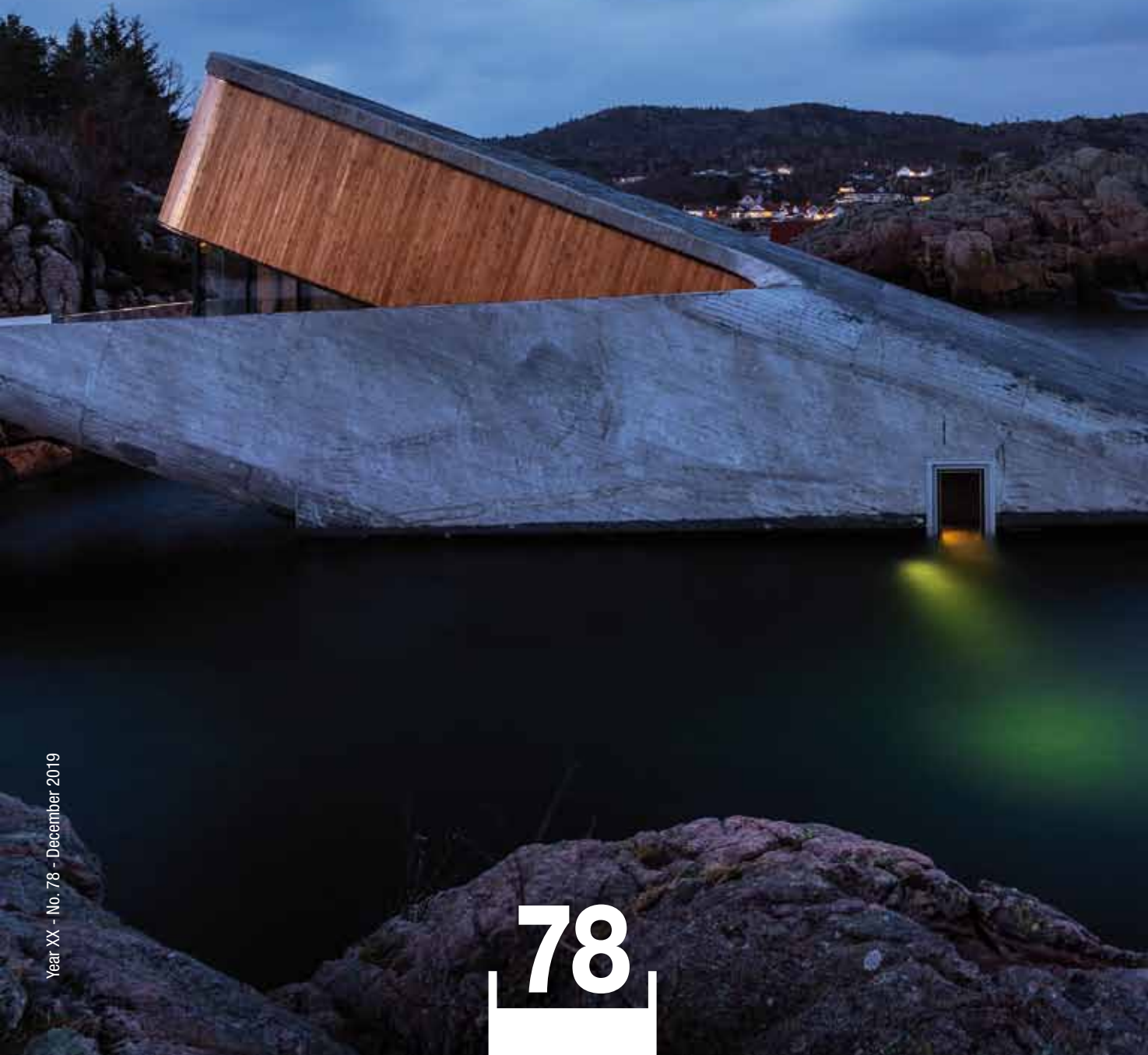


INTERNATIONAL

# Realtà MAPEI

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Year XX - No. 78 - December 2019

78



# Season's Greetings

**Mapei** would like to thank everybody working in the building industry for their help in completing both small and big projects together.





**ADRIANA SPAZZOLI**  
*Realtà Mapei*  
*International's editor*  
 in chief.

## Works blocked in Italy, obstacles to be removed

Dear readers,

Regular as clockwork, the autumn weather is really spotlighting the fragility of the Italian landscape. Flooding, high water and landslides occur every year and are soon followed by all the usual accusations from all sides and promises that it will never happen again. Unfortunately, the situation is much simpler and abundantly clear: lots of public works (both major strategic projects and small maintenance operations) have been blocked (or, at least, slowed down) for too long by the choking stranglehold of bureaucracy and standards/procedures

that are unsuitable for competing in a world that spins at a much faster rate than the Italian Nation-System.

An exemplary case, which we are documenting in this issue of *Realtà Mapei International*, is the new airport in Beijing that was built in just a few years and is set to become the world's biggest airport. An infrastructure which, once again, bears the Mapei "hallmark" with its high-tech floor products.

*Realtà Mapei International* opens with an extensive report on Latin America. Mapei has set up new manufacturing plants in various countries (from Mexico to Colombia) and aims to grow - in a balanced and sustainable way - in a region of increasing strategic importance to the Group. We are also looking abroad with our focus on Norway, where new production lines and storage facilities have recently been opened to strengthen its position on northern European markets.

A "new" sector with excellent prospects for growth is the marine industry. Mapei has focused on a wide range of solutions designed for all the different parts of a ship/boat used for a variety of purposes. This issue of *Realtà Mapei International* covers a broad spectrum of projects from big cruise ships to yachts.

But it is not all about Mapei: this issue also focuses on Vinavil, a famous brand in the Italian chemicals industry that this year is celebrating 25 years as part of the Group.

And then, of course, there are all the usual (and extensive) reports on the company's work in various other fields: from sport and culture to social responsibility.

*We are publishing the last editorial Adriana Spazzoli wrote before she passed away on 21<sup>st</sup> November when this issue of Realtà Mapei International was going to print.*

**MAPEI FOCUSES  
ON LATIN AMERICA  
WITH A LONG-TERM  
STRATEGY**

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#### COVER STORY

The Under Restaurant rests on the seabed just off Lindesnes, the most southerly point of the Norwegian coast. Mapei contributed to its construction with products and systems.

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# Looking to the future in Latin America

THE NEW MANUFACTURING PLANTS OPENED IN MEXICO,  
COLOMBIA AND PERU MEAN THAT MAPEI IS FOCUSING  
ON LONG-LASTING AND SUSTAINABLE GROWTH  
IN AN INCREASINGLY STRATEGIC REGION FOR THE GROUP



The Pabellon M multifunctional complex in Monterrey (Mexico) was built with the help of Mapei products.



# Long-term plans to counteract the economic uncertainty

IN SPITE OF THE CHALLENGES OF THE LATIN AMERICAN MARKET, WE BELIEVE THERE ARE ALSO GREAT OPPORTUNITIES

In 2019, growth in the Latin American economy still hasn't been able to be kick-started after a more or less stagnant 2018. The forecasts of the IMF (International Monetary Fund) have "trimmed" estimates even further to reach more or less 0%. The economic and financial problems Argentina is facing, political turmoil in Venezuela coupled with a collapse in trade (-35% for the GDP in 2019 and -10% in 2020), the uncertainties in Brazil and the weakness in investments in Mexico are all impacting the situation.

But Latin America is travelling at two different speeds. The brake put on growth by the major economies is being counteracted by the dynamic economic positions of the "smaller" countries, such as Peru and Colombia, where the economy is forecast to grow in spite of the period of general stagnation of the continent.

Within this not particularly brilliant overall picture, the unfavourable economic slump in the construction sector needs to be highlighted, which in 2018 recorded the worst trend at global level with a strong drop in investments. Signs of an inversion in this trend, albeit rather weak, are expected in 2020. In fact, in the two-year period 2019-2020, investments in residential constructions

are forecast to grow by 2.3% across the continent as a whole, with an expansion cycle driven by Chile and Peru which, along with an upturn in the Brazilian market, will all play their part in bringing the dynamics of investments back into positive, in spite of the decline of the Argentinian market well into 2019.

Overall, for 2020, we can expect a higher increase in GDP than in 2018 (when it rose by 0.4%) and a period of general stagnation in 2019. The outlook for South America, however, must also take into account a slowing down of the global economy (global growth is at its minimum level since 2008, the year of the economic crash), starting with Europe and the United States, a situation that has forced the IMF and the OECD to also reduce forecast growth in 2020 for Latin America. According to the most recent outlook from the IMF, overall growth in Latin America will be 1.8% with an increase in GDP in Brazil of 2% (against an estimated 0.9% for 2019), while in Argentina the recession will continue its negative trend (-1.3%) following the fall over the last two years. More positive performances are expected from Colombia and Peru.

However, even within a macroeconomic and political context

that presents so many complexities, Mapei Group is determined to invest in Latin America; proof of this determination are the new facilities recently opened in Mexico, Peru and Colombia and the new investments in production operations in Argentina. We will continue investing because we have medium to long-term projects and we firmly believe there is a possibility of sustainable development in this area. Latin America is a strategic region for the Group and, even though it was only recently that we concentrated on expanding in this continent, we intend to continue on this journey of balanced and long-lasting growth without focusing on local (economic and political) issues and circumstances that could influence the decisions we take in the short-term.

In spite of the challenges of the Latin American market, we have a long-term vision and we continue to be firm believers in the opportunities it has to offer, implementing the changes required in order to exploit them to the full.

**Veronica Squinzi.** CEO and Global Development Director, Mapei Group





The Mapei Group is present in several countries of Latin America. The following pages provide an overview of several Mapei subsidiaries operating in LATAM and the projects they have been involved in.



# Investment will really boost sales

INTERVIEW WITH ROLF MANSER, CORPORATE AREA  
MANAGER FOR LATIN AMERICAN NATIONS

## Which are the most promising markets in Latin America?

In terms of countries, the biggest, of course, such as Mexico, Colombia, Argentina and Brazil, which offer the best prospects, but we are making progress in other nations like Peru and Panama. Generally speaking, national economies are not growing at the moment, with a few exceptions.

The building industry in Mexico and Panama has been badly affected by recent changes in government, and these countries will need six months or even an entire year to recover.

As regards sales channels, we are working alongside distributors and retailers and, in certain cases in certain specific sectors, also with end customers (B2B), such as concrete manufacturers, major building companies, installers and subcontractors.

## Which Mapei product lines or systems are in greatest demand in Latin America?

The biggest sellers are products for ceramics and building, followed by admixtures for concrete and systems for



cementitious and resin floors. Waterproofing agents are the most successful of all in the building range.

The solutions for cementitious and resin floors are the biggest sellers in Brazil, and we are doing our best to replicate these excellent results in other countries in the region with the same potential.

We have increased our manufacturing output of adhesives for ceramics in Mexico, Colombia and Argentina, and we are now focusing our efforts on breaking onto the market for building products and admixtures for concrete in every country.

## Does the Mapei Group plan to keep on investing in LATAM nations by opening new manufacturing plants or bringing out new product lines?

We have boosted our manufacturing output considerably in Mexico, Colombia, Argentina and Peru by setting up new manufacturing lines for adhesives for ceramics, mortars for repairing concrete and waterproofing agents, while also enhancing our existing ranges.

At the moment, we are building a new manufacturing unit





The city of Lima, Peru, with a view of the Villa Deportiva Nacional Videna sport complex in the foreground.

in Bogotá. We have invested heavily over the last 2-3 years and we are now ready to take off in terms of sales through local supply channels.

Up until now we have focused on the cementitious and resin floors sector in Brazil through imported products, but we are now rethinking the possibility of manufacturing locally.

### **Major infrastructures or private buildings: which sectors of the building industry offer the best opportunities for growth?**

Generally speaking, the housing and private building sector offers the best opportunities all over Latin America, including maintenance and building work, as well as major infrastructural engineering projects. In Mexico, in particular, there is plenty of investment in offices, hotels, shopping malls and standard/top-class housing projects. The new government is reviewing and approving the building contracts issued by its predecessor, but it still has not ratified a new national plan for infrastructures, which will mainly focus on oil/petrol/electricity production and transport. These delays have significantly slowed down building operations. Building investment in Panama has dropped by 50-70% compared to 2017. The biggest infrastructural works underway include a fourth bridge across the Panama Canal, a third underground railway line in Panama and Corredor de Las Playas motorway, as well as an extension to underground railway line 1 in the city of Panama.

Major transport projects are continuing in Colombia, even though they have been delayed, such as those connected

with the 4G infrastructure plan encompassing 159 tunnels and 8000 km of roads. Major works in the mining and transport industries are underway in Peru and various infrastructural projects are planned for 2020-2023.

In Brazil, we are continuing to supply products for installing thousands of square metres of resilient floors for lots of hotels and hospitals. The continuity of our operations in Argentina will certainly be affected by the financial/political decisions following the result of the presidential elections in October. Heavy investment is continuing in the energy sector with a view to achieving national autonomy. Investment is particularly heavily in the wind power, nuclear (including the construction of the new Atucha III nuclear power plant) and hydroelectric industries (including the construction of several dams in the south of the country). There are also plans to invest in the mining industry, a tunnel that will stretch from Mendoza to Chile, Iguazú Airport, gas and oil fields in Vaca Muerta, and various housing and business projects around Buenos Aires.

### **Is it hard to recruit qualified staff in this region? Is that why Mapei invests heavily in training?**

There are plenty of talented workers available in these countries, but we find it harder in certain countries such as Panama, where unemployment is low, and the most qualified people are already working elsewhere. That is why we have set up programs for developing young people's skills, so they can take on specific jobs in sales and other sectors. Training is crucially important in our industry and lots of our operations are focused on customers and staff.



# 20 years in Argentina, 20 years' growth

TRAINING OPERATIONS HAVE BEEN BOOSTED: MAPEI ARGENTINA DESCRIBES ITS PRODUCTS TO CUSTOMERS

Mapei began operating in Argentina in the late 1990s and Mapei Argentina SA was set up in 2000 to supply products to the local building industry. The company had a manufacturing plant in Berazategui in the province of Buenos Aires and head offices about 60 km away in a place called Wilde. Its products, the formulation of new solutions and setting up of a specialist Technical Services Department were all key factors in the subsidiary's growth, which can now boast over 850 customers, some even outside Argentina (Uruguay, Chile, Paraguay, Bolivia). This constant growth required the acquisition of a new facility to guarantee the manufacturing output could meet the Argentinian market's demands in terms of building products. To this end, a manufacturing plant was built in Escobar, also in Buenos Aires, in 2004

on a lot of land covering 35,000 m<sup>2</sup>. Manufacturing began here in 2016 with 60 staff and an output of approximately 60,000 tons-a-year.

Mapei Argentina's Quality Control System was awarded ISO 9001-2008 certification in 2009, thereby assuring it could supply the products and services its customers needed in accordance with international standards. The Argentinian subsidiary's focus on quality was again officially recognised by being awarded ISO 9001-2015 and ISO 14001:2015 certifications in 2019.

Meanwhile the manufacturing plant continued to boost its manufacturing output to reach 120,000 tons-a-year in 2012 and, in the same year, was also equipped with an ultramodern Research & Development laboratory that has helped ensure Mapei materials market-

ed in Argentina are of the highest quality. Offices were also built on the plant premises in 2014, which has allowed better communication between human resources focused on manufacturing and administration staff, thereby boosting team spirit amongst Mapei Argentina staff.

In 2018, when the total number of staff reached 125, the subsidiary also opened a distribution centre in Córdoba, in the centre of the country, about 700 km from its plant in Buenos Aires. This has allowed faster and more efficient distribution of Mapei solutions around inland districts of Argentina.

2019 has been a very successful year for Mapei Argentina: a new 6000 m<sup>2</sup> storage facility for finished products was constructed, its administration offices were extended, and the company

**5.** The extremely well-attended "Mapei Tours" allow company technicians to take training to customers thanks to specially equipped vans.

**6.** The Argentinian subsidiary offers two days' training sessions called "Academia Mapei" held at its own headquarters.







2



3

is preparing major event to be held next year for the opening of its new plant for manufacturing grouts for joints. This will also provide the opportunity to celebrate the 20<sup>th</sup> anniversary of the subsidiary's business operations in Argentina. Mapei Argentina and its 146 staff can look forward to the future full of hope and dreams.

**MARKETING AND TRAINING**

Mapei Argentina has thought of everything to keep on growing and being successful on the local market. For example, it recently launched an advertising campaign called "Tecnología que no se ve, pero está" (Technology that is there even though it can't be seen). The idea is to show that Mapei technology and solutions are used in buildings all over the world, even though you might not be able to see them straight away. Mapei Argentina did not just want to focus on specific projects but rather on their effect on buildings themselves, whether we are dealing with adhesives, waterproofing materials or sealants. The campaign featured three TV adverts and three radio adverts broadcast on the most popular TV and radio channels, as well as ad-

vertising on digital media and platforms. Training is also vitally important for Mapei Argentina. It has two training centres: one at its manufacturing plant in Escobar and one at the distribution centre in Córdoba.

The courses are organised by Mapei Argentina's marketing office with the help of experts from the Technical Services Department. One of the most successful training activities are the so-called "Academia Mapei": two days of training during which customers are informed about the main characteristics and traits of solutions from the various ranges of waterproofing materials, products for installing ceramics, sealants and building products in general.

One of the two days is usually devoted to a visit to the manufacturing plant to show everybody taking part how Mapei materials are manufactured and let them see the Research & Development Laboratory for themselves. At the end of the theoretical-practical sessions, all the participants are given brochures, flyers and technical booklets providing further information about things they are particularly interested in.

Over 300 professionals have already attended "Academia Mapei" courses during 2019.

Mapei Argentina also organises travelling training operations: two vans specially equipped with products, tools and technical documents tour around the country to train and provide information to business partners and other players in the building industry. This creates strong ties with customers who feel the company is closer to them and more interested in their needs.

The subsidiary plans to reach 700 sales points and 7000 people on its "Mapei Tours" by the end of 2019.



6

- 1. The Mapei Argentina manufacturing plant in Escobar, near Buenos Aires.
- 2. The plant in Escobar is also equipped with a R&D laboratory.
- 3. The Mapei Argentina distribution centre in Córdoba that opened last year.
- 4. Mapei Argentina recently launched an original advertising campaign called "Tecnología que no se ve, pero está".

