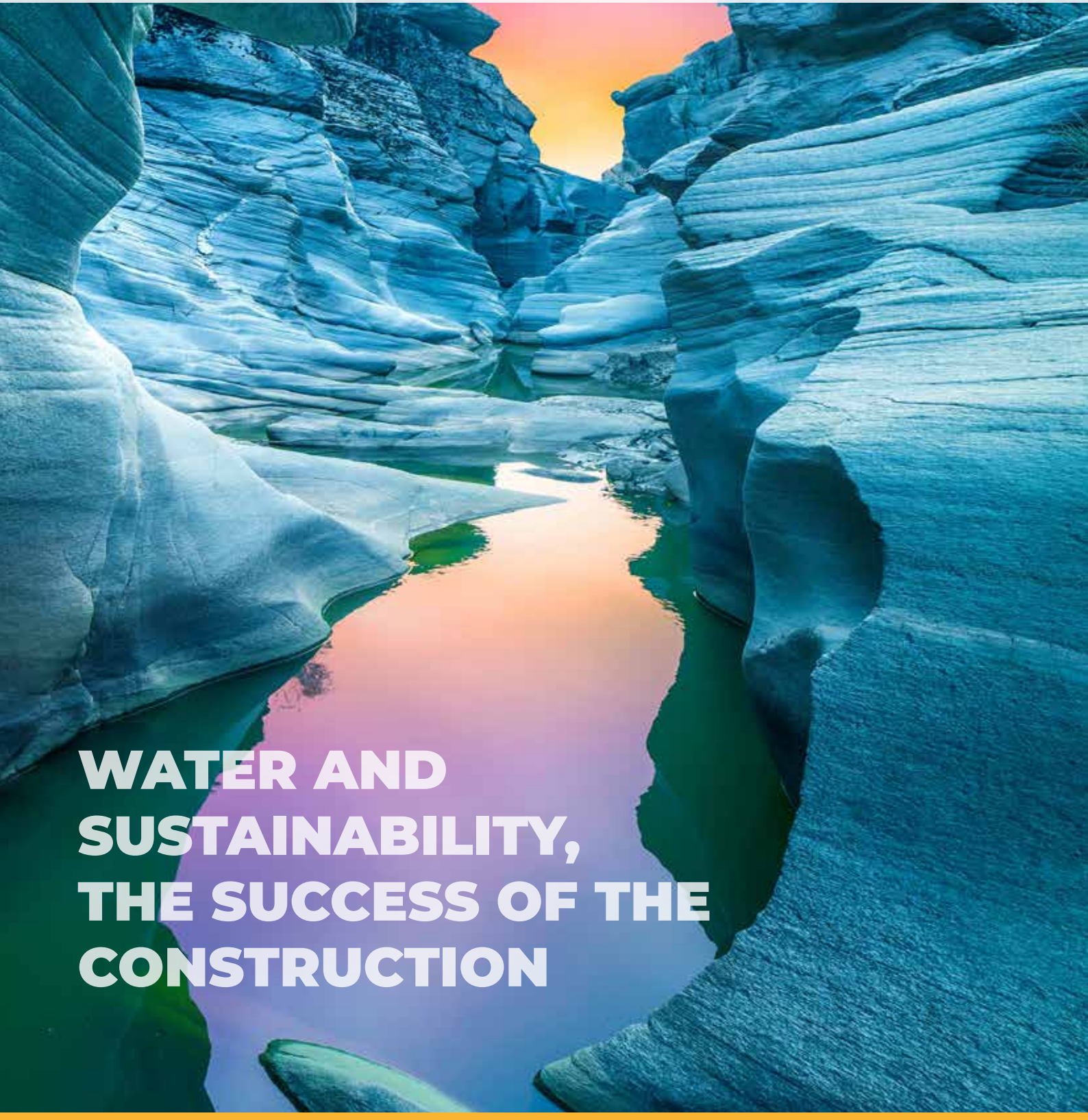
TECNO MAGAZINE by TECNOPOL



WATER AND SUSTAINABILITY, THE SUCCESS OF THE CONSTRUCTION

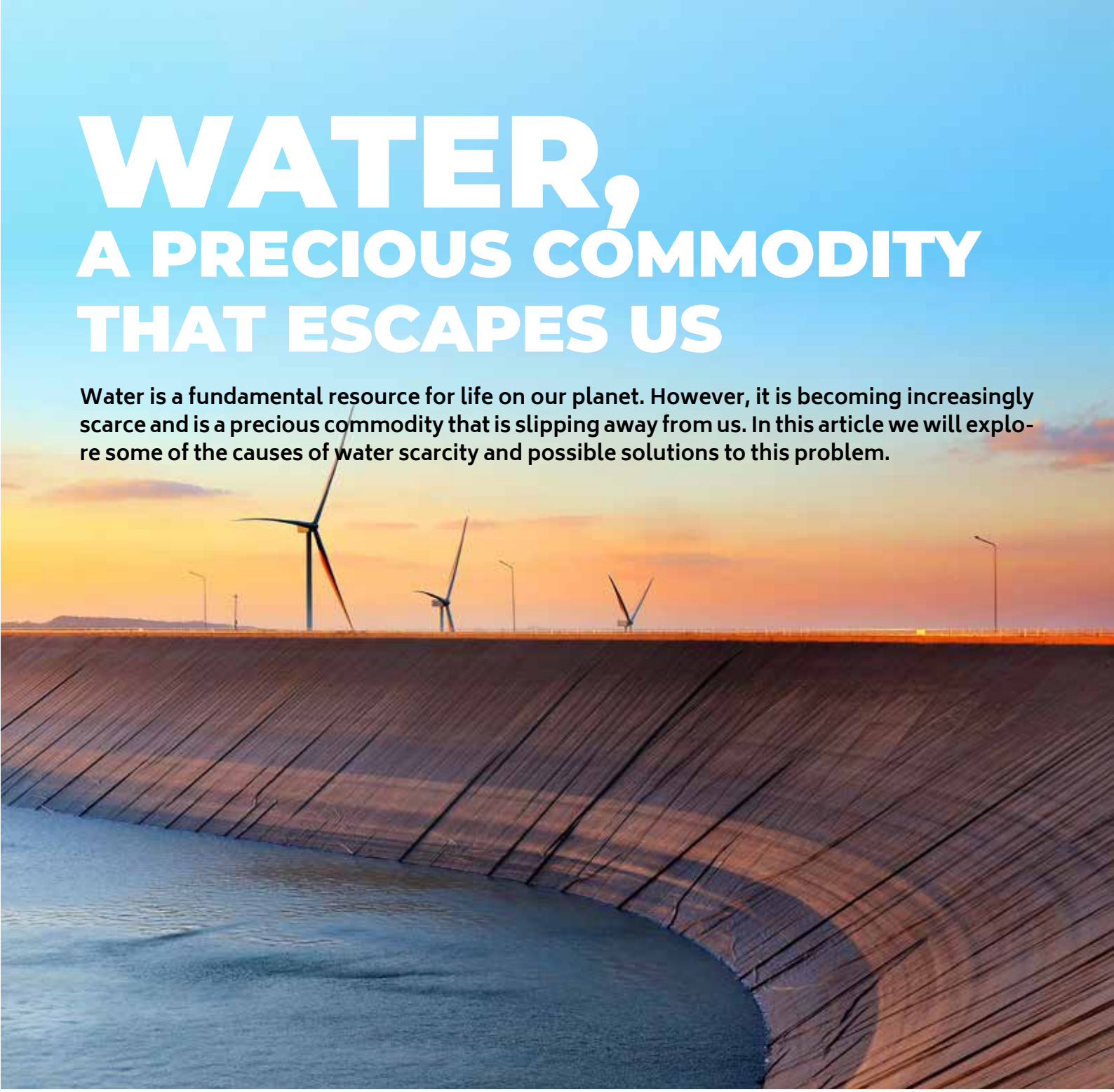
INDEX

TECNOPOL SISTEMAS, SLU
Finlàndia 33, 08520 Les Franqueses del Vallès (BARCELONA)
Tel. +34 93 568 21 11
info@tecnopol.es | www.tecnopol.es

EDICIÓN, DISEÑO, GESTIÓN DE CONTENIDOS Y REALIZACIÓN:
Dep. Marketing Tecnopol Sistemas, SLU

WATER, A PRECIOUS COMMODITY THAT ESCAPES US

Water is a fundamental resource for life on our planet. However, it is becoming increasingly scarce and is a precious commodity that is slipping away from us. In this article we will explore some of the causes of water scarcity and possible solutions to this problem.



