Italian Association AVR

On Friday, November 10th the annual convention of AVR (Italian association of valves, taps and fittings' manufacturers) took place at Iseolago Hotel by Iseo Lake.



"Robotics and innovative technologies: a contribution to improve our firms" was the title of the convention. An event that saw the participation of many representatives and CEOs from the 61 companies of which AVR is made, as well as some important and prestigious speakers.

AVR convention opened up in the morning with a welcome speech of Ugo Pettinaroli (president of AVR and current European



president of CEIR), and continued with various constructive interventions about robotics, market statistics and indexes, technical and normative developments. In the afternoon, the manufacturing facilities of Brescia brass-rod producers ALMAG opened their doors to the attendees.





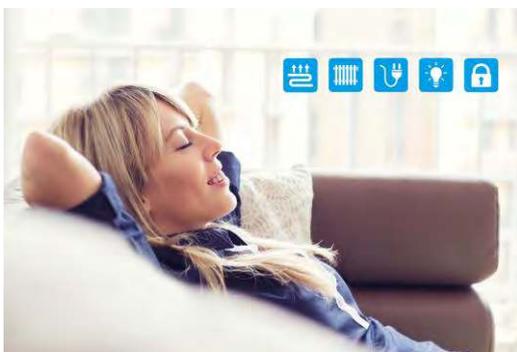
No longer the center of the Universe...

For decades we believed that the **underfloor heating system** was our centre of the Universe. Product development revolved around the idea of the system being a unique, isolated stand-alone part of the climate control in a building, especially in domestic residences. Like many other things we had to abandon this idea ten years ago, with the beginning of the iPhone generation: **Internet of Things** emerged in our daily lives.

Today Pettinaroli offers a state-of-the-art underfloor heating solution which fully integrates into a SmartHome system: the **Pettinaroli Comfort IP System**. Central to this set up is now an access point that connects and controls the functionality of every single component in this SmartHome system. It controls climate, light/shade, security systems and has an open interface to even more parts of the technical installation. In this way, our underfloor heating system is no longer the “center of the Universe” but merely an (important) peripheral component.



So, what has happened to our product development and maybe even more important: what is going to happen? Most important we are moving from “hardware intelligence” to “**software intelligence**”. For us it means simpler products. The manifold system used to be complex with valve that were fitted with a pre-setting system to balance the installation. Today the balancing is controlled by the software in the system control box. The advantage being a longer lifecycle of the mechanical components as they now perform a simple open/close operation. The software does the job, and if in the future new heat sources requires a different regulation, then the software is simply updated to provide this functionality, hence extending the life of the manifold. Working with software design instead of hardware specifications allows to combine input from sensors with output to the mechanical systems. For instance, there is no need to provide heating to a room if the windows or doors are open in that room, or if the system recognizes the environment taking the impact of the sun in the morning into consideration when deciding how aggressive heating a room if a change in the set temperature occurs.



We are far down this road already with the Pettinaroli Comfort IP system. You might say this is all well-known technology from typical Building Management Systems used in commercial buildings for years, and you are right. Where we differ is in the simplicity and in the price. Pettinaroli Comfort IP provides most of the functionality of a full-blown BMS system in residential homes and at a fraction of the cost!

So, what’s around the corner? Being a “BMS-wannabe system” demands the ability to focus on other parts of the house: lights, alarms/access control, shades, etc. We do that already! We just call it SmartHome system.

We have also taken this further and designed a human/machine interface. No, not just the apps on your SmartDevice. We provide controls by voice recognition. Talk to the Pettinaroli Comfort IP system and it obeys your commands with a gentle and polite response. By adding the **Amazon Echo® digital assistant, ALEXA**, you can control the system by natural commands: “Alexa, raise the temperature in the bathroom by 3 degrees”, and the system responds: “Increasing the temperature in the bathroom to 22 degrees” (if it was 19 degrees before, it does the math itself). In the same way you can control the light: “Alexa, turn on the light in the living room”: and she does so.



Is this a gimmick or is it useful? For blind people it is a necessity. For impaired people it is a great help. For the rest of us it is a convenience we will soon appreciate. The natural language command ability breaks down the barrier between man and machine. It really feels comfortable to speak with the system, mostly because it responds and interacts with us! Do we know this technology already? Yes! **Apples SIRI** and the **Google Assistant** allows us to talk to our smartphone. **Apple CarPlay** and **Google Auto** use the same system to interact with your car.



This brings us a bit further into the future: **your home versus your car**. In the last decade most cars have an advanced climate system. Sitting in each of the (typical) 4 seat positions in the cabin, the car provides you with a personalized climate. You do not need to suffer the unbearable heat from the sun through the window in your side of the car. You turn up the cooling and your quarter of the car temperate quickly and easily. Imagine your home mimicking your car. At the dinner table you prefer a smooth 19 degrees; your spouse is a bit cold and wants 21 degrees and both teenagers get 12 degrees, just to keep them awake and concentrated. After dinner you move to your favourite chair. Feeling a bit warm, the seat and back of the chair is set to provide a light flow of cool air, just like in your car. The same happens when you slip into bed, the madras is climatized to your preferences.