**MAPEI ARGENTINA**

**1**  
**MANUFACTURING PLANT**  
IN BUENOS AIRES

**146**  
**STAFF**

**9.4**  
**MILLION EUROS**  
TURNOVER IN 2018

**1**  
**RESEARCH & DEVELOPMENT LAB**  
IN ESCOBAR

**2**  
**TRAINING CENTRES**  
IN ESCOBAR AND CÓRDOBA



4

# Mapei de Mexico increases its manufacturing output

EXTENDING THE MANUFACTURING PLANT IN ZIMAPAN ALLOWS SYSTEMS AND PRODUCTS FROM MORE LINES TO BE DISTRIBUTED



**1.** The headquarters of Mapei de México in Queretaro, in the centre of the country, which also has its own showroom.

**2.** The Mexican subsidiary has another recently extended manufacturing plant in Zimapan, in central Mexico.

**3.** The Mapei manufacturing plant in Zimapan also includes a Research & Development Laboratory equipped with cutting-edge tools.

Since 2010 Mapei de Mexico has been operating in Queretaro at the central region of the nation where the headquarters, distribution center, and training center are located.

The manufacturing plants in Zimapan, Hidalgo (in central Mexico) and Cancún (in the south-east of the country) are strategically located to provide customers right across the nation with the best service possible. 150 employees currently work in the Mexican subsidiary of the Group. The company mainly manufactures products for installing ceramics and stone materials and finishing products for walls, but new production lines have recently been set up and new products have been launched on the market, such as admixtures for concrete, systems for repairing concrete, solutions for underground constructions and waterproofing solutions. Mapei de Mexico has achieved this by investing 3.4 million Euros over the last few years to extend its manufacturing plants to triple its output. Training operations for building companies, distributors, installers and sales staff have become more intensive: the Mapei Training Centre in Queretaro or-

ganizes courses and seminars for people working in the industry all over the country, partly with the help of such important institutes as the Mexican Institute for Cement and Concrete (IMCYC), the Mexican Society of Structural Engineering, the University of Guanajuato and Queretaro Technical Institute. Company technicians also lead the Mapei Tour training sessions organized directly at workplaces. The Mexican subsidiary has already organized over 900 training events for the first half of 2019 alone, aimed at installers, architects, designers, distributors, and commercial staff.

So, it is hardly surprising that Mapei de Mexico's overall sales in 2018 were worth 150 million pesos (over 6.8 million Euros) and it was involved in a number of important projects for the country. It is worth mentioning the Mexico-Toluca railway line, maintenance works on the Universidad Nacional Autonoma de Mexico, and commissions for important public and private works like the Iberoamericana University Jorge Vertiz Campero Library, Emiliano Hotel in Leon, or the Templo de San Sebastian and Victoria Townhall in Guanajuato.



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### THE NEW PLANT IN ZIMAPAN

The opening ceremony for the recently extended manufacturing plant in Zimapan was held on 20<sup>th</sup> February this year. The event was attended by Veronica Squinzi, the Group's Global Development Director, and Marco Squinzi, the Group's Director of Research & Development, who, together with the Mexican subsidiary's General Manager, Gerardo Villalvazo Galvez, and the Group's Corporate Export Manager for LATAM countries Rolf Manser welcomed local authorities (such as Erick Marte Rivera Villanueva, President of Zimapan municipality, and Omar Fayad Meneses, Governor of the Hidalgo state), members of industrial associations, representatives of universities and local companies, customers and business partners.

The extension and modernization of the facility, which can now boast an approximately 2000 m<sup>2</sup> manufacturing plant and an annual manufacturing output of over 185,000 tons, are part of the Group's growth-innovation strategy and linked with its policy of working lo-

cally with customers, supplying them as quickly as possible with cutting-edge solutions and reducing transport costs. The manufacturing plant's location is, in itself, strategic: this area actually contains raw materials (like calcium carbonate) in abundance; it is also close to key areas for the national economy and specialist manpower can be found locally; Mapei de Mexico is also ideally located to supply building materials to other Latin American countries like Guatemala, Honduras, Peru and Panama.

At the same time, Mapei de Mexico contributes to the economy in general and local well-being in particular through its technology, by providing jobs, and continuing to work with local institutes like the University of Mining Technology in Zimapan.

"We believe that being a local company is extremely important, because it allows us to achieve great results. For us working in Mexico means owning a company that uses our technology to create new products while maintaining high-quality standards", so Veronica Squinzi stated at the opening ceremony on 20<sup>th</sup> February.

## MAPEI DE MEXICO

**6.8**  
MILLION EUROS  
TURNOVER IN 2018

**2**  
MANUFACTURING  
PLANTS  
IN ZIMAPAN AND  
CANCUN

**150**  
STAFF

HEADQUARTERS  
IN QUERETARO



6

4, 5. The official opening ceremony of the Zimapán plant took place on 20<sup>th</sup> February and was attended by members of the Mapei Group's Board of Directors and local authorities.

6. Last October Mapei de Mexico took place in the Expo Cihac trade fair in Mexico City.

7. The Mexican subsidiary organises an extensive schedule of training events.



7



1

# From major works to renovations

AFTER WORKING ON THE PANAMA CANAL, MAPEI IS CONTINUING TO GROW ON THE PANAMANIAN MARKET SUPPLYING SOLUTIONS FOR DIFFERENT BUILDINGS

Mapei products have been marketed in Panama for over 20 years, but it was not until 2011 that the Group began operating stably in the country after taking over Cimpex International S.A.'s operations for supplying admixtures for the Panama Canal and then setting up Mapei Construction Chemicals Panama S.A. Being involved in the Panama Canal project provided the Group with a gateway into the entire region: the company has supplied various types of admixtures for concrete both for modernising the old canal and the new extension project, as well as mortars for repairing con-

crete, structural strengthening/finishing products for the locks and membranes for waterproofing ancillary water basins (see *Realtà Mapei International* no. 40, 56 and 59). "The fact that it managed to win a contract to supply materials for this gigantic work of engineering is concrete proof of Mapei Panama's success both in meeting all the requisites for products used for this kind of gigantic infrastructure and in working alongside some of the world's most prestigious firms also involved in this huge enterprise", so Pedro Graniela told us, the Technical Director of Mapei Construction Materials

Panama, S.A.

The subsidiary has a manufacturing plant in the capital city, Panamá, mainly used for manufacturing admixtures for concrete, a sector the Group has always considered to be crucial for expanding in this and other neighbouring countries. By purchasing products from the mother company and other Group subsidiaries, Mapei Panama can supply its customers not just with admixtures for concrete, but also all the company's solutions for installing ceramics, stone and resilient materials, waterproofing agents, products for cementitious and resin floors, structural strengthening solutions and underground building products, as well as products for repairing masonry, cement additives and wall coatings.

So, it is hardly surprising that Mapei products (and not just admixtures) have been used for constructing other major works in Panama, such as lines 1 and 2 of the Panamá underground railway line, Terrazas del Rey Residence, the

4. 3. The staff of Mapei Construction Chemicals Panama S.A..

5. "Minuto Mapei" is a point of sales activity carried out by Mapei experts for the final customers.



4







1. The headquarters and manufacturing plant of Mapei Construction Chemicals Panama in Panama City.
2. The Panama Canal, an engineering project that played a crucial role in the Panamanian subsidiary's expansion on the local market.
3. Concordia Hotel in Panama, a renovation project on the city's historical heritage that used products and technology supplied by Mapei Construction Chemicals Panama.

third stage in the extension to the Coast Belt (Cinta Costera), urban redevelopment projects for the Colón-Altos de Los Lagos Residence in Colón and Ciudad Esperanza Residence in Vacamonte. The Panamanian subsidiary, which also works with the Group's North American team focused on major works employing admixtures for concrete, now has 52 staff, a manufacturing output of 120,000 tons-a-year and total revenues of 9.7 million Euros in 2018. These successes are also due to plenty of marketing and training operations carried out by Mapei Construction Chemicals Panama: from January to July this year the subsidiary has organised training sessions for approximately 1500 people, almost 400 of whom attended Mapei Tours, travelling training sessions organised throughout the country by company technicians using a specially equipped van. MINUTO MAPEI are also very popular point of sales training activities where

sales promoters explain to the final customer the advantages and applications of the Mapei products. The expertise of Mapei professionals is taken directly "to the homes" of customers by means of training sessions and simple but effective video tutorials Mapei Construction Chemicals Panama posts on-line.

#### SERVING THE HISTORICAL HERITAGE

Mapei products and systems are not just enjoying great success with major engineering works in Panama. The renovation of masonry walls and historical buildings in general is another highly promising sector for the Panamanian subsidiary. At the moment, a considerable number of architects and professionals are working throughout the country on restoring the national historical heritage and, in particular, the city of Panama, which is celebrating the 500<sup>th</sup> anniversary of its founding this year. "Our job is to provide them with support, supplying products and systems that make their work easier" claims Graniela. This is possible because, for some time now, the Group has been manufacturing ranges of products specifically serving structural strengthening and masonry renovation purposes, such as the MAPE-ANTIQUE line of materials that can be adapted to those used on all the old buildings at the time of their construction. Building projects like this using Mapei solutions include Iglesia de La Merced, Concordia Boutique Hotel, Demetrio H. Brid Town Hall and the National Theatre in the Casco Antiguo district of Panama, as well as about 20 renovation projects on private buildings in the province of Colón.

## MAPEI PANAMA

**9.7**  
MILLION EUROS  
TURNOVER 2018

**52**  
EMPLOYEES

**120,000**  
TONS/YEAR  
ANNUAL PRODUCTION  
CAPACITY



# A young subsidiary with great prospects

STADIUMS, HOSPITALS AND HOTELS:  
MAPEI BRASIL CONTRIBUTES TO MAJOR  
WORKS ALL OVER THE COUNTRY



Mapei Brasil Materias de Construção was originally founded in 2013 when, in accordance with its internationalisation strategy, the Group decided to begin operating and investing in a country with highly promising prospects. In 2013 a business office was opened in São Paulo and a distribution centre in Embu Das Artes, not far from São Paulo. So, the subsidiary effectively began operating on the Brazilian market in 2014.

It immediately stood out in comparison to its rivals on the market due to its efficiency at supplying complete, long-lasting systems for installing resilient materials, textiles and wood, as well as materials with low VOC-emissions that can contribute credits for the LEED certification. Mapei products were used inside several stadiums that hosted the 2014 UEFA World Cup matches, such as Castelão Stadium in Fortaleza and Itaipava Arena Pernambuco in Recife, and also for public works like a number of hospitals, including Sirio Libanês Hospital in São Paulo and the museum dedicated to the great footballer Pelé in

**RIGHT.** Mapei Brasil's corporate history has coincided with major sports events held in Brazil over the last few years. The subsidiary supplied materials to help prepare the stadiums that hosted the 2014 UEFA World Cup matches (Castelão Stadium in Fortaleza and Itaipava Arena Pernambuco in Recife) and the 2016 Olympic Games held in Rio de Janeiro (Nilton Santos Stadium).







2



TREINAMENTO TÉCNICO MÃO NA MASSA  
LINHA ULTRATOP LOFT  
São Paulo - 28 de Maio de 2019  
MAPEI ACADEMY

3



4

Santos.

The Brazilian subsidiary soon started getting involved in important events in the local building industry in 2014, such as the specialist Revestir trade fair and annual Brazilian conference on developing hospital buildings. Despite the nation's considerable political instability and economic problems, Mapei Brasil Materias de Construção kept on growing over the next few years, launching new products on the market and taking part in lots of projects connected with such important buildings as MAR, the Rio de Janeiro Museum of Modern Art, Paraná Courthouse and the AquaRio Aquarium in Rio de Janeiro. In 2016 the Brazilian subsidiary was involved in the Olympic Games held in Rio de Janeiro, supplying products for preparing some of the facilities that hosted the main sports events, such as Nilton Santos Stadium, also known as "Engenhão".

The subsidiary has kept on growing thanks partly to a wide network of distributors and an intensive "Mapei Academy" training programme that included

1. Mapei Brasil Materias de Construção's headquarters in São Paulo.
2. Mapei Brasil also has a Technical Assistance Centre in Barra Funda in the borough of São Paulo.
3. The Brazilian subsidiary's training operations involved almost 2500 people in 2018.
4. Right from the beginning Mapei Brasil has taken part in leading events in the local building industry, such as the International Forum of Architecture, Design and Building.

230 events and involved almost 2500 people in 2018 alone. Mapei Brasil Materias de Construção also invests heavily in setting up sales outlets, providing staff and materials to help distributors with their work. The Brazilian subsidiary now employs a total of 28 staff at its headquarters in São Paulo, its Technical Assistance Department in Barra Funda in the borough of São Paulo and a distribution centre in the city of Barueri in the state of São Paulo. It also has a network of 38 distributors covering the whole of the country.

## MAPEI BRAZIL

**2013**  
FOUNDATION YEAR

**28**  
EMPLOYEES

**38**  
DISTRIBUTORS

**1**  
HEAD OFFICE  
IN SÃO PAULO

**1**  
DISTRIBUTION CENTRE  
IN BARUERI

**1**  
TECHNICAL ASSISTANCE  
CENTRE  
IN BARRA FUNDA

**2,500**  
PEOPLE  
INVOLVED IN TRAINING  
OPERATIONS IN 2018

**4.4**  
MILLION EUROS  
TURNOVER 2018





**LEFT.** The Mapei Colombia plant in Bogotá.

**RIGHT.** Mapei is regularly involved in the country's leading trade fairs in the sector of building.



## MAPEI COLOMBIA

**8.2**  
MILLION EURO  
TURNOVER 2018

**3**  
MANUFACTURING PLANTS  
(1 UNDER CONSTRUCTION)  
IN MEDELLÍN, BARRANQUILLA  
AND BOGOTÁ

**220**  
STAFF

**1**  
RESEARCH &  
DEVELOPMENT  
LABORATORY  
IN MEDELLÍN

**5**  
REGIONAL OFFICES  
(IN BOGOTÁ, MEDELLIN,  
BARRANQUILLA,  
CARTAGENA AND PEREIRA)

**5,582**  
PEOPLE  
ALREADY INVOLVED  
IN TRAINING  
OPERATIONS IN 2019

# When marketing supports growth

## FROM INFRASTRUCTURES TO PRIVATE BUILDING: MAPEI COLOMBIA IS BOOSTING ITS MARKET OPERATIONS

Mapei Colombia was first established in 2017 after taking over a company called Productos Bronco that had been operating on the local market for over 30 years. Taking advantage of existing sales channels, facilities and members of staff, the new subsidiary began developing a more elaborate set-up to provide greater market support. Very specific business and marketing strategies were immediately devised and implemented to allow Mapei Colombia to enhance its market position, distribute its extensive portfolio products throughout the country, and increase its share of the most promising market sectors.

Mapei Colombia has 3 manufacturing plants and 3 logistics centres, a Research & Development Centre, 5 regional offices in key areas of the country, and supports more than 3000 hardware stores and Homecenter/Sodimac sales points all over the country. The company is based in Medellín the north-west of the country, where it manufactures mortars for concrete repair and structural strengthening, waterproofing agents, paints, cementitious adhesives, cement additives and admixtures for concrete. The plant in Barranquilla, on the other hand, mainly focuses on admixtures for concrete and only began operating this year. A new manufacturing unit will soon be opening in Tenjo, close to the capital city Bogotá.

In just two years Mapei Colombia has seen the number of staff it employs rise to 220, while its revenue reached 8.2

million Euros in 2018. The subsidiary is destined to grow in the public infrastructures and private building industries in particular. It is also the market leader for waterproofing agents for tunnels and for supplying grinding aids to Colombian cement works. It is hardly surprising that Mapei Colombia has already contributed to the construction of such important engineering works as the Oriente Tunnel project, the longest tunnel in operation in the whole of Latin America.

### MARKETING CHALLENGES

The Colombian subsidiary's rapid growth is partly due to its marketing operations. Last year, for example, the "Amigos de lo mejor" (Friends of the Best) campaign was launched to showcase Mapei Colombia as a trustworthy business partner that works closely with its customers. In 2019 Mapei Colombia has already taken part in various trade fairs in the industry, such as Expoconstrucción and Expodiseño, and has organised plenty of training operations involving over 5582 people. The company also focuses plenty of attention on its sales outlets with targeted installations, merchandising material, visibility kits, promotional events, regional campaigns (such as Futboleros du Mundo), a prize-winning draw organised during the Copa America), and mystery shopper campaigns. The "Fin de la obra ... A viajar" campaign was also launched with the main prize being a trip to the Caribbean island of San Andrés.





## A sprint start

CREATED IN 2016, MAPEI PERÙ IS ABOUT TO CLOSE 2019 WITH A +45% GROWTH

Mapei has not been operating in Peru for long but business is growing fast: the subsidiary was set up in January 2016 with an office and warehouse in the district of Lurin in the capital city Lima to distribute the Group's solutions and products all over the country.

There were 6 members of staff at the end of 2016, and overall sales of 566 tons of Mapei materials resulted in annual revenue of 0.61 million Euros. Mapei Perù then began manufacturing on-site in October 2017, most notably admixtures for concrete at a manufacturing plant in Lurin with an annual output of 2500 tons. This significant boost in the subsidiary's operations resulted in an increase in human resources (12 staff at the end of 2017) and a 100% rise in income.

2018 was also a busy and profitable year for Mapei Perù: the subsidiary took on Mapei distributors in seven cities outside the capital; the number of staff also increased (26 employees by the end of the year) and overall revenue reached 1.72 million Euros corresponding to a rise of 43% (or 60% measured in tonnage) compared to the previous year.

But that is not all. In 2019 Mapei Perù is growing further and the forecast turnover for this year is 2.5 million Euros with sales of over 2,200 tons of materials.

### TRADE FAIRS, TRAINING AND SOCIAL RESPONSIBILITY

The subsidiary intends to hit this target thanks to an extensive programme of marketing operations and events: for example, it regularly takes part in specialist trade fairs in Peru focused on underground building works, resilient

materials, ceramics, and products for the building industry in general. In 2019 Mapei Perù took part in seven specialist trade fairs, doubled the number of people involved in its training operations, and awarded a special "Mapei Prize" to the 10 best distributors, projects and installers in the country (divided up into different categories).