One of the main causes of water scarcity is climate change. Rising temperatures in many parts of the world have led to increased evaporation of water, which means that less water is stored in lakes, rivers and aquifers. In addition, climate change has also led to greater variability in rainfall patterns, leading to longer and more severe droughts in many parts of the world. Another major cause of water scarcity is the overexploitation of water resources. Many regions of the world are using more water than they can recharge, which has led to declining groundwater levels and salinisation of aquifers. In addition, the construction of dams and the canalisation of rivers has also altered the natural flow of water, which has had a negative impact on aquatic ecosystems and biodiversity. Water pollution is also a serious problem in many countries. The release of toxic substances into rivers and lakes can have devastating effects on human health and biodiversity. In addition, water pollution can also limit its use for agricultural and industrial purposes.

Despite these challenges, there are solutions to address water scarcity. One is the adoption of more sustainable water use practices, both in domestic, industrial and agricultural water use. This can include the use of more water-efficient technologies, smarter irrigation management and wastewater reclamation. The conservation of aquatic ecosystems is also essential to secure long-term water supplies. Restoring river flows, protecting wetlands and promoting sustainable agriculture can help maintain natural water resources.

Spain loses 25% of its water supply, 15% due to leaks and breaks in the distribution network.

According to various studies in Spain, the level of water losses is equivalent to 25% of total consumption, including both real losses (15%) and apparent losses (10%).The level of water losses refers to the amount of water that is lost between supply and consumption by end users. These losses can occur at any stage of the supply process, including distribution, storage and delivery of drinking water.

There are two types of losses: real and apparent. Real losses are measurable and are due to breaks, breakdowns and leaks in the distribution network.

On the other hand, apparent losses are due to metering errors, fraud and unmeasured authorised consumption. There are several reasons for these water losses in the distribution network.

One of the main reasons is the age of the water infrastructure, which in many cases has been built decades ago and has not been properly renovated and maintained. There are also network design and construction problems, such as poorly installed or designed pipes, which can contribute to leaks and breaks.

To address this problem, the Spanish authorities have implemented various measures. These include the renovation of water infrastructure, the promotion of more efficient water management technologies and the improvement of network maintenance and repair processes. In addition, awareness-raising and sensitisation measures aimed at end-users have been put in place to promote more efficient water use and reduce waste.

REPAIRING TANKS AND WATER LEAKS WITH CERTIFIED LIQUID MEMBRANES: A LONG-LASTING AND SAFE SOLUTION

Royal Decree 140/2003 establishes the sanitary criteria for the quality of water for human consumption. In relation to the membranes used in tanks and pipes, this decree requires that they must be certified for contact with water intended for human consumption. Therefore, the use of membranes certified in accordance with RD140/2003 is a guarantee that safe materials suitable for contact with drinking water are being used in the repair of leaks and tanks.

At **Tecnopol** we have two certified solutions for the repair of water tanks and pipes.

The first is DESMOPOL DW, a **manually appliedtwo-component polyurethane membrane,** which is characterised by its ease of application and excellent mechanical properties.

The second option is TECNOCOAT P-2049, a w**aterproof polyurea membrane** that is applied hot by spraying equipment. This membrane dries quickly and has impressive mechanical properties, making it ideal for repairs in highly demanding areas.

Both options are certified for contact with water intended for human consumption and guarantee the safety and quality of the water supplied.

The application technique of the liquid membrane is relatively simple and consists of the preparation of the surface to be repaired, the application of the primer and the application of the liquid membrane in several layers until the desired thickness is reached. The liquid membrane adheres perfectly to the surface, covering any cracks or crevices and forming a durable waterproof layer. The advantage of the liquid membrane is that it is very flexible, which makes it ideal for use in tanks that are subject to deformation due to changes in temperature or water pressure. In addition, the liquid membrane is highly resistant to chemicals and corrosion, which makes it suitable for use in water tanks containing corrosive substances.

In conclusion, tank repair with liquid membranes is an effective and durable solution for water leaks in tanks. Liquid membranes are easy to apply, resistant and safe for contact with water intended for human consumption, making them an ideal choice for water tank repair.

DESMOPOL DW

SAFE WATERPROOFING OF DRINKING WATER TANKS AND PIPELINES

Water tanks and pipes are key elements in any drinking water supply system. However, over time, leaks and cracks can develop in these structures, which can jeopardise the quality and safety of the water supplied. It is in these cases that DESMOPOL DW, Tecnopol's solution for the repair of water tanks and pipes, becomes an ideal option.

DESMOPOL DW is an easy to apply two-component polyurethane membrane that has been specially designed for the repair of water tanks and pipes. Thanks to its mechanical properties, this membrane is able to effectively seal leaks and cracks, thus preventing water loss and maintaining the quality and safety of the water supplied.