Going back to the Pettinaroli Comfort IP system and glancing at the controls we find that we input our preferences by turning a dial on the room thermostats or, in the SmartHome version, we set the temperature in the app on the SmartDevice. We must ask ourselves: Do we need to have a room thermostat to set the desired temperature? The answer is: yes, if you do not want to use the SmartHome functionality. Or talk to your digital assistant, Alexa: a simple sensor providing the ambient temperature is sufficient for the system and we have no need to interact with an old-fashioned room thermostat anymore.



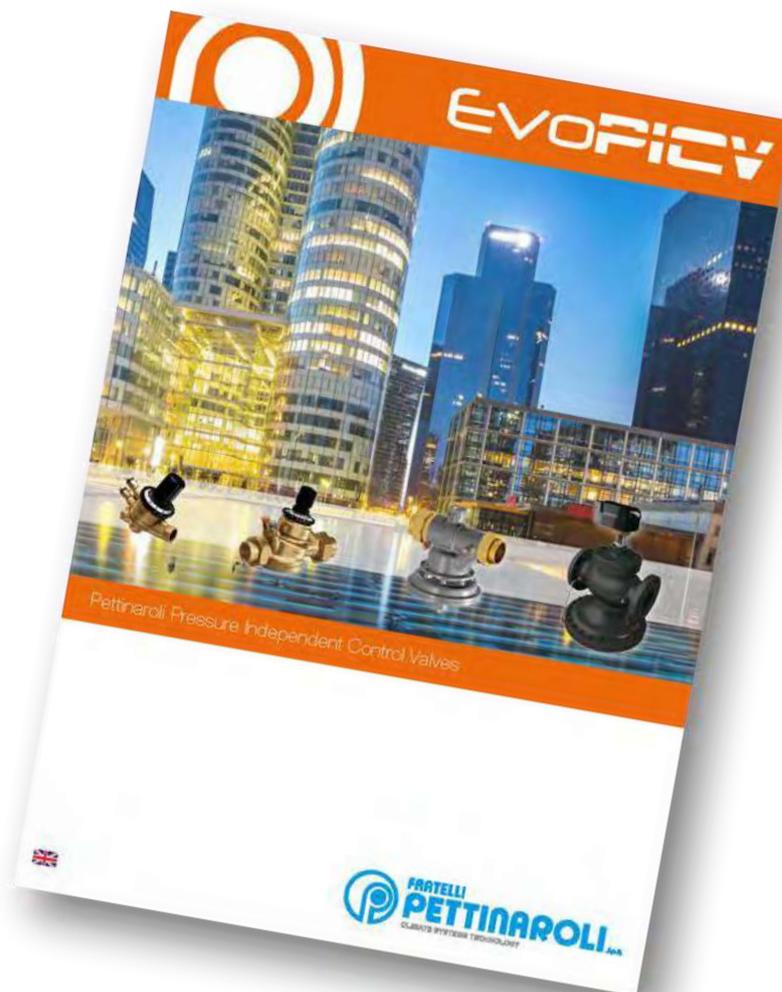
Let's take this even further: the sensor feels the ambient temperature in the room. What if the system recognized you? It detected whether you were feeling a bit too warm or too cold and adjusted the temperature accordingly? Science fiction? Goose bump detectors? No need to laugh: the sensor is already at your hand, or more accurately on your wrist. The **SmartWatch** of today measures a lot of vitals and interact with your SmartDevice. So does the Pettinaroli Comfort IP system...and it might just respond to those measurements.

Many of the technologies to personalize the ambience is already at hand; we just need to imagine how to use the incredible amount of data provided or accessible to the system. Wireless power is available (at least as wireless charging) and might just be the key to activate the micro-environment we live in. Providing cooling/heating to furniture, rooms, or even clothing. Our prediction: this is the next game-changer!

The Pettinaroli underfloor heating systems that was once the center of the Universe no longer plays this role. Important part? Yes, but today it has become so much more. Disney once said: "If you can dream it, you can do it!" Let's see how far the future takes us!!

The new EvoPICV leaflet is now available!!

A revision of our brochure of EvoPICV 2017-2018 in English language is now available, covering a range from 150 l/h up to 500.000 l/h (1/2" to 10").



Pettinaroli Group – The Chronicles, Issue Nr. 5 will be available in April 2018.

We would like to remind you that Fratelli Pettinaroli S.p.A. will be closed from
December 23rd 2017 to January 8th 2018.

We wish you and your family a Merry Christmas and a Happy New Year 2018!!