Mapei Perù also carries out plenty of training operations, which include meetings and courses at its own offices, on building sites or at clients' own premises. This has enabled the company to reach over 1000 people in 2018, thanks also to the help of technicians and experts from the head company, Mapei SpA. Travelling sessions on the Mapei Tour see company experts visit building sites and other locations by means of a specially equipped van. This special facility has allowed 1,100 people to receive training in 2019.

Let's not forget social responsibility: Mapei Perù is regularly involved in solidarity projects focused on people in need, like, for example, its Christmas breakfast for poor families.

Over the next few years the company also plans to introduce new product lines, i.e. grouts for joints, sealants, cement additives, and products for masonry renovation, which will be added to the solutions already marketed locally by Mapei Perù (waterproofers, structural strengthening products, materials for cementitious and resin floors, adhesives for resilient materials, mortars for repairing concrete, adhesives for ceramics and stone, solutions for underground constructions, and admixtures for concrete).

**ABOVE.** The headquarters of Mapei Perù are located in the Lurin district of Lima.

**BELOW.** This year Mapei Perù awarded the "Mapei Prize" to the country's best distributors.

**MAPEI  
PERÙ**

**1.72**  
MILLION EURO  
TURNOVER IN 2018

**1**  
MANUFACTURING  
PLANT  
IN LIMA

**26**  
EMPLOYEES

**1**  
HEAD OFFICE  
WITH A WAREHOUSE  
IN LIMA



**PASEO DEL BAJO - Buenos Aires, Argentina**



**TECHNICAL DATA**  
**Period of construction and intervention:** 2017-2019  
**Design:** AUSA  
**Client:** Argentinian Ministry of Urban Development and Transportation  
**Works direction:** Franco Moccia  
**Main contractors:** Ghela, Impregilo  
**Waterproofing companies:** Iecsa, Fontana Nicastro Ute  
**Mapei distributors:** Green Seosa Pbt Ute  
**Mapei coordinators:** Lorenzo Delbò, Mapei SpA (Italy); Cristina Oñate and Lucas Alvarez, Mapei Argentina

The Paseo del Bajo by-pass was inaugurated in May this year and connects the Illia and Buenos Aires-La Plata motorways, making it easier to gain access to the port of Buenos Aires and the railway station in Retiro. The by-pass (7.1 km in length), which has four lanes for heavy-goods vehicles running mainly along a trench and another eight lanes for cars, had become necessary in order to free the district of traffic so that it could be redeveloped. Mapei Argentina, assisted by the Mapei UTT Division, took part in the construction work by supplying various products such as MAPEPLAN TU S

synthetic waterproofing membrane, POLYDREN PP 400 non-woven geo-textile and MAPEPLAN PROTECTION synthetic membrane. The joints were waterproofed with MAPEPROOF SWELL hydro-expansive paste, IDROSTOP rubber profile and MAPEPLAN WATERSTOP. The MAPELASTIC TU SYSTEM sprayable membrane was also applied, along with MAPEPLAN COLLAR PVC-P collars, AQUAFLEX TECHOS PLUS\* membrane and MAPEFLEX PU 45 sealant, as well as the form-release compounds MAPEFORM ECO 32\* and MAPEFORM 2000\*.

\*These products are distributed on the Argentinian market by Mapei Argentina.

**METRO LINE 2 - Panama City, Panama**



**TECHNICAL DATA**  
**Period of construction:** 2015-2019  
**Period of the intervention:** 2016-2018  
**Client:** Panama Government  
**Main contractor:** Odebrecht Engineering-FCC  
**Project Manager:** Roberto Roy  
**Works direction:** Roberto Serracin  
**Quality supervisor:** Paolo Rocha  
**Mapei coordinator:** Arley Florez, Mapei Panama

The metropolitan transport system in Panama consists of Line 1, which was inaugurated in April 2014 (approximately 16 km long with 16 underground and overhead stations) and now, Line 2, inaugurated in the spring of 2019. This new structure, which is a 21 km long stretch of overhead railway with 16 stations and a first lot of 21 trains, connects the districts of San Miguelito and Nuevo Tocumen. Line 2 currently carries 16,000 passengers every hour in each direction but has been designed to have a future maximum capacity of 40,000 passengers during the rush-hour.

Mapei supplied the latest generation of super-plasticizing admixtures from the DYNAMON line to make the self-compacting concrete for the 1,473 beams, as well as for the concrete mix poured on site for the columns and capitals. On site, Mapei also supplied MAPEGROUT T60 and PLANITOP 540 mortars to repair the concrete and also installed dosing equipment and storage tanks with a capacity of 8,000 litres in the main plant and a 2,000-litre storage tank in the secondary plant with recirculation pumps.



## VILLA DEPORTIVA NACIONAL VIDENA - Lima, Peru



### TECHNICAL DATA

**Period of construction:** 2017-2019

**Period of the intervention:** 2018-2019

**Design:** Pattern Architects (UK)

**Main contractor:** Cosapi

**Waterproofing contractor:** Dymartec

**Mapei coordinator:** Santiago Sime, Mapei Perú

In July of this year, Lima hosted the 18<sup>th</sup> edition of the Panamerican Games and the 6<sup>th</sup> edition of the Parapanamerican Games.

Various events of the Games were held inside a refurbished poly-functional structure, Villa Deportiva Nacional Videna, including track events, swimming, cycling, badminton, bowls, handball, skating and judo. Mapei supplied a vast range of waterproofing products.

MAPELASTIC SMART, MAPENET 150 and MAPEBAND EASY were used for the water storage tanks, swimming pools, treatment rooms in the medical centre,

the access area to the stadium, the main athletics track, the secondary track and all the substrates in the aquatics centre, for a total surface area of more than 25,000 m<sup>2</sup>. PLANISEAL 88 was used for the water storage tanks and PLANITOP FAST 330, PLANITOP SMOOTH & REPAIR R4, AQUAFLEX ROOF, MAPETEX 50, MAPECOAT URBAN TNS and MAPECOAT I24 were used for the rooms housing the machinery for the complex. In the aquatics centre, the joints were grouted with ULTRACOLOR PLUS FA (distributed on the Peruvian market by Mapei Perú) while MAPEFLEX PU 45 FT sealant was used for the expansion joints.

## AQUARIO - Rio de Janeiro (Brazil)



### TECHNICAL DATA

**Period of construction:** 2016-2017

**Year of the intervention:** 2017

**Design:** Alcides Horacio Azevedo

**Main contractor:** Kreimer Engenharia

**Installation company:** Afrel Pisos e Carpetes

**Works director:** Fabiano Oliveira

**Mapei distributor:** Afrel Pisos e Carpetes

**Installed materials:** Belgotex Color Tuft

**Mapei coordinator:** Mauro Affonso, Mapei Brasil (Mapei Brasil)

AquaRio is a key attraction in the downtown port urban redevelopment plan inaugurated in 2016 for the Olympic Games held that same year in Rio de Janeiro. The structure is the home of the largest salt water aquarium in South America which has a 4.5 million litre capacity tank containing more than 5,000 sea creatures from 350 different species. The client asked for special care to be taken regarding the products used to install the textile coverings, which had to be eco-sustainable and guarantee low emission levels of volatile organic compounds (VOC) to safeguard the health of not only the workers and visitors to the centre, but also of the

marine residents of the aquarium. To comply with this request, the substrates were preliminary treated with PRIMER G in water dispersion. Then, to make the substrate flat and more resistant to pedestrian traffic, it was recommended to use ULTRAPLAN ECO self-levelling, ultra-quick-hardening smoothing compound with very low emission of volatile organic compounds (VOC), and ULTRABOND ECO 170 high initial grab and long open time adhesive, which also has very low emission levels of volatile organic compounds (VOC), was recommended to install the textile covering.



WASTE-WATER TREATMENT PLANT - Cali (Colombia)



**TECHNICAL DATA**

**Period of construction:** 1998-2001

**Period of the intervention:** 2018-2019

**Client:** EMCALI- Municipality Public Services Company of Cali

**Main contractor:** Acciona Aguas

**Subcontractors:** SP5 Soluciones en Ingeniería, Consorcio Grupo Vip Ancla, Adeco

**Mapei coordinators:** Sandra Villegas, Mónica Figueroal, and Lauren Güiza, Mapei Colombia

In 2018 a project was launched to renovate and protect the concrete structures of the plant which, since 2001, has been treating waste water from Cali, a city in Colombia with 2 million inhabitants.

Work was carried out in the walls and lateral channels of 8 aerobic sedimentation manifolds, the sides and base of 6 tanks used for anaerobic digestion and 6 sand filters. This was the first refurbishment work carried out at Cañavelarejo since its construction and the structure needed to be thoroughly analyzed to assess the best way of intervening. Mapei Technical Services took part in the work to

repair the deteriorated areas of concrete with MAPEGROUT T60 thixotropic mortar strengthened with MAPENET 150 mesh and with MAPEGROUT HI-FLOW, while the MAPEWRAP SYSTEM was used for strengthening work; reinforcement rods were protected with MAPEFER 1K, the joints and cracks were sealed with EPORIP, MAPEBAND TPE 170 and MAPEBAND TPE in combination with ADESILEX PG1, MAPEFLEX PU 35CR and MAPEFIX EP and the sedimentation tanks and sand filter tanks were waterproofed with PURTOP 1000 two-component, solvent-free, pure polyurea-based membrane.

JORGE VERTIZ CAMPERO LIBRARY - Leon (Mexico)



**TECHNICAL DATA**

**Year of construction:** 2019

**Year of the intervention:** 2019

**Client:** Universidad Iberoamericana Leon

**Works direction:** Liliana Margarita Pedroza Zuñiga

**Main contractor:** Imper del Bajío

**Mapei distributor:** Imper del Bajío

**Mapei coordinator:** Yazmin Quilpas (Mapei de Mexico)

In Leon, in the Mexican state of Guanajuato, refurbishment work on the Jorge Vertiz Campero library included installation of new solar panels on the roof of the building.

Before installing the photovoltaic system, to prevent the infiltration of rainwater, the surface of the roof was treated with two layers of AQUAFLEX ROOF PREMIUM ready-to-use, water-based, polyurethane waterproofing membrane, which contains no solvents and VOC.

Within just a few hours of application, AQUAFLEX ROOF PREMIUM forms a seamless membrane with 400% elongation capacity that is resistant to atmospheric agents, UV rays and ponding water.

Reliability, ease of handling and application and, as a result, less time required to carry out the work, meant that just 24 hours after installing the waterproofing membrane the new solar panels were ready to be installed.



EVERYTHING'S  
**OK**  
WITH  
**MAPEI**

**Mapelastic®**

From the Mapei Research and Development laboratories, the **Mapelastic** range of elastic cementitious mortars: 30 years of **waterproofing** solutions with certified quality for sound and permanent results.

Comfortable surroundings  
and respect for the environment





## Beijing (China)

# DAXING INTERNATIONAL AIRPORT

MAPEI SOLUTIONS FOR THE FLOORS OF THE CARPARK  
IN ONE OF THE LARGEST AIRPORTS IN THE WORLD





**LEFT** An aerial view of the airport.  
**RIGHT.** The interior of the airport.



## FIGURES FOR THE AIRPORT

MILLION  
PASSENGERS  
IN TRANSIT

45

MILLION  
PASSENGERS IN  
TRANSIT IN 2025

72

MILLION  
M<sup>2</sup> TOTAL  
SURFACE AREA  
OF THE AIRPORT

1.4

BILLION  
US DOLLARS  
INVESTED BY  
THE CHINESE  
GOVERNMENT

17

Inaugurated earlier this year on 25<sup>th</sup> September, Beijing's new airport is set to overtake Hartsfield-Jackson airport in Atlanta, USA, and become the largest in the world in terms of number of passengers. Built in the Daxing district, 46 km south of the centre of Beijing, Daxing International Airport is perfectly integrated into the local high-speed railway network and should help reduce congestion at Beijing Capital International Airport, on the north-eastern edge of the city.

The airport was designed by the Joint Design Team, a supergroup specially united to work under the same banner for Zaha Hadid Architects and ADP Ingénierie. Collaborators in the project included the Beijing Institute of Architectural Design and China Airport Construction Group Corporation, which designed the terminal, runways and air-traffic systems. There will be an estimated 45 million passengers transiting through the airport each year and this figure is set to rise to 72 million by 2025 and to 100 million by 2040. With these figures in mind, the Chinese government invested more than 17 billion US dollars in the project. That figure rises to more than 400 billion if the amount invested in all the surrounding infrastructures is also taken into account: roads, services and the underground and overland railway network. China's intention is to overtake the United States and become the largest airport market in the world by 2022, generating 1.3 trillion dollars turnover in the following 15 years.

### THE RADIAL STRUCTURE OF THE AIRPORT

Daxing International Airport has a compact form with a highly functional layout and, from above, is similar to the form of a starfish.

Its design is a hybrid of the principles of traditional Chinese architecture (as its shape reminds the phoenix, a Chinese mythological bird) and the more fluid and sinuous forms typical of Zaha Hadid. The distinctive sign of the British design studio emerges both in the lines of the roof and in the design of the interiors, starting from the gigantic, flower-shaped skylight extending from the centre of the structure to the end of each wing, bringing natural light inside the entire building. Columns and high vaulted ceilings create a series of circular pools of light that divide the spaces in a functional manner.

The client wanted the airport to be energy efficient and environment-friendly and also to have a high level of flexibility to accommodate future growth. Just as important was the layout of the structure so that passengers would be able to move around easily and find their way in such large spaces (the total surface area of the airport is 700,000 m<sup>2</sup> which, with the 8 runways and other service areas, amounts to 1.4 million m<sup>2</sup>).

The result is a building with a radial configuration with six wings extending from the central nucleus, a large central piazza set over various levels. The aircraft land very close to this communal area in order to reduce the distance passengers have



1



2



3

1. Outlook of the carpark area.
2. Application of the first coat of MAPEFLOOR I 900 to prime the substrate.
3. After applying a second coat of MAPEFLOOR I 900 fillerized with QUARTZ 0.5, ULTRATOP was applied over the surface.
4. The carpark upon completion of the work.

### IN THE SPOTLIGHT ULTRATOP

It is an ultra-fast setting, self-levelling mortar based on special hydraulic binders for abrasion-resistant floorings. ULTRATOP is used internally in public and industrial buildings, for levelling and smoothing new or existing concrete and ceramic substrates in thickness from 5 to 40 mm, to make them suitable for heavy pedestrian use in shopping centres, offices, shops, showrooms and areas where rubber-wheeled vehicles are in use. It may be left as a finished floor due to its high mechanical strength and resistance to abrasion and, thanks to its versatility, it is also suitable for numerous applications in the decorating sector of buildings for civil use.



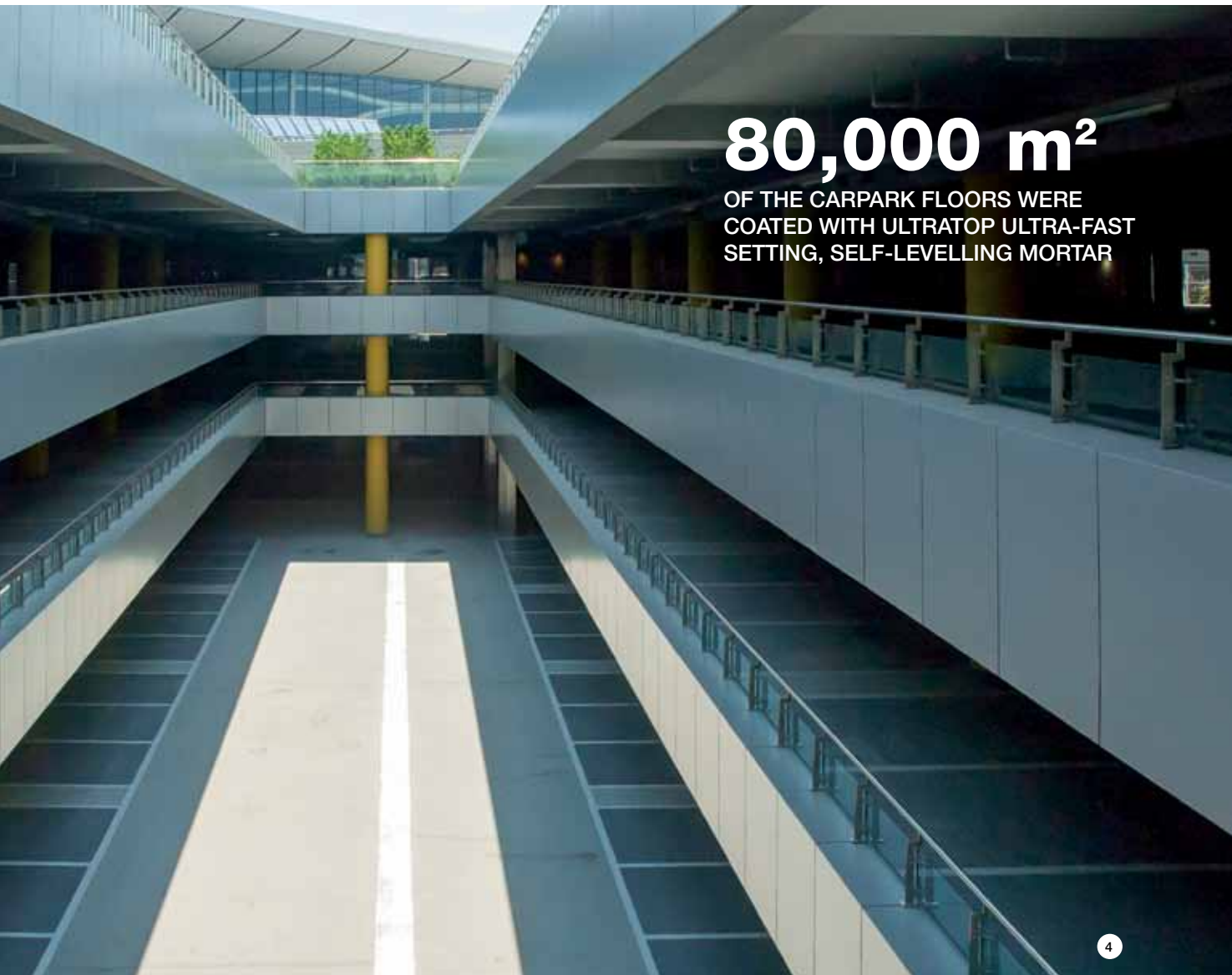
to cover: in fact, the distance between the check-in counters and boarding-gates and between the gates is never more than 600 metres, with less than 8 minutes required to cover this distance.