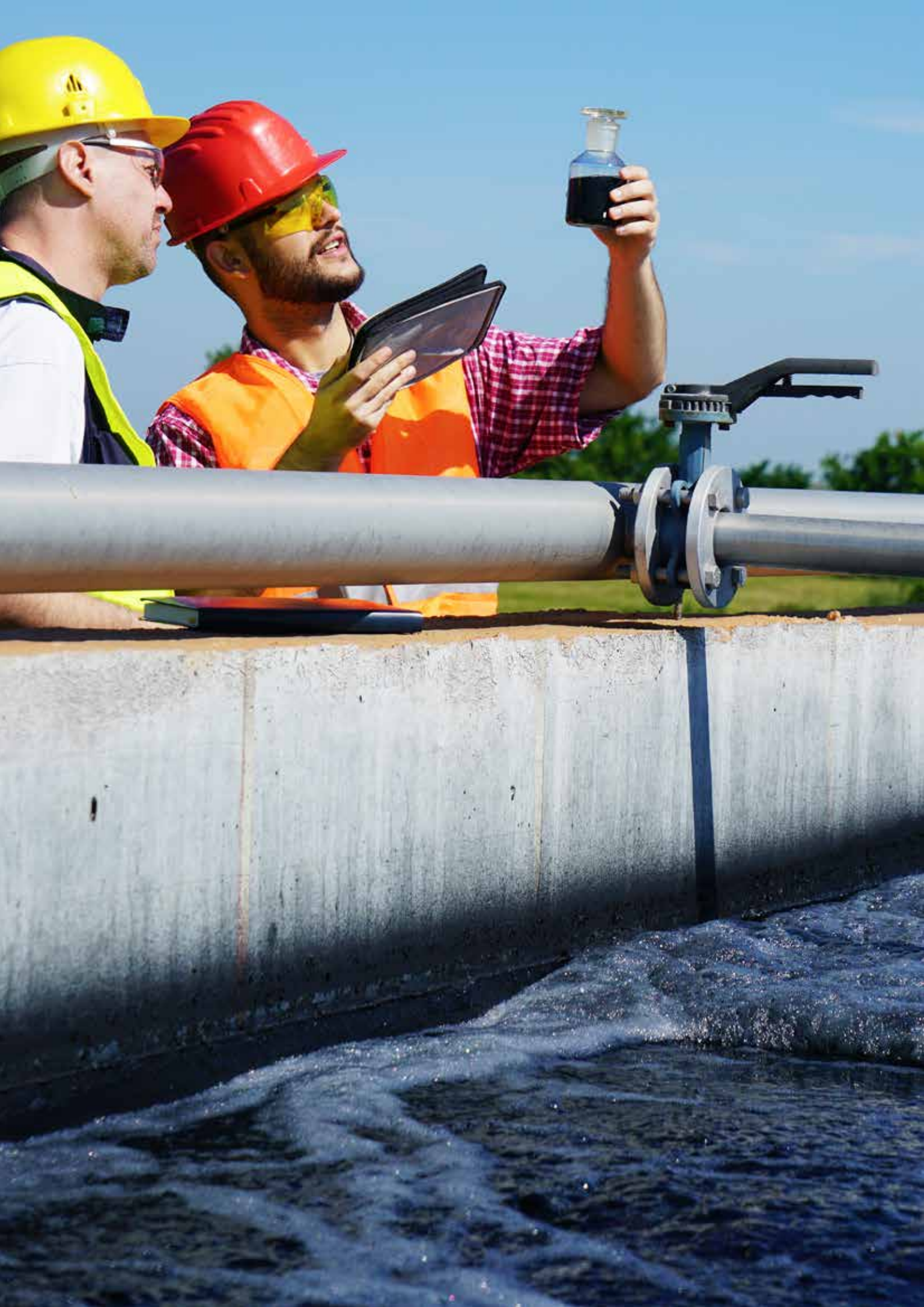
One of the main advantages of DESMOPOL DW is its ease of application. As it is a two-component polyurethane membrane, it is applied manually, which allows for greater precision in application and greater adaptability to the different shapes and sizes of tanks and pipes. In addition, its drying time is relatively short, which allows the repaired structures to be quickly put into service.

Another advantage of **DESMOPOL DW** is its high resistance to weathering and chemical agents present in water, which guarantees long-term durability and reliability. In addition, this membrane complies with the safety and quality regulations for contact with water intended for human consumption, which guarantees that the water supplied is safe and of high quality.

In short, **DESMOPOL DW** is an effective and reliable solution for the repair of water tanks and pipes. Its easy application, high resistance and certification for contact with water intended for human consumption make it an ideal choice for ensuring the quality and safety of drinking water supply.

DESMOPOL DW, the membrane that complies with RD140/2003 and WRAS regulations for the safety of drinking water.

DESMOPOL DW has obtained the RD140/2003 certificate, the Spanish regulation that establishes the minimum requirements that water intended for human consumption must meet in order to guarantee the protection of public health. This regulation is applicable to all types of materials and objects used in drinking water installations, including tanks and waterproofing membranes. Compliance Compliance



Compliance with RD140/2003 is essential to guarantee the quality and safety of water intended for human consumption. For this reason, **DESMOPOL DW** has been rigorously tested and complies with all the requirements set out in this regulation, making it a safe and effective solution for waterproofing and repairing water tanks.

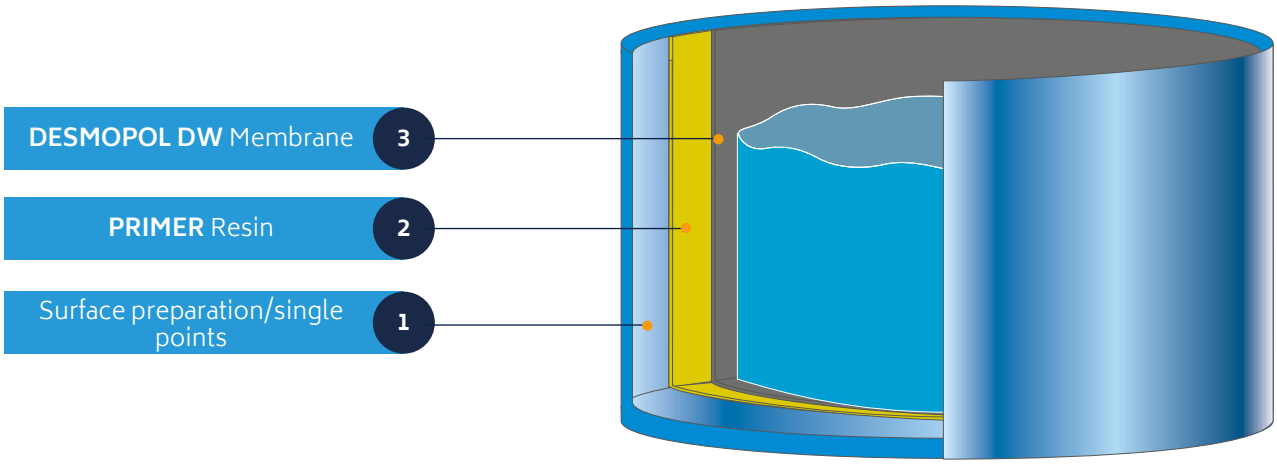
.

In addition, **DESMOPOL DW** is also WRAS certified, the UK's most recognised quality mark for materials and products for drinking water supply. This certificate is awarded by the Water Regulations Advisory Scheme, an independent body that carries out rigorous tests to assess the quality and safety of products used in the water industry

.

The **WRAS** certificate guarantees that **DESMOPOL DW** meets the quality and safety requirements set by **WRAS**, demonstrating its suitability for use in applications in contact with water intended for human consumption.

In short, **DESMOPOL DW** is a high quality polyurethane membrane that meets the requirements of the **RD140/2003 and WRAS** regulations, which guarantees its safety and quality for use in the waterproofing and repair of water tanks and structures in contact with water intended for human consumption.



DESMOPOL DW
THE PERFECT SOLUTION FOR WATERPROOFING AND REPAIRING SWIMMINGPOOL

Swimming pools are a great investment and a source of fun and relaxation all year round. However, over time, the pool can become structurally flawed and its finish damaged, which can lead to water leaks and other problems. In these cases, it is important to carry out repairs and maintain it in good condition.

An effective solution for both the construction and repair of swimming pools is the use of **DESMOPOL DW** liquid polyurethane membrane for total waterproofing in combination with **TECNOTOP 2CP** aliphatic finish.

The two-component **DESMOPOL DW** liquid polyurethane membrane is a highly resistant waterproofing material that adheres to any type of surface, including concrete, mortar, ceramic and other building materials. This material is easy to apply even on vertical surfaces and is ideal for preventing water leaks.

To repair or construct a swimming pool with **DESMOPOL DW** liquid polyurethane membrane, several important steps must be followed. First, the pool surface must be prepared by removing all traces of dirt, grease, oil and other contaminants. The surface must be completely dry and free of any moisture.