Various features have been included in the design of the airport structure which together will reduce CO<sub>2</sub> emissions by 50%. A self-sufficient energy supply comes from photovoltaic panels around the perimeter of the structure, while pumps feed recovered geothermal heat into a central heating system. A water management system to collect rainwater is also part of the design and any excess water is directed into new wetlands, lakes and rivers to prevent flooding and to counteract the airport's "heat-island" effect during the summer.

### COATING THE CARPARK FLOORS

The main contractor asked Mapei Technical Services for their support for a series of cutting-edge systems to be used for the road surface in the carpark of the airport's west wing, which has more than 5,000 parking spaces, 600 of which with charging points for electric cars.





# 80,000 m<sup>2</sup>

OF THE CARPARK FLOORS WERE COATED WITH ULTRATOP ULTRA-FAST SETTING, SELF-LEVELLING MORTAR

4

Once the concrete substrate had been thoroughly cleaned, the surface was primed by applying a coat of MAPEFLOOR I 900 two-component, epoxy binder with a roller to completely fill all the pores. A second coat of MAPEFLOOR I 900 was then applied, this time fillerized with QUARTZ 0.5 quartz sand. A seamless surface coating of ULTRATOP ultra-fast setting, self-levelling mortar was then applied, which is used to give floor surfaces an attractive finish and high resistance to abra-

sion. A total of around 80,000 m<sup>2</sup> of the carpark were coated with ULTRATOP.

This particular job was the most extensive of all the work carried out until now with this product. Its performance properties met with the full approval of the client and designers which convinced Mapei Technical Services to propose it for the next projects planned for the airports in Xiamen, Chengdu and Urumqi.

#### TECHNICAL DATA

##### Daxing International

Airport, Beijing (PRC)

##### Period of construction:

2017-2019

##### Year of the Mapei

intervention: 2019

##### Intervention by Mapei:

supplying products to lay cementitious floors in the carpark of the west wing

##### Design:

Joint Design Team including Zaha Hadid Architects, ADP Ingénierie (ADPI), BIAD (Beijing Institute of Architectural Design) and CACC (China Airport Construction Group Corporation), Beijing Architectural Design and Research Institute

**Client:** Shouzhong Investment

Management Co. Ltd

##### Main contractor:

China Construction Eighth Engineering Bureau

##### Flooring contractor:

Henan Jian'An Waterproof and Anticorrosive Engineering Co.,Ltd

**Mapei coordinator:** Guo Ming, Mapei Construction Materials (Guangzhou) Co. Ltd.

#### MAPEI PRODUCTS

Treating the substrates:

Mapefloor I900, Quartz 0.5

Laying cementitious coatings:

Ultratop

For further information on products see [mapei.com](http://mapei.com) and [mapei.com.cn](http://mapei.com.cn)



## Milan (Italy) LINATE AIRPORT

25 KILOMETRES OF JOINTS SEALED IN THE CONCRETE ROAD SURFACE  
IN THE PARKING AND TAXIING AREAS USED BY THE PLANES

Milan Linate Airport has been up and running again since 26<sup>th</sup> October this year after exactly three months of work. Two weeks previously, more than 150,000 spectators had watched in awe at the exciting display put on by the Freccie Tricolori airplanes at the "Milano Linate Air Show", with their acrobatics making the air-show dedicated to the world of flying and aerobatics even more special.

The Milanese airport closed on 27<sup>th</sup> July so that work could be carried out on the 2.4 km long, 60 m wide runway used for landing and take-off and on the taxiing

lanes, in compliance with current norms and standards that require maintenance work to be carried out every 15/20 years. The runway and lanes were completely resurfaced down to a depth of 60 cm and the existing concrete buffer-ends were rebuilt. This type of work, which involved using the most innovative Mapei product systems including those for sealing joints, can only be carried out in the summer because, when work is carried out on runways, the weather needs to be stable and calm and a hot climate is required to get the best results.

Work on restyling the departure gates

started at the same time, and this will continue until 2021.

In the meantime, the system that handles the passengers' luggage has been revamped by installing four new BHS (Baggage Handling System), that is, the equipment that manages the movement of baggage and prepares it before it is loaded on the planes. The new systems are of the latest generation and, apart from checking and controlling baggage much more accurately, they also increase the level of safety and reduce the time required for the baggage to be checked and sorted.





### **A GUARANTEE OF A PERFECT SEAL IN CONCRETE**

Mapei engineers were on site during both the design phase and the execution phase and were involved mainly in repairing the existing seals in the slabs of concrete in the parking areas used by the planes and in the areas where they join the new take-off and landing runways.

The first step was to thoroughly clean the old surfaces, a total length of 25,000 m, using both hand tools and grinders in order to remove the hardened, solidified bituminous mass that had lost all its elastic properties from inside the joints. The joints that still had traces of bitumen along the edges were then treated with PRIMER SN, two-component, fillerized epoxy primer and adhesion promoter.

The old joints that had clean edges with no traces of bitumen, on the other hand, were treated with PRIMER M, one-component, solvent-free primer for polyurethane sealants for compact, absorbent

surfaces.

Before applying the new sealant, to ensure the correct size and depth of the joints and prevent it sticking to the bottom of the joints, MAPEFOAM closed-cell, compressible, polyethylene foam cord was placed along the bottom of the joints.

It was only at this point that the new sealant was applied in the joints by hand and using MAPEFLEX SPP electric guns. The sealant chosen was MAPEFLEX PU50 SL fluid, polyurethane sealant which has been specifically formulated for sealing structural expansion and distribution joints in industrial concrete floors, including those subject to intense traffic such as runways and parking bays in airports.

It has a fluid consistency so that it may be applied quickly and, thanks to its quick-hardening properties (around 2 mm every 24 hours), joints may be put into service very quickly, resulting in various economic benefits.

### **INSTALLATION OF NEW CERAMIC TILES**

Reliable products of the latest generation were used to install large format ceramic tiles in the fifteen bathrooms in the departure gates area. ULTRALITE S2 adhesive was used to bond 240 x 120 cm tiles, a product that has been specifically developed to install large format tiles in complete safety. This product is highly deformable, has good trowellability and, thanks to its special formulation developed in the Mapei Research & Development laboratories, it guarantees particularly high yield and good buttering capacity, ensuring that any type or format of tile adheres perfectly.

KERAPOXY was used to grout the tile joints, a two-component, acid-resistant epoxy adhesive and grout for joints of at least 3 mm.

The recent reopening of Linate Airport doesn't mean that all the work has been completed. Some of the sites will remain open until the middle of 2021 and the



**IN THE SPOTLIGHT**

**MAPEFLEX PU50 SL**

It is a one-component, ready-to-use, easy-to-apply polyurethane-based sealant with a low modulus of elasticity, specially formulated for sealing structural expansion and distribution joints in internal and external horizontal surfaces subject to movement of ± 25% of their original size.

MAPEFLEX PU50 SL is highly resistant to atmospheric agents and is also resistant to occasional chemical attack by hydrocarbon-derived products, such as benzene, kerosene and diesel fuel. It may only be used on horizontal surfaces or surfaces with a maximum slope of 2%.



presentation of a completely new airport for the city of Milan.

In the meantime Mapei experts will continue to be present on site to help in the construction of a completely revamped, welcoming and functional infrastructure – with particular attention on design and spatial harmony – which will be able to optimise the flow of passengers and offer them a complete, comfortable and ef-

fortless travel experience. Once work has been completed the New Linate airport – which by 2023 will be connected to the centre of the city via the M4 line of the Milan metro rail network – will be an airport designed to put passengers at their ease, with a new range of shops more focused on the business traveller, along with all the services you would expect in any city airport at a European level.

**ABOVE.** MAPEFLEX PU50 SL was used to seal the joints in the concrete surfaces.

**BELOW.** Ceramic tiles were installed in the bathrooms with ULTRALITE S2.



**TECHNICAL DATA**

**Milan Linate Airport,** Milan (Italy)

**Period of construction:** 1933-1937

**Original design:** Gianluigi Giordani

**Period of the intervention:** 2019

**Intervention by Mapei:** supplying products for sealing

joints and installing ceramic tiles

**Client:** S.E.A. SpA

**Design:** Nicola Montemurro

**Works directors:** Marco Andreula (sealing joints), Gabriella Tomasini (installation of ceramics)

**Contractors:** ATI imprese Vitali Spa and Artifoni SpA (sealing joints), Ar.Co Lavori Consorzio Montagna Costruzioni (installing

ceramic tiles)

**Subcontractors:** Bacchi Srl (for sealing joints), Montagna Costruzioni, Franco Tripodi (installing ceramic tiles)

**Mapei coordinators:** Fabio Guerrini, Ivan Ceriani and Andrea Serafin, Mapei SpA (Italy)

**MAPEI PRODUCTS**

Sealing joints in concrete surfaces: Primer M, Primer SN, Mapefoam, Mapeflex PU50 SL

Installing ceramic tiles:

Ultralite S2

Grouting tile joints: Kerapoxy

For further information on products visit [mapei.com](http://mapei.com)



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TAKE YOUR  
WORK LIGHTLY.



**Ultralite Flex, Ultralite S1, Ultralite S1 Quick, Ultralite S2, Ultralite S2 Quick:** a line of **lightweight** cementitious adhesives with extraordinary performance features for all types of ceramic tiles: **Improved workability, less tiring to apply, quicker application, lighter bags and packaging with handles** for easier handling.



Traditional  
adhesive  
for ceramic  
tiles

**25 kg**



**just 15 kg!**

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**MAPEI®**  
ADHESIVES - SEALANTS - CHEMICAL PRODUCTS FOR BUILDING



# Products for the marine industry



## Primers

Adhesion promoters for cementitious and resin products



## Underlays

Cementitious and resin-based products for levelling off internal and external ship decks



## Waterproofers

Products for waterproofing cementitious underlays including in damp and wet areas



## Adhesives

A wide range of high-quality products for installing ceramic tiles, stone material, mosaic, textiles and resilient materials



## Grouts

A range of high-quality, highly functional coloured products rich in colour for internal and external use





## MAPEI MARINE OFFERS A WIDE RANGE OF SOLUTIONS FOR SHIP-BUILDING

Cargo ships, vessels for military use, cruise liners, pleasure boats and ocean-going yachts: the ship-building industry has evolved significantly over the last few decades due to the constant development and progress in construction technology and the continuous research work carried out on materials.

And on top of the consolidated requirements in terms of durability and resistance to aggressive atmospheric and environmental agents, or wear caused by the movement of high volumes of passengers and cargo, a new list of requirements also has to be taken into consideration: the need to offer increasingly high levels of comfort, liveability, health and safety.

The answer to these needs and requirements is Mapei Marine, a dedicated line of products for the ship-building industry, which has been developed thanks to the exclusive wealth of experience that Mapei has built up in this specific application field.

Mapei solutions are eco-sustainable and designed to be applied in different areas (cabins, common areas, sport areas, decks, swimming pools) for different purposes (from waterproofing compounds to grouts for joints, from systems for deck floors to cleaning agents). In the next few pages you will find a selection of the Mapei solutions for the marine industry. You find more detailed information at [marine.mapei.com](http://marine.mapei.com) or on a dedicated brochure called "Mapei Marine", which is available in English language at [mapei.it](http://mapei.it).



### Seamless floorings

Polyurethane and epoxy products to create highly attractive floors with excellent mechanical characteristics



### Products for cleaning

A range of products for the care and maintenance of boats and ships



This symbol proves that the product is suitable for marine equipment in compliance with the Marine Equipment Directive (MED) 96/98/EC and subsequent amendments.

## Durable systems that are also easy to apply

WE TALK TO **ANDREA GERARDINI**, PRODUCT MANAGER FOR THE MAPEI MARINE LINE

### Which is the reference market for the Mapei Marine line; is it mainly Italy or do you also operate overseas?

Mapei operates at a national level where we are suppliers of materials for the leading Italian companies involved in the construction and refitting of cruise liners. We have a working partnership with Fincantieri regarding Research & Development activities and, thanks to our commitment and the extensive range of solutions we have to offer, we have received an order to supply and apply all the floors in 6 ships for the Italian navy. The Mapei products most in demand from the market are those for making cementitious substrates (ULTRAPLAN MARINE line) and for installing ceramic (KERAPOXY and ULTRABOND ECO PU2K). Fincantieri, on the other hand, requests our resin-based products (MAPEDECK line) for decks.

Mapei has made a name for itself mainly for products for substrates and for installing ceramic, but is also well known in the marine industry for its range of products for levelling off interior and exterior bridge decks on ships (resin-based and cementitious products), which stand out in particular for their low weight and flexibility. They are easy to apply and offer a sound, durable end result, eliminating any uneven areas. Almost all of them are supplied ready-mixed and do not need any additional fillers. As far as overseas markets are concerned, the Mapei Marine brand is present in the United States, where we collaborate with the leading shipping companies, as well as

in France, Germany, Poland, Russia, Scandinavia and China. On these markets, all the products from this particular line are available (products for substrates, materials for resin and cementitious floors, adhesives and sealants). We also supply a turnkey service for our resin flooring products through which, apart from supplying the products, we also apply them. This service uses the support of Mapei Technical Services, a consultancy service which offers much more than just pre and post-sales assistance; they work alongside the client to help them choose the best solutions, from the design phase right through to the application phase.

Amongst our most recent projects was the supply of almost 3,000 m<sup>2</sup> of MAPEDECK ULTRASCREEDE for a new 100 m yacht built by Benetti, which was chosen for its low density (it weighs around 40% less than a traditional levelling mortar for exteriors).

### Does Mapei plan on entering new markets where it doesn't currently operate?

At the moment we are pushing to get the Mapei name recognised in the small to medium-sized pleasure craft sector, which also includes through boat and yacht brokers, especially in Italy and the United States. At the moment we are most interested in promoting the ULTRACARE 4 YACHT line, a range of products for scheduled and non-scheduled maintenance work on boats, created specifically for the pleasure craft sector.

### Is Mapei only interested in creating new contacts with potential clients, or also with potential suppliers?

During the current phase we are only focusing on clients, our exclusive partners for which we develop and offer the most cutting-edge solutions.

### Which trade fairs is Mapei taking part this year?

We were at MetsTrade in Amsterdam (the Netherlands) where we presented our range of solutions and systems for the shipbuilding industry. Ample space was dedicated on this occasion to our high-end decorative products in particular, such as MAPEDECK MIRUM: first introduced to the market during the SMM trade fair in Hamburg (Germany), it is a decorative polyurethane skimming compound to create a highly attractive finish on internal and external surfaces on ships and yachts. The other trade fairs we are taking part in this year include Seatrade in Miami (USA), Nor Shipping in Oslo (Norway) and Cruise Ship Interiors Expo in Barcelona (Spain).





# Passion and curiosity: a winning mix in naval architecture

INTERVIEW WITH **ANDREA BONINI** FROM THE ESPEN OEINO DESIGN STUDIO

*Norwegian with a profession as luxury yacht creator for clients such as Paul Allen, cofounder of Microsoft: this is Espen Oeino studio, whose talent for designing and building boats has been widely recognised all around the world for 25 years. According to Espen Oeino, when one is commissioned to design a yacht, it is similar to designing a harmonious, made-to-measure home, respecting the structural details and rules that every boat – just like every building – requires. The Italian engineer Andrea Bonini was the project director for Espen Oeino for the REV vessel (see the box below) and we took the opportunity to ask him a few questions.*

**How do you become a designer - or a team of designers - of yachts, specialised not only in the study of their interiors, but also the part regarding their plant systems, hull and bridge?**

Just for the record, Espen Oeino International is a naval architecture & yacht design studio. This means we design the layout of both the technical spaces and areas, all the areas dedicated to the owners of the yacht and their guests (general layouts) and the main naval architecture, but not the interiors themselves (by that I mean how they are decorated and choosing the materials). We do, however, take care of all the details regarding the outfitting of the exte-

rior decks: furnishings, soffits, decks, swimming pools, stairs, handrails and exterior lighting for example, to name but a few.

Now we have made this distinction, I would say that a designer, first and foremost, must be passionate, secondly inquisitive and, lastly, have a general understanding of a lot of different subjects. In our team we have naval architects, civil engineers, design engineers, industrial designers and transportation designers.

A technical background is also a great help; we work mainly in 3D. Having said that, the ability to communicate is fundamental and to be able to draw and design freehand in front of clients obviously makes all the difference!

**Remaining on the subject of interior yacht design, “classic” interior design undoubtedly has an influence on the materials and lines used in interior yacht design. But when it comes to the nautical sector, the influence of the movement of a boat or yacht and the force of nature is something that needs to be taken carefully into consideration.**

**How do you apply all of this to a project?**

For the details of the exterior decks we try to verify their ergonomics, practicality, ease of maintenance, their compa-

tibility with the marine environment and the often extreme changes of temperature and, because the yachts designed by Espen Oeino are in the highest bracket of the market, which means full-custom yachts of 50 to 60 m and more, we have to do all this while looking to adopt solutions that do not compromise on sophistication and elegance.

**The construction materials are obviously influenced by a yacht’s movement, the force of the sea and corrosion caused by saltwater. Mapei has a dedicated line of specific products for sailing craft. How has the offer for this sector changed over the years?**

I would say that clients are interested in alternatives to teak. This doesn’t necessarily mean an imitation wood finish, but also different colours and textures. Apart from the usual requirements such as cleanability and resistance to corrosion and wear, we mustn’t overlook the sensorial experience: it’s important that resin doesn’t get too hot if it is exposed to direct sunlight (people normally walk around barefoot when they are on board) and that it has a pleasant texture when it comes into contact with the sole of the foot. Cleanability is also very important: and that goes not only for saltwater and fresh water (that sometimes leaves a stain!), but also for wine and sun-cream.

**The MAPEDECK DESIGN system and MAPEDECK SOFT DESIGN seamless “elastic” self-leveling resin coating were chosen for some of the exterior decks of the REV (Research Expedition Vessel) designed by the Espen Oeino design studio. The Vessel is part of the Norwegian Rev Ocean Project, which carries out research work on marine ecosystems. Two decks used as helicopter pads were coated with Mapei products, as well as a deck set aside for playing various sports and other areas of the ship. Elisabeth Tuvnes from the OceanTec. company said: “Mapei has a comprehensive portfolio of high quality products certified for naval use. For the landing pad we used solid, 15-20 mm thick flexible polyurethane coating, while for the deck for sports activities we chose a softer surface. Mapei also takes a great deal of interest in the environment and this is very important for our clients”.**



# Boat shows

AMSTERDAM AND BARCELONA BRING TO A CLOSE ALL THE EXHIBITIONS IN THIS SECTOR THAT BEGAN IN MIAMI AND OSLO

## Seatrade Cruise Global Expo

### MIAMI (USA)

Held at the Miami Beach Convention Center from April 9 - 11, Seatrade Cruise Global Expo brought more than 11,000 professionals from around the world to discover the latest trends in the cruise industry. Mapei took part in the event through its subsidiary, Mapei Corp, since the company has brought its marine systems to the United States and is in the process of expanding the product line. Bookending the booth were two large “C-shape” structures coated in MAPEDECK MIRUM decorative polyurethane skimming compound used to create a highly attractive finish on internal and



external surfaces. Sweeping, curving and beautifully finished in gleaming alabaster-white and a striated marble-like surface, these structures

demonstrated the continuous coverage possible with MAPEDECK MIRUM, with ceilings, walls, coving and floors all coated in a flawless

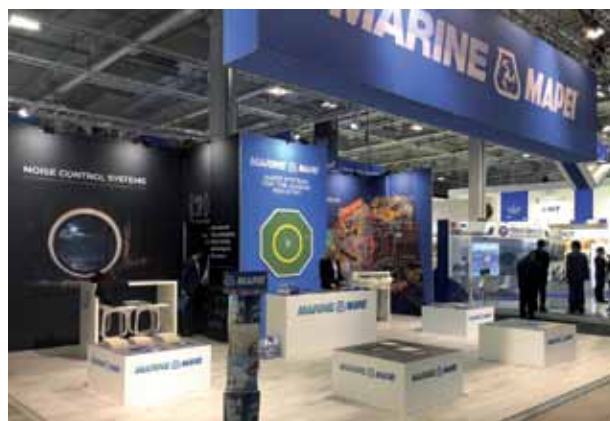
application. One of the more popular features in the booth were “vision boxes” that highlighted the “glow-in-the-dark” properties of MAPEDECK STARLIGHT DESIGN seamless resin coating. The boxes allowed viewers to look at a strip of the resin coating as it appears in natural sunlight, and then to turn on a black light to see how it appears at night – gently glowing and softly illuminating stairs, edges and any place that is desired. The booth also interspersed large, colorful images from project references representing a variety of the colors available in the MAPEDECK products.

## Nor-Shipping

### OSLO (NORWAY)

Mapei solutions for the marine industry were on display at the Nor-Shipping maritime trade fair being held from the 4<sup>th</sup> to the 7<sup>th</sup> of June in Oslo. This two-yearly appointment is a point of reference for the sector and attracts 30,000 professionals from all around the world, keen to find out more about the latest trends from the exhibitors (846 this year). Since one of the highlights of the Norwegian fair was acoustic comfort on-board ship, Mapei showcased the solutions it has

developed to improve the level of acoustic comfort on cargo ships, cruise liners and offshore oil rigs. Against vibration noise Mapei proposed MAPEFLOAT SYSTEM, a range of floating systems that dampen vibrating structural oscillations by isolating the vibrating structure from the rest of the areas, rooms or cabins, and MAPEVISCO SYSTEM, viscoelastic systems that are used in technical areas of a ship to dampen mechanical vibrations and the noise they generate.



To counteract compact noise, Mapei proposed MAPEDECK I.S. (Impact Sound) SYSTEM and MAPEDECK I.S. SYSTEM LITE soundproofing systems. Mapei also displayed

MAPEDECK ANTISKID F4, a new coloured, non-slip acrylic resin for coating internal and external surfaces on ship decks and helicopter pads on offshore platforms.



# METStrade 2019

## AMSTERDAM (THE NETHERLANDS)

METStrade is the world's biggest exhibition of equipment, systems and materials used in ship building. The only international B2B show devoted to leisure marine equipment, this fair is a firmly established innovation platform for operators in the industry, as well as a great opportunity for networking. The total of almost 27,000 visitors this year came from 115 different nations, including 64% from outside the Netherlands. 72% were decision-makers and 21% young people under the age of 35. 670 exhibitors from 53 countries were represented by 7.297 stand personal. METStrade 2019 took place in Amsterdam from 19<sup>th</sup> to 21<sup>st</sup> November when Mapei proposed to sector professionals an extensive range of safe and certified solutions that guarantee the best result possible with every job and intervention.

The company stand particularly emphasized its solutions for interior and exterior decks on ships characterized by high levels of elasticity and flexibility and high resistance

to chemicals and abrasion, and available in a host of colours to help create different effects and patterns, as well as in a teak version to simulate the effect of natural wood.

In the spotlight at METStrade its seamless resin coatings to create floorings with a teak, wood or "terrazzo-alla veneziana" effect (MAPEDECK TEAK DESIGN, MAPEDECK TEAK EVOLUTION, MAPE-



DECK TERRAZZO), its skimming compounds for coating surfaces (MAPEDECK MONO and MAPEDECK

MIRUM) and the fluorescent effect created by MAPEDECK STARLIGHT DESIGN resin coating.



# Cruise Ship Interiors Expo Europe

## BARCELONA (SPAIN)

Cruise Ship Interiors Expo Europe is the biggest European exhibition of cruise ship interiors.

It is an important event for architects, interior designers, suppliers of materials, builders and other operators involved in the renovation or

construction of river, sea and transatlantic vessels.

The latest edition held from 4<sup>th</sup> to 5<sup>th</sup> December in Barcelona attracted 160 exhibitors from 39 countries, including 47 cruise ship companies. It provided Mapei with the chance to showcase to the

public its extensive range of solutions for constructing various parts of ships and boats: from crew's quarters to passenger cabins, from floor and wall coverings (made of marble, wood, carpet) to indoor/outdoor communal areas, from swimming

pools to spas, from kitchens to areas for sport.

Solutions that also facilitate tailor-made projects meeting the needs of even the most demanding designers and clients in terms of eco-sustainability, durability and hygiene.



# Great experience for great ships

WORKING WITH THE BIG NAMES: FROM GNV TO CARNIVAL AND COSTA CRUISES

Mapei and great ships. A years-old winning combination. In fact, there are many ships from the biggest names in the business, such as GNV, Carnival, Costa, etc., that have been built using Mapei materials and systems. This may be explained by the company's ability to supply complete and certified systems so that all kinds of work (such as the preparation of substrates, waterproofing work, the installation of ceramic, wood, synthetic grass, textile or resilient materials) can be carried out successfully and effectively and that the work is made to last and to be eco-sustainable in the most diverse array of surroundings: from public areas to kitchens, from spa centres to swimming pools, from areas reserved for the crew to sports areas, and from exterior

decks to children's play areas. All this while guaranteeing that surfaces remain durable and hygienic and are resistant to atmospheric agents.

Three more great ships that chose to employ Mapei solutions were recently completed: the Carnival Pride, the Carnival Legend and the Oasis of the Seas of the Royal Caribbean Company. The first two, which can each accommodate more than 2,100 passengers and have a crew of more than 900, are more than 290 m long and carry their passengers on cruises around the Caribbean, the Bahamas and Bermuda, as well as being able to pass through the Panama Canal. For both liners, MAPEDECK TEAK DESIGN played an important role: with this self-levelling resin coating with good

resistance to atmospheric agents and salty sea spray, seamless floors with a teak-effect finish were created in the exterior "Serenity" area on deck 9 of the Carnival Pride and in the passenger lobby on deck 0 of the Carnival Legend. When it was launched in 2008, with a length of 362 m, a width of 47 m (at the water line) and weighing 220,000 tonnes, the Oasis of the Seas of the Royal Caribbean Company was the largest passenger ship in the world. Decorative coatings were created on the walls of the Music Hall using MAPEDECK MONODESIGN, a special fine-textured, trowellable, decorative polymer smoothing and levelling compound which is highly versatile and easy to apply and provides excellent resistance to abrasion.





**IN THE FACING PAGE .** When it was launched in 2008, the Oasis of the Seas of the Royal Caribbean Company was the largest passenger ship in the world. Decorative coatings were created on the walls of the Music Hall using MAPEDECK MONODESIGN decorative smoothing and levelling compound.  
**IN THIS PAGE.** The Carnival Pride (above) and the Carnival Legend (below, left) can each accommodate more than 2,100 passengers and feature seamless floors completed with MAPEDECK TEAK DESIGN.







# On board with Mapei

MAPEI SYSTEMS USED IN THE CONSTRUCTION OF TOURIST BOATS, CRUISE LINERS AND ICEBREAKER SHIPS

## Amakristina THE NETHERLANDS

After 18 months of intensive work, in April, 2017 the renowned cruise liner company, AmaWaterways, launched its new flagship vessel: the 135 m long AmaKristina, which accommodates 158 guests (in 79 cabins) enjoying luxury cruises along the river Rhine. There is

also a solarium available for the guests on the deck of the liner, as well as a fitness centre, a massage area, a beauty salon, a gymnasium and three restaurants.

Mapei products were used to install ceramic tiles and stone slabs in vari-

ous areas of the liner, such as in the bathrooms, where the substrates of the walls were treated with PRIMER G or ECO PRIM GRIP before bonding 60 x 30 cm ceramic tiles with ULTRAMASTIC 5\* adhesive. MAPESIL AC silicone sealant was then used to seal the expansion







joints. 30 x 30 cm tiles were chosen, on the other hand, for the floors in the bathrooms. They were installed with ULTRALITE S1 lightweight cementitious adhesive on a screed made from TOPCEM PRONTO pre-blended, ready-to-use mortar, after treating the surfa-

ces with EPORIP epoxy adhesive to ensure a proper bonding of the TOPCEM PRONTO layer to the metal base of the ship. The substrates were waterproofed where required with MAPEGUM WPS and MAPEBAND PE 120. In the lobby, the lift and on the stairways

of the liner, slabs of marble were installed with ELASTORAPID adhesive after treating the substrates with PRIMER G. The slabs joints were then grouted with KERAPOXY CQ and the expansion joints were sealed with MAPESIL LM silicone sealant.



#### TECHNICAL DATA

**Period of construction:** 2015-2017

**Period of the Mapei intervention:** 2016-2017

**Client:** AmaWaterways

**Design:** Kamphuisen Projects

**Contractor:** Willemsen interieur en scheepsbetimmering

**Installation company:** Harbers T.G.W.

**Mapei distributor:** Bouwcenter HCI Ulf

**Mapei coordinator:** Wessel Derksen, Mapei Nederland (The Netherlands)

**Photos:** AmaWaterways media gallery

#### MAPEI PRODUCTS

Primer G, Eco Prim Grip, Mapegum WPS, Mapeband PE 120, Ultramastic 5\*, Mapesil AC, Ultralite S1\*, Elastorapid, Topcem Pronto, Kerapoxy CQ, Eporip, Mapesil LM

\*This product is distributed on the Dutch market by Mapei Nederland

For further information on products visit [mapei.com](http://mapei.com) and [mapei.nl](http://mapei.nl)



## The Dalmatino, Corona and Casanova yachts

KRILO JESENICE, CROATIA



The town of Krilo Jesenice is renowned for its maritime (shipbuilding and navigation) traditions, initially through the dragging of sand from the local river beds and then, since the 1970's, as a tourist location. Every year, almost 200 boats and ships, and often even luxury yachts, set sail from here and head towards the Dalmatian Islands. The decks of the yachts used to be made from teak which meant high costs for their upkeep to maintain their condition. More recently, some boats have started to replace them with a Mapei polyurethane-based system which is extremely durable and easier to

maintain. Once the steel substrate has been prepared as specified and then levelled off, the surface is treated with corrosion-resistant polyurethane-based MAPEDECK PRIMER 200. The next step is to install a 5 mm thick layer of MAPEDECK LITESCREED, followed by a coat of MAPEDECK TEAK DESIGN self-levelling resin coating, which has high resistance to moisture and atmospheric agents. The seams are filled with MAPEDECK CAULKING aliphatic polyurethane coating and the final finish is achieved by applying MAPEDECK WAX, to guarantees a high visual impact.

### TECHNICAL DATA

#### Period of the Mapei

**intervention:** March – June 2019

**Contractor:** Duraflex Ltd.

**Mapei coordinator:**

Nenad Karalija, Mapei Croatia

### MAPEI PRODUCTS

Mapedeck Caulking,  
Mapedeck Litescreed,  
Mapedeck Primer 200,  
Mapedeck Teak Design,  
Mapedeck Wax

For further information on products visit [mapei.com](http://mapei.com) and [mapei.hr](http://mapei.hr)





# Murmansk icebreaker ship

## VYBORG, RUSSIA

The Murmansk is the penultimate of a series of similar diesel and electrically-powered icebreaker ships commissioned by the Russian Federal Agency for Maritime and River Transport. Six icebreakers were built between 2008 and 2016 as part of two state-funded initiatives, Project 21900 and Project 21900M. The Murmansk was part of the second project and the contract for the construction of the ship was awarded to the Finnish shipbuilding company, Arctech Helsinki Shipyard. Apart from “shepherding” ships with much higher tonnage, this icebreaker is also used to

help extinguish fires on board ships, to assist or to tow ships in difficulty and to transport heavy loads. Mapei took part in its construction by supplying products suitable for floors subjected to large levels of deformation.

ULTRABOND ECO 170 adhesive was used to install textile flooring in the wheelhouse, while ULTRABOND ECO VS90 PLUS was used to bond PVC flooring in various rooms and in the corridors. In the showers and bathrooms, ceramic tiles were installed with KERAPOXY and the joints were grouted with ULTRACOLOR PLUS.



### TECHNICAL DATA

**Period of construction:**  
012-2015

**Period of the Mapei intervention:** 2015

**Client:** Russian Federal Agency for Maritime and River Transportation

**Design:** Arctech Helsinki

**Contractor:** Vyborg Shipyard

**Mapei coordinator:**  
Denis Krutilin, ZAO Mapei (Russia)

### MAPEI PRODUCTS

Ultrabond Eco 170,  
Ultrabond Eco VS90 Plus,  
Kerapoxy, Ultracolor Plus

For further information on products visit [mapei.com](http://mapei.com) and [mapei.ru](http://mapei.ru)



# Getting bigger and more competitive

THE NEW MAPEI AS MANUFACTURING PLANT AND STORAGE FACILITIES NOT FAR FROM OSLO OPENED IN NORWAY ON 1<sup>ST</sup> OCTOBER

Mapei has come a long way in Norway. After taking over a company called Rescon based in Sagstua (approximately 100 km from Oslo) in 1999, the Group ended up building its fifth biggest manufacturing plant here. A brand-new production unit primarily for manufacturing products in powder form (adhesives, levelling/smoothing compounds) and new facilities for storing finished products and raw materials officially opened on 1<sup>st</sup> October. The Group's Norwegian subsidiary was initially primarily involved in supplying thermo-setting plastics, special cementitious mortars and admixtures for concrete, but now the plant in Sagstua mainly manufactures materials for most Mapei product lines, ranging from solutions for the building industry to cementitious and resin floors, products for installing ceramics, waterproofing agents and cement additives, as well as products for underground constructions.

The Sagstua plant is also the home of

the headquarters of Mapei Nordic & Baltic and of a Research & Development laboratory that opened in October 2007. A training centre also opened here in 2015, which allows the Norwegian subsidiary to carry out intensive training work for Mapei clients and partners in all Nordic and Baltic nations.

Sagstua has always been the main base and launchpad for all Mapei operations in northern European countries, such as Sweden, Iceland, Denmark, Finland, Estonia, Latvia and Lithuania that host Group distributors and subsidiaries. The Group's subsidiaries in Scandinavia officially changed name in October 2011 to

#### IN THIS PAGE.

The Mapei AS plant in Sagstua was recently extended to encompass new storage facilities and a new manufacturing plant.







fall in line with the Group's official brand, so Rescon Mapei AS was renamed Mapei AS. Some enviable targets have been achieved by this subsidiary over 40 years' growth: firstly, in sales (revenue in 2018 reached 95 million Euros); in the number of staff (the company now employs 250 staff); and, since October, with its new cutting-edge manufacturing plant constructed using eco-sustainable technology.

### **GREAT CELEBRATIONS**

The Mapei AS plant in Sagstua has been extended by approximately 8000 m<sup>2</sup> to cover an overall area of 24,000 m<sup>2</sup> thanks to an investment of approximately 19 million Euros. Extension work lasted almost 2 years and resulted in the construction of two storage facilities and a manufacturing plant for materials in powder form complete with a 45 m-tall tower holding silos. Manufacturing operations carried out here can claim to have reduced environmental impact and energy is generated by means of a geothermal system exploiting heat from under the ground. The products manufactured here do not just supply the Norwegian market, they are also exported to Nordic and Baltic countries. The completion of these operations deserved to be celebrated in the appropriate way and Mapei AS did so in style, inviting approximately 300 guests, including customers, staff, journalists and

authorities, to join in the celebrations on the afternoon of 1<sup>st</sup> October. The plant in Sagstua, which was honoured with a Royal visit by King Harald V and Queen Sonja of Norway in July 2017, was this year treated to a visit from Erna Solberg, the current Prime Minister of Norway, underlining the importance of the new Mapei AS manufacturing plant. Guests arrived at the Sagstua plant around 12 o'clock and were greeted by female members of Mapei AS staff, all wearing traditional dress from the area they come from. A showroom displaying Mapei products and systems was set up in the new raw materials storage facility, where a buffet lunch was served before beginning the guided tour of the plant.

The Prime Minister, Erna Solberg, and Alberto Colella, the Italian Ambassador to Norway, arrived around 2 p.m. and were greeted by Trond Hagerud, General Manager of Mapei AS and head of the Group's operations in Nordic and Baltic countries. These very special guests also visited the plant along with a group of journalists and some young people doing internships at the Norwegian subsidiary. Everybody was then entertained with music by a violinist and young singer from our local area.