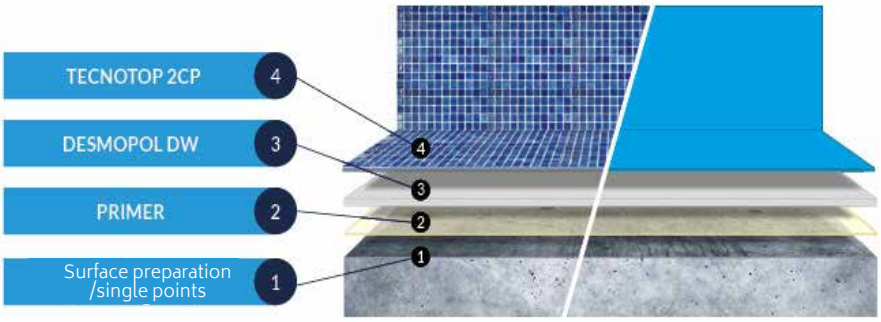
A primer coat from our **PRIMER** range is then applied to ensure proper adhesion of the liquid membrane. After application of the primer, **DESMOPOL DW** is applied with a trowel or short nap roller to ensure even distribution of the product. Once dry, it is important to carry out leak tests to ensure that there are no leaks. If leaks are detected, additional coats of liquid membrane can be applied to the affected areas.

Once the **DESMOPOL DW** liquid polyurethane membrane has been applied to the walls and floor of the pool, it is important to apply a high quality finish to ensure resistance to sun and chlorinated water. In this respect, the **TECNOTOP 2CP** top coat is an excellent option to provide additional protection to the pool structure.

TECNOTOP 2CP is a two-component finish coat that offers excellent resistance to weathering, chemicals used in pool maintenance and abrasion. This coating is applied over the **DESMOPOL DW** liquid polyurethane membrane in several layers, with a total thickness of between 300 and 500 microns, depending on the size and shape of the pool.

The **TECNOTOP 2CP** top coat is resistant to discolouration and fading, which means that the appearance of the pool will be maintained for many years. In addition, this coating offers excellent adhesion to the pool surface, ensuring long-lasting protection and resistance to chlorinated water.

In conclusion, repairing swimming pools with **DESMOPOL DW** liquid polyurethane membrane and finishing with **TECNOTOP 2CP** is an excellent option to guarantee the durability and protection of the pool structure as well as giving a modern, coloured aesthetic finish that is easy to clean and maintain. The use of these materials offers excellent resistance to water, sun and chemicals used in pool maintenance, which means that the pool will remain in excellent condition for many years. In addition, the application of these materials is quick and easy, which saves time and costs in the pool repair process.



WE OBTAIN ISO:9001

CONFIRMS TECNOPOL'S COMMITMENT TO EXCELLENCE AND CUSTOMER-CENTRIC QUALITY.

At Tecnopol, **we are proud to have obtained ISO 9001 certification,** an international quality management standard recognised worldwide. Obtaining this certification is a significant achievement for our company and demonstrates our commitment to excellence and customer satisfaction.

ISO 9001 sets out the requirements for an effective quality management system (QMS) in an organisation. This includes defining processes, identifying objectives, measuring and analysing results, and implementing continual improvement. By achieving ISO 9001 certification, we have demonstrated that we meet all of these requirements and that we are committed to quality in everything we do.

The process of becoming ISO:9001 certified began several years ago when we decided it was time to implement a formal quality management system in our company. We knew this would allow us to improve efficiency, reduce errors and increase customer satisfaction, but we also knew it would be a challenge.

It is important to note that ISO 9001 certification is not an end in itself, but a means to achieve continuous improvement in our company**. We continue to evaluate and improve our processes and procedures to ensure that we meet the requirements of the standard and satisfy the needs and expectations of our customers.**

It is important to note that **ISO 9001 certification** is not an end in itself, but a means to achieve continuous improvement in our company. We continue to evaluate and improve our processes and procedures to ensure that we meet the requirements of the standard and satisfy the needs and expectations of our customers.

At **Tecnopol**, we believe that **quality is the key to business success. ISO 9001 certification** is an essential tool to ensure quality and excellence in everything we do. We are proud to have obtained this certification and we are committed to continuously improve our processes and procedures to provide our customers with the best possible products and services.

JESÚS LUQUE,
QUALITY MANAGER OF TECNOPOL

Jesús Luque is the current head of **Tecnopol's** quality system. With more than 10 years of experience in the sector, Jesús is an expert in quality management and has been instrumental in **Tecnopol** obtaining ISO 9001 certification.

As the person responsible for the quality system, Jesús is in charge of supervising and guaranteeing the correct application of the processes and procedures necessary to ensure the quality of the products and services offered by **Tecnopol.**

His experience and knowledge in the area of quality have been key to obtaining ISO 9001 certification, a globally recognised standard that guarantees the quality of a company's processes and products.

In this interview, Jesús talks about his experience in the sector and the importance of quality management at **Tecnopol.**

What is your job as Quality Manager?

Making a quick summary, we could say that it mainly consists of implementing a quality management system and ensuring its compliance through a continuous improvement system.

How important do you consider a quality management system to be in an organization? What advantages does it bring?

I believe that a quality management system is crucial in any organization that seeks to improve the efficiency of its processes, products, and services. These systems provide a solid foundation for planning, implementing, controlling, and continuously improving quality in all aspects of the organization.

The advantages offered by these types of systems can be summarized mainly in the following four points:

Improved customer satisfaction: By focusing on customer satisfaction, it helps the organization meet and exceed its customers' expectations.

Enhanced process efficiency: A quality management system enables the identification and elimination of inefficiencies, reducing errors, and streamlining processes

Increased productivity: By standardizing and optimizing processes, a quality management system promotes increased productivity, allowing the organization to deliver products and services more efficiently.

What are the main challenges you face in maintaining high quality standards in the company?

It is certainly not easy to maintain high quality standards. Obtaining and, above all, maintaining a quality system is hard work and costly, both in terms of time and resources. If we go into the challenges we could say that they are mainly:

Resistance to change: often, the changes necessary to improve quality can be perceived as threats by some members of the organisation. It is important to overcome this resistance to change and ensure that all members of the organisation are committed and willing to implement the necessary changes to improve quality. As mentioned above, maintaining high quality standards can require considerable resources, such as time, trained staff and advanced technology.

If the organisation does not have sufficient resources to support the quality management system, it may not be able to maintain high quality standards in the long term.

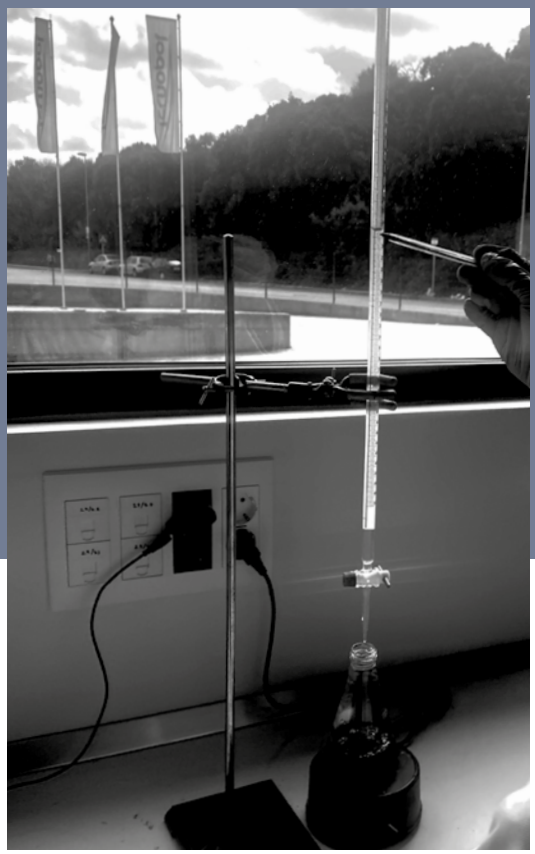
Finally, a challenge that has proven to be of vital importance in recent years are the changes in market demand and expectations that force the organisation to constantly adapt its processes and products/ services to maintain high quality standards. This may require a rapid response capability and constant attention to market trends and needs.

Tecnopol has recently obtained ISO9001, what has been your role in obtaining this certification?

My role in the process has been mainly that of coordination and project management of the implementation of the quality management system. I have worked together with colleagues from both Tecnopol and the quality departments of Mapei Corporate and Spain. I would like to take this opportunity once again to thank the whole team for their work. Without their efforts, it would not have been possible to obtain the ISO accreditation with such an important certifying company as Certiquality. I am very happy and proud of the work we have done together.

What skills do you think are essential for a Quality Manager?

How have you developed these skills in your professional career?



Having been involved in this implementation process, in my opinion it is important that the quality manager has a strong knowledge of the company or system in which he/she wants to implement the management system. If we were talking about skills in a general way, I would say that technical knowledge and analytical skills are essential to identify possible problems and opportunities for improvement. Likewise, **skills related to communication, leadership and problem solving are quite important skills as well. As I mentioned earlier in the challenges of the system, resistance to change and team involvement** is vital for a successful implementation of the system, so good leadership and especially communication skills help to overcome these difficulties.

How do you foster a culture of quality throughout the organisation and what strategies do you employ to ensure that all employees understand the importance of quality and are committed to the company's standards?

Primarily by clearly communicating the importance of quality: It is essential that all employees understand the importance of quality and how their work affects the overall quality of the company. Clear and effective communication is essential to ensure that all employees are aligned with the organisation's quality objectives.

Providing training in quality skills and techniques can help employees understand how their actions affect the overall quality of the organisation.

Continuous training and development is essential to keep employees up-to-date and motivated in quality improvement and is the best way to involve employees in their own quality improvement.

Finally, it is essential to set clear and measurable goals; this helps employees to understand the organisation's quality objectives and how their work contributes to achieving them. Once the goals have been achieved, quality achievements should be recognised and rewarded. Positive feedback is essential to keep employees motivated and committed to quality improvement.

What methodologies or tools do you use to assess and improve the quality of the company's products or services? How do you identify and address areas for improvement?

There are various methodologies and tools that can be used to evaluate and improve a company's services. They range from internal audits, data analysis or external feedback from customer satisfaction surveys.

In this sense, **this year we are aiming to launch a new customer satisfaction survey for our customers as well as other means to evaluate and study the results in order to obtain a better overall picture and find possible points for improvement.**

Normally, once the points of improvement have been established, we always work on each one of them as an independent project, always following the same four points: Analyse the data, set objectives, develop the action plan and finally a follow-up and final evaluation. This system is applicable to practically any project, not only for improvement actions.

You have been with Tecnopol for more than 6 years, in terms of quality, how do you consider that the company has evolved over this time in terms of quality?

Since I started working at **Tecnopol** there has been a huge change in this respect.

When I started, quality control and management were very basic. The quality policy was not implanted in the roots of the company. **If there is one thing I can say that I am proud of, it is that we have gradually created a greater awareness of the importance of quality in the company. We have implemented new strategies and practices to improve quality, such as conducting internal and external audits, adopting best practices** and quality standards. This has all concluded in **obtaining the ISO 9001 certification.**

What challenges do you foresee for the future in terms of quality in the industry where Tecnopol is located? How do you plan to face these challenges?

In terms of quality in the chemical industry, the future is going to be really challenging.

What I think is going to be the main challenge is the increasing demand for more sustainable and environmentally friendly chemical products. This year, for example, new legislation and restrictions on disocyanate formulations come into force, forcing us all to modify our formulations to comply with the new European policies. This is linked to what I believe will be the next big challenge,

which is the need to comply with increasingly strict regulations and standards in terms of safety, health and the environment. And of course we cannot fail to mention globalisation of competition and increased pressure on finished product prices.

The enormous global uncertainty has made everything surrounding global sales much more difficult.

Finally, a challenge that I believe is more of an opportunity is the very rapid evolution of technology and the need to adapt to this evolution. **The emergence of AI on the global scene can be a great tool for management from R&D to quality management.**

Finally, a challenge that I believe is more of an opportunity is the very rapid evolution of technology and the need to adapt to this evolution. **The emergence of AI on the global scene can be a great tool for management from R&D to quality management.** **To face future challenges in the chemical industry, we must continue to work in terms of excellence as we have done so far.**

That is to say, working in terms of quality, it is essential to develop a comprehensive strategy that fosters continuous improvement, risk management, innovation, training and collaboration.

Case Study:

Rosa Agustina Resorts and Spa

Where comfort, elegance and natural beauty come together.

Rosa Agustina Resorts and Spa is a dream destination that combines natural beauty with world-class amenities. Strategically located in a setting of lush rolling hills and majestic mountains, Rosa Agustina is a true nature lover's paradise.

With breathtaking panoramic views, it immerses you in an atmosphere of peace and serenity, far from the hustle and bustle of the city. This spa is located in the commune of Guanaqueros, Coquimbo Region, this resort joins the existing Rosa Agustina in Olmué, Valparaíso Region.

Elegance and comfort are the hallmarks of Rosa Agustina. Its luxurious rooms and suites have been meticulously designed to provide maximum comfort and privacy. From cosy rooms overlooking the gardens to spacious suites with private balconies offering breathtaking panoramic views, each space has been created with your well-being in mind.

Behind its splendour is a major construction project, with Tecnopol playing a key role in the waterproofing phase. In this article, we will explore how Tecnopol's waterproofing systems have ensured the integrity and durability of the pools, fountains and flat roofs, paving the way to a world-class destination.

The waterproofing phase

A crucial step in the construction project:

In any construction project, the waterproofing phase plays a vital role in protecting the structures and ensuring their longevity. In the case of Rosa Agustina Resorts and Spa, Tecnopol was selected to provide its polyurea waterproofing systems on a total area of 8,000 square metres for the pools and fountains, as well as 10,000 square metres for the flat roofs.

Tecnopol polyurea waterproofing systems, unmatched performance and durability:

Tecnopol is recognised in the industry for its state-of-the-art polyurea technology, which offers a superior level of performance and durability compared to other conventional waterproofing systems. Polyurea is a liquid resin that is applied in spray form, creating a high-strength waterproof coating that adheres durably to almost any surface.

In the case of the pools and fountains, the **TECNOCOAT P-2049 AQUA** polyurea waterproofing system was applied to a total surface area of 8,000 square metres.

This process guarantees impeccable watertightness, preventing leaks and maintaining the structural integrity of the aquatic facilities. In addition, the system employed provides a surface that is resistant to wear and tear and to the chemical products used in pool maintenance, prolonging its useful life and reducing maintenance costs in the long term.

For flat roofs, Tecnopol applied its T**ECNOCOAT H-2049** polyurea waterproofing system, which has a **European Technical Assessment (ETE 20/0263)**, according to the **European guideline DEE 030350-00-0402** for waterproofing walkable flat roofs, on an area of 10,000 square metres. This innovative solution protects roofs from the damaging effects of moisture, preventing leaks and reducing the risk of structural damage due to water accumulation.

A successful project, a world-class destination:

Thanks to the collaboration with Tecnopol, the Rosa Agustina Resorts and Spa construction project has achieved superior levels of quality and durability in its waterproofing phase. Tecnopol's polyurea technology has provided an innovative and reliable solution to protect the resort's pools, fountains and flat roofs.