It was then time for the official speeches starting with Trond Hagerud, who, after thanking all the guests and authorities for coming, told everybody how incred-



**1.** The opening ceremony of the new plant was attended on the 1<sup>st</sup> of October by the Norwegian Prime Minister, Erna Solberg, who was accompanied by Trond Hagerud, General Manager of Mapei AS and Region Director of the Nordic and Baltic countries, on a tour around the plant.

**2.** The event was attended by approximately 300 people, including local officials, staff and executives from Mapei AS and the Group's other subsidiaries from the Nordic and Baltic countries.

**3.** The guests visited the plant's manufacturing areas and new storage facilities.

**4.** Guests enjoyed musical entertainment by local talents.

## TEAMWORK NORWAY



**5, 6.** Official speeches were given by Trond Hagerud, Erna Solberg (who also performed the ribbon-cutting ceremony) and the Mayor of the Nord Odal City Council, Lise Selnes.

**7.** The event was also attended by Lorenzo Pastore, Corporate Area Manager.

**8.** The new manufacturing plant was officially started at the end of the event.



## MAPEI AS

**1**  
MANUFACTURING PLANT  
IN SAGSTUA

**1**  
TRAINING CENTRE

**1**  
RESEARCH  
& DEVELOPMENT  
LABORATORY

**250**  
EMPLOYEES

**95**  
MILLION EUROS  
2018 TURNOVER

ibly proud he was of what this plant had achieved and Mapei's growth throughout the whole of northern Europe. The plant manager, Jan Roger, then gave a brief overview of the extension work and outlined certain specifics about its operating.

The Prime Minister said she was really impressed with the new plant: "It is always exciting when a new production unit opens in Norway. It proves that Norwegian business and industry are competitive. And the most remarkable fact is that Mapei is a foreign company that could have located its plant anywhere but chose here because of the expertise and efficiency it found in this area". Lise Selnes, the Mayor of the Nord Odal City Council where the headquarters of Mapei AS is located, pointed out that the plant extension came about partly thanks to the great working partnership between Mapei and local authorities, who did everything possible to ensure this area was chosen to host the Group's new manufacturing plant in

northern Europe. "In many places a City Council is seen as a hindrance to business, but here we are considered to be a factor in success", so the Mayor went on to say. "I'm extremely proud because we did everything possible for the company right from the very first day. The City Council has been working in close cooperation with Mapei since 1999 and when it discovered that the Group might build its new manufacturing plant here, it took all the necessary measures to make it happen".

Next to speak were representatives of a corporate client, Granitt og Betongvare, and a supplier, Norcem, who emphasised the fact that Mapei AS is part of a supply chain based on a close working relationship between several companies guaranteeing efficiency and success for everybody involved.

Guests were then invited to watch the symbolic start of the new manufacturing plant by Jan Roger, before Trond Hagerud drew the ceremony to a close and thanked everybody for taking part.



# Works in Norway



## Bergen Airport, Terminal 3

### FLESLAND, BERGEN

A new terminal was built in 2017 for the Bergen airport in the south of Norway. The terminal extends over a total area of 85,000 m<sup>2</sup> (including the 22,000 m<sup>2</sup> of existing buildings) and was built to handle a flow of 10 million passengers. The construction of the terminal cost 360 million Euros and Mapei took part in the project by supplying products to prepare (PRIMER G, PRIMER ECO\*

and UNIPLAN ECO\*) and then water-proof (MAPEGUM WPS) substrates, to install ceramic tiles and stone materials (MEGALITE S1\*), to grout the joints (ULTRACOLOR PLUS and KERAPOXY DESIGN) and to seal expansion joints (MAPESIL AC) in various areas of the terminal (public areas, bathrooms and the stairs to the railway station).



#### TECHNICAL DATA

**Period of construction:** 2015-2017

**Year of the Mapei intervention:** 2017

**Client:** Avinor

**Contractor:** Sweco AS

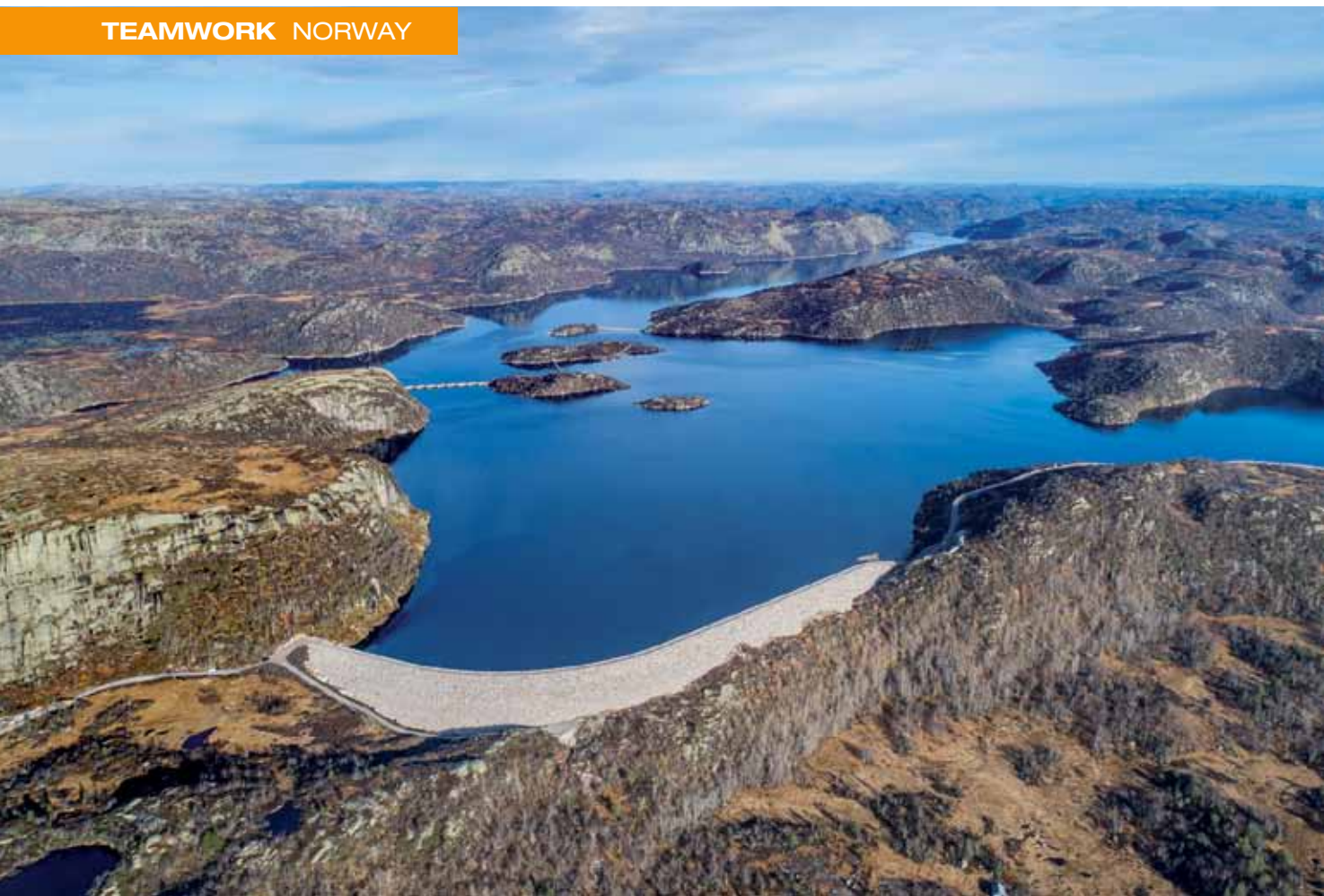
**Project managers:** Jens Otto Villumsen, Trond Wiese Hansen, Christian Sortland

**Subcontractors:** Celco AS, Bru og Wiese Hansen Murmesterforretning, Stor Bergen Mur og Flis AS, Industrigulvspeialisten

**Mapei coordinators and photos:** Christian Espeseth and Kenneth Nilsen, Mapei AS (Norway)

#### MAPEI PRODUCTS

Primer G, Primer Eco\*, Uniplan Eco\*, Mapegum WPS, Megalite S1\*, Ultracolor Plus, Kerapoxy Design, Mapesil AC



## Skjerkevatn dam

### ÅSERAL

The Norwegian electrical energy supplier Agder Energi recently constructed a new dam on Lake Skjerkevatn, in the south of Norway, to better exploit the potential of the hydro-electric plant situated a little further downstream. It is the biggest dam of its type in Norway and has enabled the plant to increase production to 40 GWh per year, enough electricity to supply 2,000 homes.

The project was awarded the national "Damkrona 2018" prize for dams that stand out for their excellence in con-

struction techniques.

It took more than two and a half years to complete the dam out of a mixture of concrete and rocks.

Mapei AS also took part in the construction of the dam by supplying various products, such as MAPEPOXY BI-R\* two-component epoxy adhesive for injections and RESFOAM 1KM ultra fluid, one-component polyurethane injection resin, which is used to waterproof structures, land and rocks subjected to intense water seepage.

#### TECHNICAL DATA

**Period of construction:** 2018-2019

**Period of the Mapei intervention:** 2018-2019

**Client:** Agder Energi Vannkraft AS

**Mapei distributor:** Rencon AS

**Contractors:** JV Skanska TT Anlegg A Rencon AS /

Eco Injeksjon AS

**Mapei coordinator:** Jan Tore Siljedal, Mapei AS (Norway)

**Photos:** Anders Martinsen

#### MAPEI PRODUCTS

Mapepoxy L\*, Redirep 25 RSF\*, Redirep 45 RSF\*, Resfoam 1KM, Resfoam 1KM AKS\*, Purgel\*, Tynner Rapp\*,

Mapefer, Dynamon SX-N, Lynbetong\*, Grout Set 2000\*, Mapepoxy BI-R\*





## Sjøtroll fish farm

### FITJAR

Lerøy, a Norwegian salmon company, recently completed construction of a new farm complex for breeding and raising fish on an industrial scale in Fitjar, on the west coast of Norway. It is one of the largest of its kind in the world and cost around 65 million Euros. The plant also adopts cutting-edge technology to farm the salmon, which are normally transferred from fresh water to salt water when they reach a weight of 180 grams. Thanks to this technology, the salmon can remain in the fresh water until they

reach 500 grams, which reduces the risk of them catching lice. More than 18,000 m<sup>2</sup> of surfaces in the tanks at the farm were waterproofed with PURTOP 1000 two-component, solvent-free, pure polyurea membrane, which was applied by spray. PURTOP 1000 features a high level of elasticity and excellent resistance to abrasion. It is completely waterproof and suitable for contact with potable water, properties which will guarantee a high level of durability for the tanks and protection for the fish.

#### TECHNICAL DATA

**Period of construction:** 2018-2019

**Period of the Mapei intervention:** 2018-2019

**Clients:** Lerøy Vest AS and Sjøtroll Havbruk AS

**Contractor:** Total Betong AS

**Works Director:** Ole Roger Sem

#### Waterproofing

**contractor:** Minor Industriplast AS

**Mapei coordinator:** Erik Gabrielsen, Mapei AS (Norway)

**Photos:** Total Betong AS and Erik Gabrielsen

#### MAPEI PRODUCTS

Mapeprimer M\*, Purtop 1000





## Langavatn water treatment plant

### ÅLGÅRD

The Langavatn water-treatment plant is situated 30 km to the south of the city of Stavanger in south-west Norway. Construction of the plant got underway in 2014 and was completed, thanks to an investment of more than 100 million Euros, in 2019. The plant, which extends over an area of 21,000 m<sup>2</sup> with a building covering 9,700 m<sup>2</sup> of the plant, has 44 tanks spread over two levels that treat the water and then supplies potable water to around half a million people.

Mapei AS supplied products such as MAPEPOXY L\*, REDIREP 45 RSF\* and CONFIX\* to treat various concrete surfaces and to seal cracks before bonding and grouting 6,000 m<sup>2</sup> of ceramic tiles with KERAPOXY.

Apart from these products, ZINKBOLT\* expansive mortar was used to anchor the bolts to the rocks and PLANITOP SMOOTH & REPAIR and PLANITOP FINE FINISH were used to skim and finish off the surface of concrete.

#### TECHNICAL DATA

**Period of construction:** 2014-2019

**Period of the Mapei intervention:** 2018-2019

**Design:** Asplan Viak AS

**Client:** IVAR

**Main contractor:** Kruse Smith

**Subcontractor for concrete work and**

**treatment:** Chem Con AS

**Installation company:** og Murmester Heskje

**Project manager:** Arne Heigre

**Mapei coordinators:**

Livar Høgemark and Reidar Skurve, Mapei AS (Norway)

**Photos:** Thomas Thorsen

#### MAPEI PRODUCTS

Kerapoxy, Mapepoxy L\*, Redirep 45 RSF\*, Confix\*, Planitop Smooth & Repair, Zinkbolt\*, Planitop Fine Finish





## Fredrikstad on-shore fish farm

### FREDRIKSTAD

Fish-farming on an industrial scale in Norway has to face many challenges, such as the fish dying, diseases, polluted seawater, the excess use of medicines, etc, and to help overcome these challenges, Norway's first ever on-shore fish farm has been built in the south-west of the country. Because the client specified the use of products with high performance properties and excellent mechanical properties, Mapei systems were chosen to waterproof the tanks and to treat the concrete water pipes

connected to the water treatment plant. Going into detail, the substrates were treated with MAPEPRIMER M\* epoxy primer before applying around 7,000 m<sup>2</sup> of PURTOP 1000 membrane, which was chosen because it is suitable for contact with drinking water, is highly flexible, has high waterproofing capacity and creates a very smooth surface which can help protect the fish. Also, MAPECOAT DV\* solvent-free epoxy coating was applied on 700 m<sup>2</sup> of surfaces.



#### TECHNICAL DATA

**Period of construction:** 2018-2019

**Period of the Mapei intervention:** 2018-2019

**Client:** Fredrikstad Seafoods AS

**Contractor:** Fredrikstad Seafoods Engineering

**Project manager:** Ketil Fjeld

#### Waterproofing

**contractor:** Resconsult AS

**Mapei coordinators:**

Erik Gabrielsen, Mapei AS (Norway)

**Photos:** Resconsult AS, FMV

**Photos:** Fredrikstad Seafoods

#### MAPEI PRODUCTS

Mapeprimer M\*, Purtop 1000, MAPECOAT DV\*

\*These products are manufactured and distributed on the Norwegian market by Mapei AS.

For further information on products see [mapei.com](http://mapei.com) and [mapei.no](http://mapei.no)



# Spangereid (Norway) THE UNDER RESTAURANT

BUILT UNDERWATER IN THE OCEAN OFF THE COAST OF NORWAY, IT WAS DESIGNED BY SNØHETTA



The Under Restaurant is a monolithic structure made from reinforced concrete. It is 34 m long and slopes away into the sea down to a depth of 5 m, where it rests on the seabed just off Lindesnes, the most southerly point of the Norwegian coast, around a one and a half hour drive from the nearest airport and five hours from Oslo.

The interior spaces of the restaurant are protected by a 1 m-thick reinforced concrete shell designed to withstand the pressure of the water and the particularly harsh climatic conditions both above and below sea level. The designers decided to leave the exterior surfaces of the construction with a rough, exposed concrete finish to encourage the growth of seaweed and mussels below the waterline and to make the structure seem part of the rocky coastline where it is situated. Thanks to its particular location, the building is also intended to become an observation point to control the surrounding marine environment.

The structure is made from precast modules and is anchored to a block



## IN THE SPOTLIGHT

### ULTRABOND MS RAPID

It is a one-component, deformable, thixotropic adhesive with a high modulus of elasticity made from silylated polymers, characterized by its high initial tack and rapid final hardening. It is recommended for those bonds where a strong initial tack and high mechanical strength are required after a short curing time. It features rapid polymerisation and is especially suitable for bonding cement and cement-derived materials, bricks, stone, wood and wood-derived materials, metals, painted surfaces, ceramics, glass, rigid and flexible plastics.



1. The building was made from precast concrete modules.
2. The 3D tiles in the bathrooms were installed with ULTRABOND MS RAPID.
3. The restaurant on the lower floor.



of concrete. A walkway links the rocky coastline to the entrance of the restaurant, which opens onto an interior space with a surface area of 600 m<sup>2</sup> over three levels descending into the sea. On the top floor, or “zero” floor, there is the reception and cloakroom, followed by a bar at the mezzanine level and then a lower floor where the restaurant, with seating for up to 100 guests, is situated. The dining room has a panoramic window with a double layer of acrylic glass looking out directly onto the seabed.

### WORKING BELOW SEA LEVEL

Because of its special design and complexity, the project required a large range of high quality and technologically advanced products.

The products supplied included CONFIX\*, CONFIX FIN\* and REDIREP 45 RSF\* to repair the concrete, epoxy resin-based products and hi-flow mortars for anchoring elements in place (such as MAPEPOXY BI\*, MAPEPOXY LR\*, MAPEPOXY L\* and NONSETT 400\*), MAPEFIX VE SF for chemical anchors,

MAPEPRIMER M\* epoxy primer for treating concrete substrates with surface moisture, PLANITOP FINE FINISH ultra-fine-textured skimming compound for exposed concrete, RESFOAM 1KM and RESFOAM 1KM AKS\* resin for waterproofing structures subject to intense water seepage and SUPERFLYT\* superplasticising admixture for mortars. ULTRABOND MS RAPID adhesive was chosen for its high sucker effect and rapid setting properties to install the 3D ceramic tiles in the bathrooms.

### TECHNICAL DATA

#### Under Restaurant,

Spangereid (Norway)

#### Period of construction

2018-2019

#### Period of Mapei

intervention: 2018-2019

#### Design:

Snøhetta

#### Client:

Lindesnes Havhotell

#### Installation companies:

Rencon AS, Muremester Arnt

Kristensen AS

#### Main contractor:

BRG

Entreprenør AS

#### Project manager:

Dag Terje

Håland

#### Subcontractors:

Rencon AS,

Muremester Arnt Kristensen

AS

#### Mapei coordinators:

Trond

Helgedagsrud and Alexander

Kristensen, Mapei AS (Norway)

#### Photos:

Tomasz Majewski

Photography, Trond

Helgedagsrud

### MAPEI PRODUCTS

#### Smoothing and repairing

concrete: Conplan Eco

F\*, Confix\*, Confix Fin\*,

Mapeprimer M\*, Redirep 45

RSF\*, Planitop Fine Finish,

Admixture for mortars:

Superflyt\*

Structural anchors: Mapepoxy

BI\*, Mapepoxy L\*, Mapepoxy

LR\*, Nonset 400\*;

Anchoring: Mapefix VE SF

Waterproofing: Resfoam 1KM,

Mapecoat CFS\*, Resfoam

1KM AKS\*

#### Installing ceramic tiles:

Ultrabond MS Rapid

\*These products are manufactured and distributed on the Norwegian market by Mapei AS (Norway)

For further information on products see [mapei.com](http://mapei.com) and [mapei.no](http://mapei.no)

## Rimini (Italy)

# PALACONGRESSI RIMINI

MAPEI SYSTEMS FOR INSTALLING THE ORGANIC RESILIENT FLOORING PURLINE BY WINEO IN ONE OF THE LARGEST CONGRESS CENTRES IN EUROPE





**RIGHT.**  
The Palacongressi conference centre in Rimini was designed and built with a strong focus on the respect for the environment.



The Palacongressi conference centre in Rimini – designed by the architect Volkwin Marg from gmp Architects in Hamburg and managed by Italian Exhibition Group SpA – was inaugurated in 2011. The structure extends over an area of 38,000 m<sup>2</sup> and is the largest congress centres built from scratch in Italy. It was designed and constructed with an accent on respect for the environment, technological innovation and flexibility of use. Situated just a few minutes from the city centre, it has large spaces that can accommodate any size or type of congress. On the ground floor there is a large multipurpose hall (around 4,700 m<sup>2</sup>) and its original industrial flooring was recently renovated using numerous Mapei product systems to overcome various types of problem: cracks, unsuitable materials and defects in its flatness.

#### **REPAIRS AND INSTALLATION ON SCHEDULE AND WITHIN BUDGET**

The schedule to carry out the work – which was particularly tight so that the centre could honour its commitments – meant the site would only be available between the end of July and the middle of August.

To satisfy the special requirements of the client, Mapei Technical Services were also involved during the preliminary work to define how the work should be carried out and to select the most appropriate materials for the work. In order to keep costs down, rather than skim the entire surface, it was decided to carry out localised repair work which would still enable a suitable substrate to be created for the type of flooring chosen.

PLANIPREP FAST TRACK proved to be particularly effective for this job. This product is an ultra rapid-drying, fine textured, thixotropic cementitious compound for skimming and levelling-off the surface of new and old substrates (from a feather edge up to a maximum thickness of 3 mm) to make them suitable for installing any type of flooring very quickly (after just 2 hours), including resilient and textile flooring.

Flatness was restored to the substrate where required by using NIVORAPID and LATEX PLUS, which together form a strong, resistant levelling layer with excellent bonding strength. The cracks in the flooring were opened up and then sealed with EPORIP two-component, solvent-free, epoxy adhesive mixed with QUARTZ 1.2 quartz sand.

PLANIPATCH smooth, ultra-fast setting patching compound was also used in certain areas to restore flatness. Certain parts of the existing floors needed to be demolished and were rebuilt with TOPCEM PRONTO ready-to-use, normal setting, quick-drying mortar, which was bonded monolithically to the old screed with EPORIP two-component, solvent free epoxy adhesive.

The decision about the flooring was crucial given the specific needs: a low thickness resilient floor with very high resistance performance (including passage of heavy vehicles up to 140 quintals, stains and aggressive agents, etc.), bio-based and sustainable in accordance with the green philosophy of the building and the fair authority itself, a modern design that adapted to the existing context. The choice therefore fell on the organic flooring PURLINE by Wineo, the resilient floor able to satisfy



1

1. Before installing the floors, the substrates were skimmed with PLANIPREP FAST TRACK. Flatness was restored to the substrate where required by using NIVORAPID and LATEX PLUS. 2, 3, 4. PURLINE organic flooring by Wineo was installed with ADESILEX G20 adhesive. 5. ULTRABOND MS RAPID rapid-setting assembly adhesive and MAPESIL AC sealant were used to seal the manholes.



2



3



4



5

all requirements: an ecological polyurethane floor, obtained from natural renewable elements, free of chlorine, solvents and plasticizers and consequently free of harmful emissions, as asserted by the numerous quality certifications obtained.

Because of the particular type of use of the hall, the mechanical stresses and loads the flooring in the hall is exposed to and the fact that machinery and equipment pass through the hall, the adhesive chosen to bond the flooring was two-component, low viscosity, epoxy-polyurethane ADESILEX G20, which is normally used for bonding rubber, PVC and resilient and textile floors, especially in the event of intense mechanical stress. To seal the manholes in the floor, the products used were MAPESIL AC pure, acetic silicone sealant and ULTRABOND MS RAPID rapid-setting assembly adhesive.

#### IN THE SPOTLIGHT ADESILEX G20

It is a low-viscosity, two-component epoxy-polyurethane adhesive for resilient and textile flooring in interiors and exteriors. Extremely strong and elastic, it is particularly suitable for non-absorbent substrates or moisture-sensitive substrates (wood, metal, ceramic, stone, resin, PVC, rubber, etc.). It is used for bonding rubber, PVC and all common types of resilient and textile floors, especially in the event of extreme stress due to solar radiation, intense mechanical stress by lift truck, forklift, etc., thermal shock or long-time contact with water.



#### TECHNICAL DATA

**Palacongressi Rimini Congress Centre**, Rimini (Italy)

**Year of construction:** 2011

**Original design:** Volkwin Marg, gmp Architects

**Year of the Mapei**

**intervention:** 2019

**Intervention by Mapei:**

supplying products for preparing substrates and

bonding resilient floors

**Client:** Italian Exhibition Group SpA

**Design:** Claudia Campagna

**Works director:** Italian Exhibition Group SpA

**Works director:** Claudio Colombo

**Safety coordinator:** Renato Veronesi

**Contractor:** Baldacci

Costruzioni

**Floor installation company:** Davide Guidi

**Installed material:** PURLINE organic flooring by Wineo

**Distributor:** Centro Moquette Rimini Srl

**Mapei coordinators:** Paola Di Silvestro and Antonio Costanzi, Mapei SpA (Italy)

#### MAPEI PRODUCTS

**Preparing substrates:** Eporip, Nivorapid, Latex Plus, Planipatch, Planiprep Fast Track, Ultraplan

**Bonding resilient floors:** Adesilex G20

**Sealing joints:** Mapesil AC, Ultrabond MS Rapid

For further info [mapei.com](http://mapei.com)



THE SECRET  
BEHIND EVERY  
GREAT PERFORMANCE

Mapei offers a complete range of products to create the perfect substrate: with high resistance to loads and excellent results to install any type of flooring. **Because it's what you can't see that makes all the difference.**

EVERYTHING'S **OK** WITH **MAPEI**

Learn more on [mapei.com](http://mapei.com)



# Belgrade (Serbia) NEW PAVING FOR KARADORĐEVA STREET



RENOVATION OF THIS ROAD IN THE CENTRE OF OLD BELGRADE INCLUDED THE INSTALLATION OF STONE PAVING IN THE ZONE TO BE USED BY THE CITY TRAM NETWORK

## IN THE SPOTLIGHT

### MAPESTONE TFB 60

Pre-blended mortar for installation screeds for architectural stone flooring (exposure classes XF4 and XS3). It is a complementary product of MAPESTONE system, which allows to realize architectural stone paving with high durability even in environments subject to rain, to freeze-thaw cycles in the presence of de-icing salts and seawater.







Named after Karađorđe, leader of the first Serbian uprising against the Ottoman Empire, Karađorđeva Street runs through the neighbourhood of Savamala and is one of the busiest roads in the old part of Belgrade. Over the course of the last few years, the area has become one of the main tourist attractions in the city, especially for young tourists, thanks to the opening of new clubs and bars and the presentation of shows and exhibitions held in the open air. Being so close to the port and the customs office also plays a part in it being such an important hub in the daily life of Belgrade. The road also has one of the major tram lines of the city running along it.

In 2017, the local council decided to refurbish Karađorđeva Street by widening the pavements, planting new trees, promoting restoration work on the facades of nearby historic buildings and constructing a new terminus for tourist coaches. The project also included moving the sleepers for the tram-lines and relocating them along the new stone paving (628 metres in length).

The local Mapei Technical Services Department proposed using the MAPESTONE system to the contractor and local council. The system makes it possible to create stone paving in urban surroundings using technologically innovative products at a competitive cost. Mapei recommended using MAPESTONE TFB 60 pre-blended mortar to install the stone. Installation screeds made from MAPESTONE TFB 60 guarantees the durability of architectural stone paving in exposure class XF4 with high compressive strength and high resistance to freeze-thaw cycles. The stone joints were then grouted with MAPESTONE PFS 2 pre-mixed mortar for architectural

#### IN THE FACING PAGE.

A view of Karađorđeva Street.

**1, 2.** Installation of the stone paving on the screed made with MAPESTONE TFB 60.

**3.** The joints in the paving were grouted with MAPESTONE PFS 2.

stone paving, again in exposure class XF4, which has a high level of compressive strength and is also resistant de-icing salts and freeze-thaw cycles. Paving made using this product cycle also absorbs stresses and loads caused by the passage of vehicles, including heavy-goods vehicles. MAPEFLEX PU 65 sealant was then used to seal the joints between the stone and tram lines.

#### TECHNICAL DATA

**Karađorđeva Street,**  
Belgrade (Serbia)

**Year of the intervention:**  
2019

**Intervention by Mapei:**  
supplying products for installing and grouting stone to renovate the paving in the city centre

**Client:** City of Belgrade - Secretariat for Utilities and Housing Service, and Belgrade Land Development Public Agency

**Consortium/Main contractor:** Energoprojekt – Niskogradnja a.d.

**Contractors:** Bauwesens, d.o.o. (Serbia), Clas Rail S.A.S

(France)

**Installation company:**  
Bauwesens, d.o.o.

**Mapei coordinators:** Andrija Vidanović, Đorđe Jovanović, Mapei SRB d.o.o. Beograd (Serbia)

**Photos:** Nemanja Janić, Mapei SRB d.o.o. Beograd

#### MAPEI PRODUCTS

Installing and grouting stone

paving: Mapestone TFB 60, Mapestone PFS 2

Sealing joints: Mapeflex PU 65

For further information on products visit [mapei.com](http://mapei.com) and [mapei.rs](http://mapei.rs)



# An historic trademark in Italian chemicals

VINAVIL KEEPS ON GROWING AND IS CELEBRATING 25 YEARS IN THE MAPEI GROUP

The story of Vinavil, a subsidiary of the Mapei Group that manufactures vinyl acetate polymers, is closely entwined with the history of Italian chemicals, an industry that underwent significant and not always painless change during the course of last century. The company is now celebrating 25 years in the Group: this is a chance to take stock and plan new strategies for the future on a rapidly evolving market. With revenue of 181 million Euros in 2018 (47% of which in Italy and 53% abroad) and 500 staff worldwide, Vinavil SpA is a global company: its manufacturing-business structure and technical assistance service are expanding and the company is focusing on long-term partnerships with other operators in the chemicals industry, supplying products for miscellaneous sectors ranging from the textiles to the chewing-gum industry. But Vinavil does not just manufacture for industry: the brand has actually been famous for decades thanks to Vinavil universal adhesive, the famous “white glue” in its distinctive red and white packaging. There is also considerable focus on environmental sustainability: the manufacturing plants in Ravenna (Central Italy) and Villadossola (Northern Italy) manufacture solvent-free solid or water-based dispersions guaranteeing extremely low emissions of volatile organic compounds. In every industry in which it operates, Vinavil manufactures products complying with the regulations in force in all those countries to which they are supplied. The Research& Development sector also plays a key role in formulating innovative products. Vinavil’s story continues in a mix of tradition and innovation.



## STEPPING STONES IN A HUNDRED-YEAR BUSINESS VENTURE

|                                                                                   | 1922                                                                                                                                                                                                                                                                                                                                                   | 1936                                                                                                                                                                              | 1942                                                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
|  | <p><b>A production facility is opened</b> by SET (Società Elettrochimica del Toce) and SIPS (Società Italiana di Prodotti Sintetici) in Villadossola (Italy) to produce calcium carbide. Over the next few years, the facility starts producing rayon acetate.</p>  | <p><b>Production of vinyl acetate commences</b> on a semi-industrial scale which is transformed into polymers and polyvinyl alcohol for applications in the adhesives sector.</p> | <p><b>The so-called “white glue” is created</b> which ten years later becomes known as Vinavil “universal adhesive”.</p> |





**LEFT.** The Vinavil manufacturing plants in Ravenna (Central Italy) and Villadossola (Northern Italy) manufacture solvent-free solid or water-based dispersions guaranteeing extremely low emissions of volatile organic compounds.



## NOT ONLY "WHITE GLUE"

Vinavil's manufacturing breaks down into the following production realms:

- Vinylic and acrylic binding agents for water-based paints
- Vinylic and acrylic dispersions for adhesives and the textiles industry
- Re-dispersible polymer powders
- Solid polymers for the chewing-gum industry
- Polymers in pearls for special uses
- Vinyl adhesives for the "do-it-yourself" market
- Vinylic and acrylic polymers tailor-made for miscellaneous uses (from cementitious additives to suspending agents for polymerisation, etc.).



|                                                                                   | 1946                                                                                                                                                                                                                                      | 1952                                                                                                                                                                                                                                                                                                                                             | 1966                                                                                                                                                                                                                                                 |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <p>The French company Rhône Poulenc, through the company Rhodiatoce, launches a joint-venture with Montecatini. Over the next few years, the company brings in its valuable know-how originating from large German industrial groups.</p> | <p>Reactors to produce polyvinyl acetate in emulsion are installed and at the same time the name Vinavil is born (an abbreviation of Vinyl Acetate at Villadossola). This white latex invades the Italian market and soon becomes synonymous with glue.</p>  | <p>Montecatini merges with Edison, to form Montecatini Edison S.p.A., which in 1974 becomes Montedison. This new colossal company carried with it the seeds of the successive industrial crisis. In 1972 Rhône Poulenc leaves the joint-venture.</p> |

## Celebrating with Mapei

In 2019 Vinavil celebrated being part of the Mapei Group for 25 years. An important landmark that was duly underlined during the Vinavil Global Meeting held from 3<sup>rd</sup> to 5<sup>th</sup> September, three days of meetings between the Vinavil SpA, Vinavil Americas & Canada and Vinavil Egypt teams to take stock of the results achieved, plan a new customer-intimacy strategy, and enjoy an evening's celebrations. After the first day's proceedings at the Mapei headquarters in Milan, everyone taking part moved on to Vinavil's plant in Villadossola and to Baveno (Northern Italy) for two days of technical-business meetings, which drew to a close on the evening of 5<sup>th</sup> September in the town of Stresa on Lake Maggiore with a gala dinner and concert at the Stresa Festival, an event Vinavil has now sponsored for 13 years in a row.



A moment from the gala evening celebrating Vinavil's 25<sup>th</sup> year with the Mapei Group: from left, Marco Squinzi, President of Vinavil SpA and Director of Research & Development for the Mapei Group, Laura Squinzi, Member of Vinavil's Boards of Directors, and Taako Brouwer, Managing Director of Vinavil SpA. Below, a group photo of guests at the Vinavil Global Meeting held in Baveno on Lake Maggiore.



1979

The cost of running the vinyl acetate plant is no longer sustainable and it closes down, followed shortly after by the closure of the calcium carbide plant in 1983.



1990

All Montedison's chemical operations are passed over to EniChem. The plant in Villadossola comes under the umbrella of the operations company EniChem Synthesis, along with the facility in Ravenna (Central Italy) which produces similar products.

1991

EniChem presents a Business Plan which foresees the closure of the facility in Villadossola. After strong pressure from politicians and trade unions, it is decided to sell the company.

1994

Mapei buys the vinyl acetate production activities from EniChem Synthesis and the purchase includes the Villadossola and Ravenna facilities. The new company is renamed Vinavil S.p.A. Following the acquisition, a restructuring and redevelopment process is launched.







## Customer intimacy and foreign markets



### “ **TAAKO BROUWER, MANAGING DIRECTOR OF VINAVAL SPA**

#### **What is Vinavil's business strategy focused around?**

As presented during our celebration of 25 years with Mapei, the core of our strategy is focused around customer intimacy. This strategic concept is not new to Vinavil, as Vinavil has followed this approach unconsciously for a long time. New is the decision to consciously build a strategy towards customer intimacy, ensuring that all departments in our organization actively contribute to this concept. This will allow Vinavil to become the most customer intimate polymer producer in our market and to do this more efficiently. With this approach we aim to differentiate ourselves from our main competitors and target customers that value being understood by the supplier, customers that look for long term partnerships, instead of the lowest price only. The technical assistance Vinavil offered in the past is a nice example of the way we have been close to our customers in the past. We will continue offering this great value to our customers, while focusing a little more on partners that really value this service.

#### **Are there areas in which you plan to invest more heavily?**

We will also widen our hunting grounds. Today we are the real market leader in the whole of Italy, even in the west part of Sicily, while in Switzerland, Austria and France (which are much closer to our plants than Sicily) our position is not so strong. Our aim is to use our customer intimacy strategy to increase our presence in the countries around us, while we will heavily defend our home turf by offering service and new products, like coatings for metal and pressure sensitive adhesives, to our local customer base.

|                                                                                   | 1997                                                                                                                                                                                                                   | 2000                                                                                                                                                                 |                                                                                      | 2007                                                                                                                                                              |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <p><b>Internationalisation of the company commences</b> with the foundation of Vinavil Corp. (USA) and Vinavil Inc. (Canada) in North America. Since 2001 there has been a joint-venture in Egypt (Vinavil Egypt).</p> | <p><b>Production of redispersible powders</b> used in cementitious products by Mapei commences and, the following year, a line of acrylic emulsions is launched.</p> |  | <p><b>A new line of copolymer solutions</b> from a 30 m<sup>3</sup> reactor is launched. In the same year, the company is awarded EN ISO 14001 certification.</p> |

# AT THE THEATRE, THINKING ABOUT THE FUTURE

## NO'HMA THEATRE'S NEW SEASON FOCUSES ON "THE WORLD WE WANT"

In 1994 Teresa Pomodoro, an actress, playwright and director, set up the No'hma Cultural Association in Milan to develop her own personal approach to theatre inspired by the idea of culture as a public service. The clearly stated intention was to bring people together through the miscellaneous languages of theatre and to focus on "sharing, solidarity and engagement/involvement based around trust and hope in the future".