TECNOCOAT P-2049 AQUA on a total surface area of 8,000 sqm

Wear and chemical resistant surface

TECNOCOAT H-2049 polyurea waterproofing for roofs

Case Study:

BUS STATION OF CORDOBA BUS STATION

Protecting the archaeological site of Cercadilla

The Cercadilla site is **an important archaeological site located in the city of Cordoba**, Spain. This site is located in the heart of the city, underneath the Cordoba bus station.

The Cercadilla site **was discovered in 1970** during the construction of the bus station. Since then, numerous archaeological excavations have been carried out which have uncovered important remains from the Roman and Visigothic periods.

The Cercadilla site **has an extensive system of galleries, rooms and cisterns that show the complexity and richness of Roman architecture in the city.** In addition, various objects have been found at the site, such as coins, ceramics and other artefacts that help us to understand the daily life of the inhabitants of the period.

The fact that the **Cercadilla site is located underneath the Cordoba bus station** represents a great challenge for the archaeologists working on the site, but also poses a risk to the conservation of the site itself.

Water and motor oils, a risk for the conservation of the site. In order to protect the site from damage caused by water and other liquids, it has been necessary to waterproof the bus traffic area of the station. Water and humidity can cause serious conservation problems to archaeological materials, such as corrosion of metal, decomposition of wood or degradation of stone materials.

In addition, water can also cause soil erosion and cracking, which could endanger the integrity of the site.

Waterproofing and protection works. For the waterproofing of the traffic area, the technical team has chosen a high-performance waterproofing system using high-quality waterproofing materials that ensure lasting protection of the site.

In this specific case, the **TECNOCOAT** waterproofing system based on pure polyurea has been used, an extremely resistant elastomer that protects and waterproofs the entire bus parking area and the entire bus taxiing area, as well as having sufficient resistance and adherence to withstand the continuous traffic and rolling of these vehicles.

SYSTEM USED

In this project, the TECNOCOAT system used consisted of the following layers:

1. Preparation of the substrate and singular points.
2. Preparation and waterproofing of expansion joints and structural joints.
3. Primer coat with PRIMER Pu-1050 in dry areas and PRIMER WET in wet areas.
4. Waterproofing layer with **TECNOCOAT P-2049 Polyurea.**
5. UV protection layer with **TECNOTOP 2C Black.**
6. Anti-slip layer with silica sand dusting.
7. Top coat with **TECNOTOP 2C Black** + road markings.

The TECNOCAT P-2049 system guarantees the protection of the archaeological site while the bus station remains operational.

1

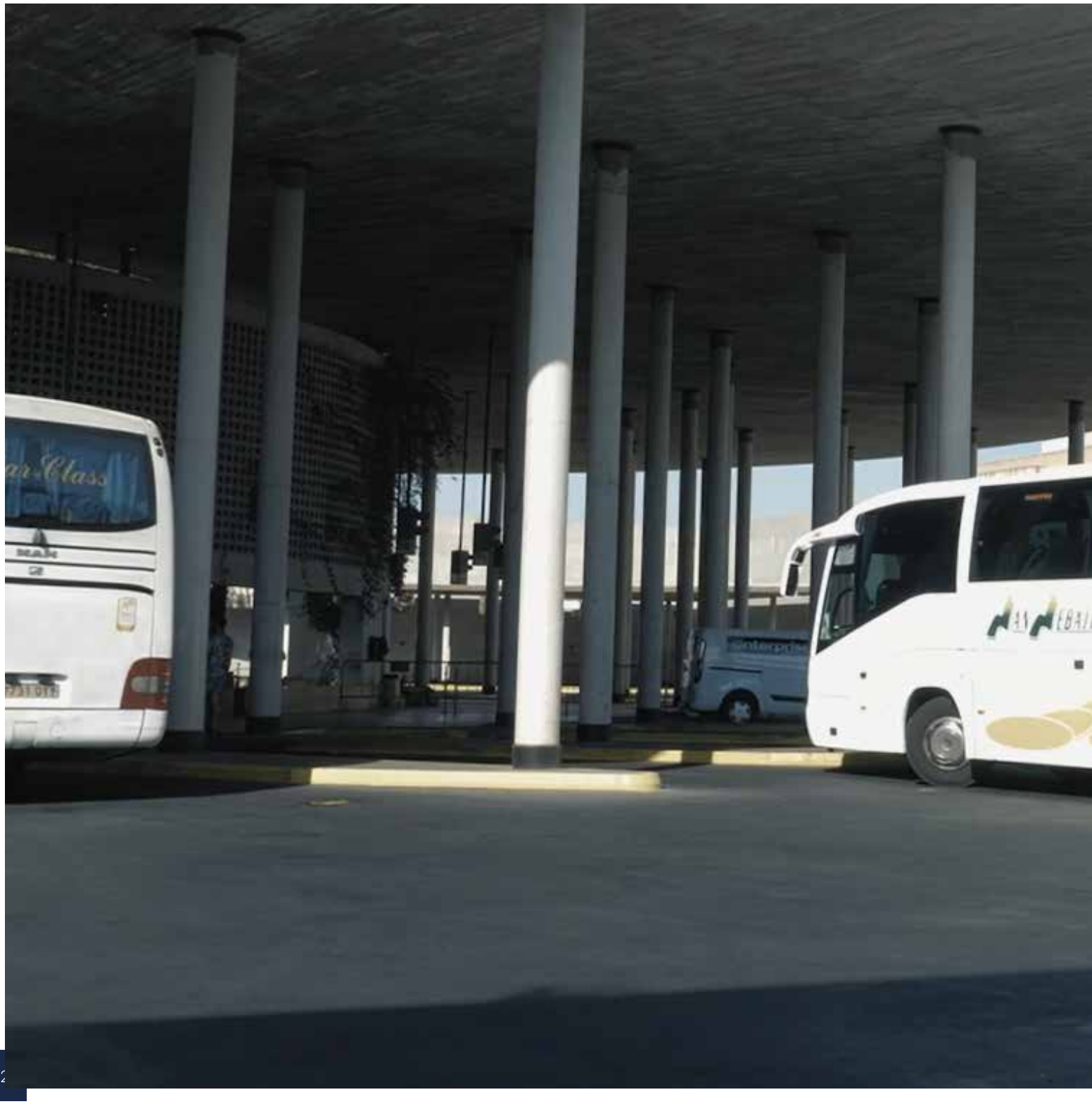
2

3

4

5

6




Transportes Públicos de
Andalucía
MAN

RIVER

Renovation continues: second phase of waterproofing of the Mas Monumental stadium awarded

The River Plate Monumental stadium is an icon of world football, known for its majesty and passion. As part of the renovation project of this emblematic stadium, **Tecnopol** has been awarded the second phase of the waterproofing of the stands. With its **TECNOCOAT** polyurea system, Tecnopol will be responsible for protecting an additional 36,000 square metres of existing and newly constructed stands, using the same successful approach employed in the first phase of 27,000 square metres. **Tecnopol** continues to demonstrate its expertise and commitment to excellence in protecting iconic structures.

Protecting the essence of the stadium**Más Monumental**:

River Plate's Monumental stadium is much more than a football venue. It is a temple of emotions and unforgettable experiences. To ensure that this symbol lasts over time, the waterproofing of the stands plays a fundamental role and **Tecnopol** has been selected as a trusted partner to provide long-lasting and effective protection.

The proven effectiveness of polyurea technology:

Tecnopol an industry leader thanks to its advanced polyurea technology. This waterproofing system has proven its effectiveness in demanding projects, providing long-lasting protection against leaks and dampness. In the first phase of waterproofing the stands of the **Monumental stadium, Tecnopol** applied its **TECNOCOAT** polyurea system with exceptional results, guaranteeing the integrity of the structures and preserving the passion of the fans.

The second phase: a further step towards complete protection.

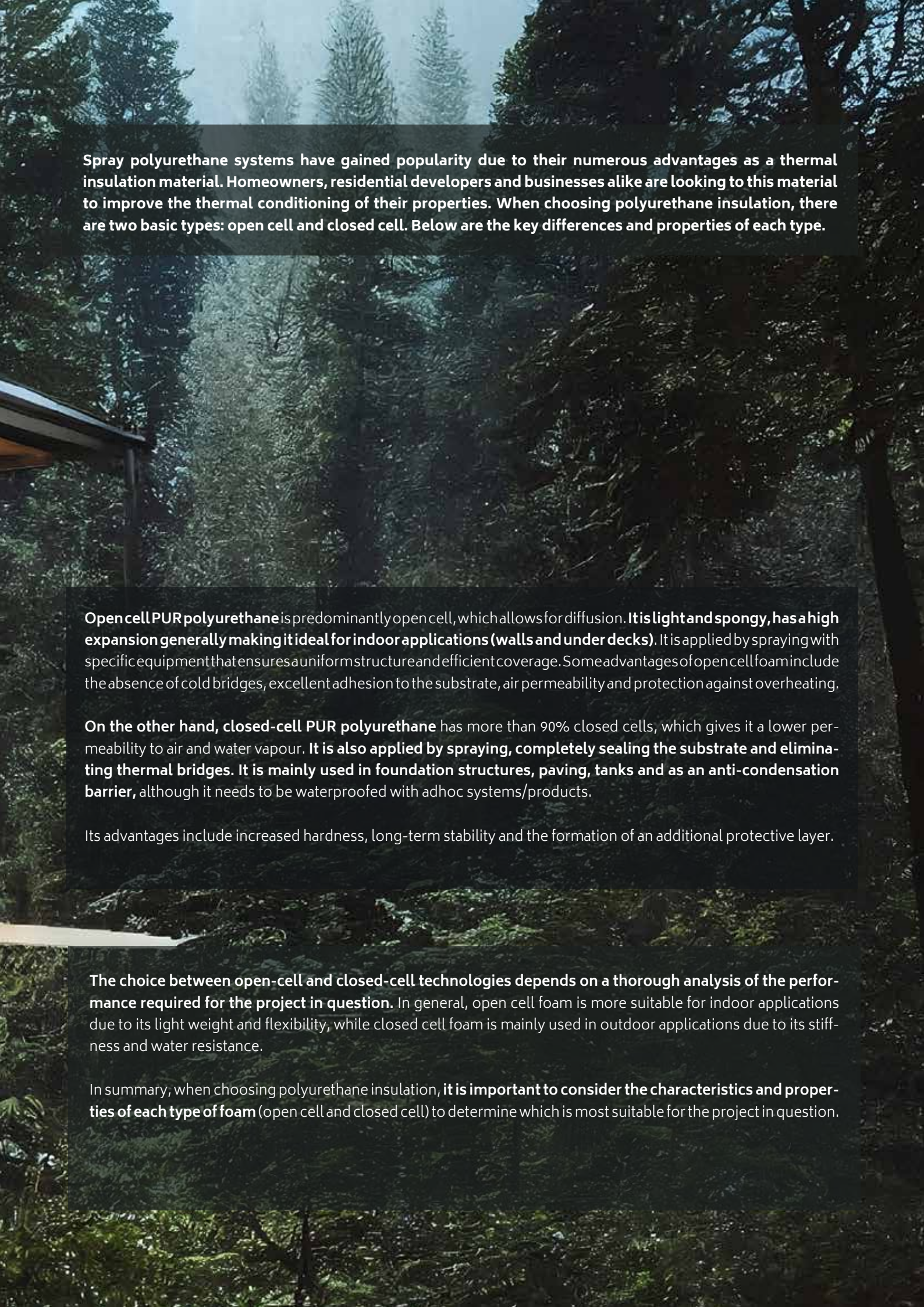
The award of the second phase of the waterproofing of the stands at **River Plate's Monumental stadium to Tecnopol** is a testament to the trust placed in its expertise. With a further 36,000 square metres to be waterproofed, Tecnopol will use its polyurea system to ensure that the stands are protected against moisture and leaks for years to come.

A bright future for the **Monumental stadium:**

Thanks to the collaboration with Tecnopol, **River Plate's Monumental stadium** will continue to be a meeting place for football passion and dreams. The durable protection of the stands will ensure that fans can enjoy every moment without worrying about inclement weather or moisture-related problems. **Tecnopol**, with its experience and state-of-the-art technology, has become a reliable partner in the protection of iconic structures.

PLATE

PROTECT YOUR HOME WITH THE BEST
THERMAL INSULATION



Spray polyurethane systems have gained popularity due to their numerous advantages as a thermal insulation material. Homeowners, residential developers and businesses alike are looking to this material to improve the thermal conditioning of their properties. When choosing polyurethane insulation, there are two basic types: open cell and closed cell. Below are the key differences and properties of each type.

Open cell PUR polyurethane is predominantly open cell, which allows for diffusion. **It is light and spongy, has a high expansion generally making it ideal for indoor applications (walls and under decks)**. It is applied by spraying with specific equipment that ensures a uniform structure and efficient coverage. Some advantages of open cell foam include the absence of cold bridges, excellent adhesion to the substrate, air permeability and protection against overheating.

On the other hand, closed-cell PUR polyurethane has more than 90% closed cells, which gives it a lower permeability to air and water vapour. **It is also applied by spraying, completely sealing the substrate and eliminating thermal bridges. It is mainly used in foundation structures, paving, tanks and as an anti-condensation barrier,** although it needs to be waterproofed with adhoc systems/products.

Its advantages include increased hardness, long-term stability and the formation of an additional protective layer.

The choice between open-cell and closed-cell technologies depends on a thorough analysis of the performance required for the project in question. In general, open cell foam is more suitable for indoor applications due to its light weight and flexibility, while closed cell foam is mainly used in outdoor applications due to its stiffness and water resistance.

In summary, when choosing polyurethane insulation, **it is important to consider the characteristics and properties of each type of foam** (open cell and closed cell) to determine which is most suitable for the project in question.

THE QUALITY OF THE COLOURS

Tecnopol has taken a step forward in its commitment to offer its customers a personalised and quality experience by investing in a new tintometric machine. This investment will allow Tecnopol to provide a customised colour service on its **Tecnofloor T-3020** industrial flooring and, in a second phase, on **TECNOTOP 2C** aliphatic resin.

The new tintometric machine is a state-of-the-art system with cutting-edge technology in colour mixing and dispensing. Thanks to it, Tecnopol will be able to offer a wide range of customised shades and colours for its customers, adapting to their preferences and specific needs.

With this new service, **Tecnopol** customers will be able to choose from a wide variety of colours, no longer limited to standard options, but will be able to obtain a unique and exclusive colour for their industrial flooring or **TECNOTOP 2C** aliphatic resin.

In addition to the wide range of colours available, the tintometric machine guarantees exceptional accuracy and consistency in the reproduction of the selected colour. This means that Tecnopol customers will obtain an accurate and uniform end result, without unwanted variations.

Tecnofloor T-3020 industrial flooring and **Tecnotop 2C** aliphatic resin are renowned for their durability, strength and excellent performance in demanding industrial environments. Now, with the colour on demand service, **Tecnopol** customers will be able to benefit from all these superior features along with the ability to customise the colour of their flooring or resin coating.

This investment in the tintometric machine demonstrates **Tecnopol's** commitment to innovation and customer satisfaction. The company continues to look for ways to improve its products and services, providing solutions tailored to the individual needs and preferences of each customer. With the new tintometric machine, Tecnopol raises its standard of excellence.

Customers will be able to enjoy a resin floor or wall covering with a unique, customised colour, guaranteeing an exceptional end result that meets their highest expectations.

MORE EFFICIENCY AND QUALITY: WE ADDED A NEW POLYUREA POLYUREA PRODUCTION LINE TO THE EXISTING ONES

Tecnopol boosts production capacity with new polyurethane foam line.

Tecnopol has made a major investment to increase its production capacity.

By acquiring a new 9,000 kg reactor and a state-of-the-art packaging and labelling line, the company is positioned to meet growing market demand and offer high quality products more efficiently.

With this acquisition, the company has increased its polyurethane foam production capacity, enabling it to tackle larger-scale projects and meet delivery deadlines more effectively. The reactor features advanced technology that guarantees precise and homogeneous mixing of the components, ensuring the quality and consistency of the final product.

In addition to the reactor, **Tecnopol** has implemented a new packaging and labelling line that streamlines and automates the entire production process. This line is equipped with machinery that allows for greater efficiency and ensures proper packaging and clear product identification..

In addition to the benefits in terms of capacity and efficiency, the new production line also contributes to sustainability. **Tecnopol** has implemented more efficient production practices that reduce material waste and optimise energy consumption.

In this way, the company seeks to minimise its environmental impact and promote responsible practices throughout its supply chain.

BEYOND PRODUCTS:

Tecnopol Academy focuses on the integral training of our clients.

At **Tecnopol Academy**, we continue to provide specialised training to our clients and on this occasion, we are pleased to share the details of the day we held for the employees of Tiendas Montó, with the aim of showing them **Tecnopol's** cold waterproofing systems.

The training day focused on the cold waterproofing systems developed by **Tecnopol**. During the event, our experts presented in detail the different products and application techniques, providing Tiendas Montó employees with a solid understanding of their advantages and benefits.

Throughout the day, practical demonstrations were carried out, allowing participants to observe the application of the waterproofing systems up close. In addition, there was the opportunity to interact with the materials and perform practical exercises under the guidance of our instructor.

Montó seller points employees had the opportunity to resolve their doubts and ask specific questions related to **Tecnopol's** waterproofing systems.

At the end of the day, Montó seller points employees left with a greater knowledge and understanding of Tecnopol's waterproofing systems. They are better equipped to advise customers and offer effective solutions for their waterproofing needs.

Tecnopol Academy, we are pleased to be able to collaborate with Tiendas Montó in the training of their team, providing them with the tools and knowledge necessary to offer a quality service to their customers. We will continue to work closely with them and other clients, offering training programmes tailored to their specific needs and contributing to their growth and success in the market.

MANDATORY TRAINING IN THE USE OF DIISOCYANATES - EVERYTHING YOU NEED TO KNOW

In order to ensure the safe use of diisocyanates (such as MDI) in the professional environment and to prevent their health effects in compliance with EC Regulation 1272/2008, such as skin and respiratory sensitisation, a restriction on their use has been implemented **under REACH, which establishes obligations for suppliers, importers, formulators and users.**

From 24 February 2022, any product containing at least 0.1% MDI must display a warning stating that, from 24 August 2023, appropriate training is required for industrial or professional use of the product.

To receive the necessary training, online courses have been developed by **ISOPA and ALIPA,** lasting between 30 minutes and 2 hours and costing €5 per person. These courses include a final assessment and award a personal, non-transferable certificate, valid for 5 years from the passing of the course.

Every worker who comes into contact with MDI in their work is required to attend and pass these courses.

A deadline **of 24 August 2023** is given for all persons handling MDI in the company to receive this training.

These courses must be taken and passed by each individual worker who may come into contact with MDI in their daily work.

If a worker performs more than one activity, he or she should take at least one of the courses corresponding to the higher level activity. If the worker's activity is not on the list of courses, he/she must search for it in the complete list. A deadline of 24 August 2023 is given for all MDI handlers in the company to receive this training.

These courses must be taken and passed by each individual worker who may come into contact with MDI in their daily work.

Professional profile	Course	Course level*	Course link
Applicator (or assistant) of sprayed or injected polyurethane or sprayed polyurea on site.	011 - Spray applications outside a spray booth.	Level III Advanced training	Https://isopa-aisbl.idloom.events/011-es
Applicator (or assistant) of polyurethane elastomers or cold polyurea, with brush or roller on site.	005 - Brush and roller coatings, handling of open mixtures, clean-up and residues.	Level III Advanced training	Https://isopa-aisbl.idloom.events/00-es
Application of polyurethane mastics or adhesives in cartridges or aluminium bags (not spray) on site.	048 - Professional application of adhesives and sealants. Small containers at room temperature	Level II Intermediate training	Https://isopa-aisbl.idloom.events/045-es
Warehouse personnel moving MDI in drums or IBCs.	045 - Basic training	Level I General training	Https://isopa-aisbl.idloom.events/045-es
MDI transporter in drums or IBCs.	045 - Basic training	Level I General training	Https://isopa-aisbl.idloom.events/045-es

**Los niveles superiores abarcan la formación de los niveles inferiores.*
Si un trabajador desempeña múltiples actividades, debe realizar el curso correspondiente a la actividad de mayor nivel.

If you do not find your activity in the list of courses, you can search for it in the complete list available on the **ISOPA and ALIPA** website.

https://www.aisla.org/cursos-online-de-isopa-y-alipa-sobre-el-uso-seguro-de-los-diisocianatos/

https://www.safeusediisocyanates.eu/es/

Who is obliged to complete the training?

All workers handling MDI in the company must complete the training by 24 August 2023. When we talk about "handling", we mean the ability to open containers or apply the product, whether by gun, brush or roller. It is important to note that users who only handle sealed containers are not required to complete the training.

Which Tecnopol products contain Diisocyanates?

HAND-APPLIED MEMBRANES: DESMOPOL DW
MASTICS: MASTIC P-2049, MASTIC PU
PRIMER PU-1000, PRIMER PU-1050, PRIMER PUc-1050, PRIMER PUc-1050
POLYUREAS: RANGE TECNOCOAT P-2049, RANGE TECNOCOAT H-2049
INDUSTRIAL FLOORING: TECNOFLOOR PU-3010, TECNOFLOOR PU-3060, TECNOFLOOR STF-7020 ACCELERATOR
ALIPHATIC TOP COAT: TECNOTOP 2C, TECNOTOP 2CP, TECNOTOP S-3000, TECNOTOP S-3000 T
TOP COAT ALIFÁTICO: TECNOTOP 2C, TECNOTOP 2CP, TECNOTOP S-3000, TECNOTOP S-3000 T
POLYURETHANE FOAMS: RANGE TECNOFOAM H20, RANGE TECNOFOAM HFO

www.wedevelopvalue.com

TECNO MAGAZINE by TECNOPOL

TECNOPOL SISTEMAS, S.L.U.
c/Finlandia, 33
08520 · Les Franqueses del Vallès · Barcelona (Spain)
Telf. (+34) 93 568 21 11 · Fax. (+34) 93 568 02 11
e-mail: info@tecnopol.es · www.tecnopol.es

@tecnopolgroup