Now, 25 years later, No'hma Theatre is a well-established player on the theatre scene in Milan with an extensive schedule of theatrical shows, stage-music performances, events and meetings that attract an average overall audience of 50,000 each season from all walks of life, with over half the people under the age of 35.

Following Teresa's premature death in 2008, her sister Livia Pomodoro took

over her work, injecting fresh input and extending it onto an international scale, still without charging for tickets. The widespread promotion of high culture is one of the linchpins of the theatre, whose ultimate goal is to help offer "art theatre

for everybody".

For several years now Mapei has been sponsoring No'hma Theatre, which is based in the old city waterworks in via Orcagna in the Città Studi neighborhood of Milan.

### Why "No'hma"?

To really understand the heart and soul of No'hma Theatre we need to begin with its name, which is a combination of two Greek words: «νοῦς» meaning thought and «αἷμα» meaning blood or life blood. The purpose of the Association and the spirit in which it has fit into the city's urban fabric can be traced to the notions of thinking, reflecting, flowing and nourishing (just like blood) its audience and the city as a whole.



Spazio Teatro NO'HMA  
Teresa Pomodoro





## About Teresa Pomodoro

Teresa Pomodoro, the founder and driving force behind No'hma, learnt her trade working with leading cultural figures in Milan in the 1970s: meeting Giorgio Strehler had a profound influence on her; he was the creator of "Space, Time, Words", a group Teresa joined as she became deeply interested in dramaturgy.

Her initial experiences gave her a great desire to create an innovative, free theatre project with no limits or financial constraints that set out to serve society and tackle quite different themes from traditional theatre. Teresa's own artistry culminated in the creation of the No'hma Theatre.

Over its first few seasons No'hma took the theatre into places characterised by social exclusion, holding workshops at both Milano-Opera and San Vittore prisons. The 2006 project entitled "Thinking and Faith" focused on secular people, who had examined the relations between the human and divine. The following year Teresa organised a series of shows devoted to the "Great figures of Peace and Human Solidarity", such as Mother Teresa of Calcutta, Gandhi and Martin Luther King Jr. Finally, in 2008, she put on a series of events focusing on the "Educators who create the Universal Heritage", such as Father Lorenzo Milani and Father David Maria Turolido.



The No'hma Theatre is located in the Città Studi neighbourhood of Milan and attracts an average overall audience of 50,000 each season.

### THE WORLD WE WANT

No'hma Theatre's seasonal schedule focuses on a different theme each year. The leitmotif of the 2019-2020 season is "The world we want", which will be presented on stage as a world of global vices and individual potential as Mother Earth's cry for help goes unheeded while, nevertheless, remaining a melting pot of hope, contradictions and diversity. A world that can only come about if people learn how to live together in peace, as became clear last season when the theatre focused on relations between people. Other stage events devoted to "The world we want" will be scheduled in conjunction with an International Prize entitled "Teresa Pomodoro's naked theatre" in memory of its founder, which will see a combination of theatrical experimentation and tradition from five continents alternating on stage. There will also

be musical events like "Harmonies and sounds", a mix of contemporary music, jazz and folk music, "The first night of the first night at La Scala" dedicated to the world of opera, and an evening entitled "A gift to the city of Milan", with a special show staged in an emblematic location in the city (i.e. Sant'Ambrogio Basilica or the Flower Markets). An extensive and varied programme of events for a theatre that invites us to reflect on the human condition and to envisage change, but which is, first and foremost, a place for art, beauty and interaction.

The season opened on 24<sup>th</sup> October with a concert entitled "Il canto delle radici" with works by the maestro Fabio Vacchi. At the beginning of the evening Livia Pomodoro took the stage to dedicate the concert to Giorgio Squinzzi's memory.

For further information visit [nohma.org](http://nohma.org).



# Celebrity Fight Night 2019



MAPEI WAS  
ALONGSIDE  
ANDREA BOCELLI  
TO SUPPORT AN  
EXCLUSIVE EVENT  
TO HELP PEOPLE  
IN NEED







From 25<sup>th</sup> to 28<sup>th</sup> July Teatro del Silenzio and Forte dei Marmi in Tuscany (central Italy) provided the wonderful setting for the return of “Celebrity Fight Night in Italy”, one of the year’s most popular charity events in support of the Muhammad Ali Parkinson Center and Andrea Bocelli Foundation, which have been working together since 2001 to help people struggling with illnesses, poverty and social marginalisation. For years now Mapei has also been supporting this charity event first established in the United States 25 years ago to help in the battle against Parkinson’s disease and which for over five years now has also been hosted in Italy, thanks to the combined efforts of Andrea Bocelli and his wife Veronica.

This year’s edition was hosted for the very first time in the magical setting of Teatro del Silenzio in Lajatico (Central Italy). An open-air theatre in the very heart of Tuscany - opened in 2006 and built thanks to Bocelli himself, who was born in this town - a magnificent natural setting where art and entertainment are at the focus of attention for a

few hours each year before handing the stage back to the sweet scents and silences of nature. The show, entitled “Wings of freedom” to commemorate the 500<sup>th</sup> anniversary of Leonardo da Vinci’s death, was a great celebration of the idea of flight and our primeval longing to fly up into skies. On the final evening on Sunday 28<sup>th</sup> July, Bocelli once again opened up the doors of his own home along the seafront at Forte dei Marmi to six-hundred guests for an elegant “white party” featuring an exclusive dinner and concert during which many of his dear friends joined him on stage. The evening also marked the official opening of a new fundraising campaign called “Con Te, ripartiamo” (We will start all over again with your help) aimed at rebuilding Camerino Music Academy in Central Italy that has been closed down since the earthquake in 2016.

Culture, singing of the highest quality and high-class international entertainment to help those in need is the kind of social responsibility enterprise that Mapei is always pleased to support.

# De Zerbi: "Sassuolo, we must be more consistent"

THE TEAM MANAGER WILL BE GIVING YOUNG PLAYERS A CHANCE

Roberto De Zerbi, aged 40, is in his second season as team manager of Sassuolo. He expected more from the team's performances over the first few months of the 2019-2020 championship: "We could have more points and have not been consistent enough, but I think there are plenty of good reasons (not excuses) why we are a little bit further down the table than we were this time last season".

## What has changed compared to the first part of the 2018-2019 season?

"In summer 2018 I had the entire squad available right from the first day of the pre-season training camp. Considering all the new players who joined us this summer and the long list of injuries, we are slightly lower down the table than we were this time last year. Not all years are the same. This year's league is much more evenly balanced than it was last season. All those teams that have had players injured during autumn have really struggled".

## In certain matches Sassuolo has only really got going after conceding a couple of goals. Why's that?

"We still haven't found the right mental approach. We have not played consistently right through any of our games so far. This is partly due to changes in the starting eleven: when you change lots of players, you will inevitably struggle to get back to the level you were at the previous year".

## As regards your matches against the top teams, you lost 4-3 against Inter Milan at Mapei Stadium, but the team finished really strongly and almost got a draw.

"Without ignoring the fact that we should have been more focused during the first 70 minutes, the team played really well after that".

## Which was your best match during the first part of the season, the 4-1 win against Sampdoria, your 1-0

## away win at Verona or the 3-1 win at home in the derby against Bologna?

"The matches against Sampdoria, Verona, Bologna and also Spal were all good performances, but I would also like to focus on how well we played in matches we lost against Torino, when we had lots of players out injured, and also Roma, when, unfortunately, our comeback began too late. As regards our worst performances, I would say they were the defeats against Atalanta and Parma".

## This season Berardi has scored more goals and, generally speaking, played better than last season.

"Berardi is scoring more freely and thinking more clearly, but I was also pleased with how he played last season when he was tight in the thick of things. People always remember goals, but he actually performed at a high level last season. Berardi is an exemplary player who has always worked really hard. He went through a bad patch last season, but he kept on training hard and is now playing well again".

## How has Obiang been playing in midfield?

"Whenever he has played well, the whole team has performed well. It is only when he has underperformed slightly that the team has suffered".

## You have Locatelli, the captain of the Italian under 21 team, in midfield. Do you think he is ready to be a key player for Sassuolo when the team, hopefully, qualifies for Europe or do you think he will make his mark internationally playing for some other big club?

He is not ready for that yet. Our job is to make sure he will be soon. Locatelli joined the club in summer 2018 from A.C. Milan, a great team, but it has not been all plain sailing and he has had some disappointing moments with his new club, too. He has ups and downs in most games; Locatelli must become a more complete player and he will because he is intelligent. Sassuolo invests in young players like Locatelli, helping





**RIGHT.** From top, The Greek defender Giorgos Kyriakopoulos, Pedro Obiang, 27, a midfielder from Equatorial Guinea, and Filippo Romagna, who also plays in defence.



them to improve so they can move on to big clubs. That is what we did with Sensi, Lirola and Demiral”.

**Duncan was Sassuolo’s best player for at least two months last season. What about now?**

“He has performed to a very high level this season too, particularly in the games we have won. He needs to be more consistent right through the entire season”.

**Is Traorè really an attacking midfielder, more comfortable when he pushes forward?**

“Traorè is talented but rather wild. But he really is talented. He will eventually become a complete mid-field player; we want to help him get there, so that he can make a real contribution both in attack and defensive. As regards strikers, we have got four and I cannot play them all at the same time. We are already an attacking team, so if I played them all it would cause chaos. Caputo began the season really well and I think he will continue to play well for the rest of the season. Berardi and Boga have both improved and Defrel is an incredibly skilful player, but the injury he got in the autumn has slowed him down”.



**Your new defender Toljan comes from an important club like Borussia Dortmund. Has he fitted in well?**

“He also won the Scottish League Championship with Glasgow Celtic. After a few initial problems with the language, Toljan is now fitting in really well. He scored against Lecce and is getting more involved in the matches, as he realises what great skill and athletic ability he has. Müldür and the other youngsters we have in the squad are also very important. It is my job and that of my assistants to help them improve. Let’s not forget that we lost Rogerio, Ferrari and Bourabia due to injuries. If Ferrari and Rogerio had been available, I could have rotated the team more and let Tripaldelli and Kyriakopoulos progress in their own time”.

**Are there any Sassuolo players you would describe as having been revelations towards the end of 2019?**

“Various players could be described as revelations: Romagna is just 22 years old but already has the head of a veteran; Magnanelli keeps on getting better as he gets older, just like fine wine; Boga has been getting more consistent since the start of the season. Last year Boga was a rather rough diamond, but now he is really shining. Djuricic is also doing well and has been called up for the Serbian national team again after four years and is delighted about that; Consigli is always the first name on the team sheet and Kyriakopoulos is also playing well.

**Do the Sassuolo players and staff feel they have improved after drawing 2-2 against Juventus?**

“Definitely not: thinking we are suddenly better than we were before the match and that all our problems have been solved would mean a real lack of ambition. Consistently showing the same spirit,

concentration and buzz it took to get a point in the away game at Juventus Stadium would, on the other hand, be a sign that we are making progress”.

**Imagine you are the Italian national team manager Roberto Mancini: which Sassuolo players would you call up to play for Italy in the European Championships?**

“Mancini has already shown an interest in a number of our players, including Berardi, Locatelli and our goalkeeper Consigli. Ferrari was also in the frame until he got injured. Italy has qualified for the finals of the European Championships, so it is unlikely the team manager will make any changes to his squad now”.



# Duncan: “My ambition is to set a good example for young kids”

THE AMBASSADOR FOR GHANA AWARDED A PRIZE TO THE SASSUOLO MIDFIELDER

During the build-up to the Sassuolo-Bologna match on 8<sup>th</sup> November, the Ambassador of the Republic of Ghana to Italy, Her Excellence Ms. Eudora Hilda Quartey Koranteng, and Mr. Jonathan R. Magnusen, Minister for Welfare and Head Consul, who were in attendance at Mapei Stadium together with over 200 members of the Ghanaian National Association in Reggio Emilia and Associations from Mondinsieme Intercultural Foundation, presented the Sassuolo midfielder player Alfred Duncan with a special award for sporting merit and human endeavour. Duncan was delighted: “It is immensely satisfying to receive such recognition from my own country. When I first came to Italy, I did not even know where to go and now fifteen years later here I am receiving an award from the Embassy: it means I am doing important work that is helping raise Ghana’s profile. I am delighted to receive this prize and see the smiles on the faces of the 200 Ghana fans, including lots of children. I was like them when I was a child and I dreamt of getting where I am today. It is only right

that they should also dream of becoming important people in the world of sport or some other realm in the future”.

Alfred moved to Milan in 2009. He says: “Milan is in my heart, I immediately felt at ease when I got there”. Even though Duncan is still young, he is part of Sassuolo’s “veterans” alongside Magnanelli, Berardi, Peluso and Consigli. “Us old-timers and the new arrivals have a real desire to win something important wearing the Sassuolo team shirt”, so Alfred told us, a player who is extremely effective both in attack and in defence. This is what Duncan had to say about the tricky start to this season: “We have been unlucky

this autumn, injuries have affected us but despite everything I have never felt my team was struggling. Luck really has played its part, and we conceded some ridiculous goals in the first few games. One of the games worth forgetting was the 2-1 defeat against Fiorentina at Mapei Stadium: “Everything went wrong and a poor clearance by me finally gave them their second goal”. This talented African footballer is

## 5

**THE NUMBER OF AFRICANS IN SASSUOLO’S SERIE A TEAM: OBIANG, BOURABIA, BOGA, TRAORÈ, DUNCAN**



## THIS IS HIS FIFTH SEASON AT SASSUOLO

Joseph Alfred Duncan was born in Accra, the capital of Ghana, on 10<sup>th</sup> March 1993. He began his career playing for Inter Milan's youth team and made his debut in the Italian Serie A on 26<sup>th</sup> August 2012, when Inter Milan won 3-0 away to Pescara. Inter Milan then loaned him out to Livorno from January 2013 to June 2014, where he played a total of 19 games in the Serie B scoring one goal and 32 matches in the Serie A. He played 26 league games for Sampdoria (Serie A) in the 2014-15 season. He joined Sassuolo in July 2015. He played a vital part in the team finishing sixth in the 2015-16 season, which qualified Sassuolo for the 2016-17 Europa League, a tournament in which Alfred played five matches. So far, up until June 2019, Duncan has played 167 matches (7 goals) in the Italian Serie A, including 106 (6 goals) for Sassuolo. He has been one of the most regular players this season. As regards goals, his best season was 2018-19: 4 goals. Duncan is proud to play for the Ghana team. He played four times for the youth team before becoming a fixture in the first-team squad.



**SOPRA.** Alfred Duncan wearing the Sassuolo shirt for the 2015-16 season, the first he played for the team.

**BELOW.** Duncan in last season's league match against Inter Milan.



certain of one thing: "When everybody in the squad is available, we will be ready to fight for a much higher position in the table".

### MAESTROS

The midfielder, who originally came from Inter Milan, says he has had lots of maestros. "The first was Piero Ausilio, the former head of Inter Milan's youth team sector who got me into the Inter Milan team, gave me lots of good advice and helped me become a regular in the youth team. And then there was Davide Nicola at Livorno, who worked really hard on the mental side of my game". "I was transferred from Inter Milan, a really prestigious club where I made my first-team debut, to Livorno, where I played half a season in the Serie B and then a full season in the Serie A. I was young and because I was on Inter Milan's books, I thought I was important, I behaved like a spoilt kid who thought he did not need to improve. Nicola explained to me that I needed to keep on working hard and making sacrifices to improve". Sinisa Mihajlovic was on the bench at Sampdoria. "He has a strong personality and he passed it on to me. Eusebio Di Francesco, the team manager at Sassuolo at the time, played me in a different position: I was used to playing in the middle of the pitch, but he made me play wider. On the other hand, De Zerbi has taught me how to hold onto the ball and make better use of space. He wants me to be more consistent and I will do everything I can to make him happy".

### MIDFIELD ROLE MODELS

Duncan has plenty of role models: "When I was at Inter Milan training with the first team, I wanted to be like Thiago Motta as he always cropped up at just the right moment and never made mistakes. Javier Zanetti could also play in lots of different positions and then, of course, there was Andrea Pirlo when he played for AC Milan and Juventus".

### "I WANT TO SCORE MORE GOALS"

Duncan has caught the eye this season for the number of goals he has set up; he even set a record for decisive passes this autumn. Who knows if Duncan regrets being a midfielder. "I did not begin my career as a striker, and I do not regret it. My biggest regret is that I do not score many goals from midfield, even though I have got the skills and qualities to do so. I would like to be more like Arturo Vidal, who used to score lots of goals playing in midfield for Juventus. My short-term aim is to score more goals, as well as helping others score, which would really help Sassuolo. I think I can do it".

Duncan is also the midfield general for his national team. "Ghana has a great team and we can expect to do well in the Africa Cup of Nations and the next edition of the World Cup. Ghana can do well with or without me: there are plenty of other really good players in my country. The national team is important to me and our team manager is Stephen Appiah, who was, of course, another great player I have always tried to copy."

# 10

**THE NUMBER OF GAMES  
DUNCAN HAS PLAYED  
FOR THE GHANA  
NATIONAL TEAM IN  
THE CENTRE OF ITS  
MIDFIELD**

# “We will see the real team from January onwards”

THE TEAM MANAGER: INJURIES AND BANS HAVE HELD BACK SASSUOLO

Sassuolo struggled during most of the first half of the Italian Serie A 2019-20 season, often hovering around mid-table. “You will see the real Sassuolo team - so the team manager Gianpiero Piovani claimed - in the second half of the season. Autumn has been a tricky period, but it was our results that were bad not our performances. We always played well, even when the results were going against us”. Mr Piovani is sure of one thing: “Being able to work with my players every day means they are progressing. I am working with a different group of players from last season; I have some foreign players who are extremely skilful but have not really grasped the tactics of the Italian game. Both our Italian and foreign players are very young”. Injuries have played their part too: “Once we had 10 players in the sick bay”. Three players have been pleasant sur-

prises for Piovani: “Maria Luisa Filangeri is a promising player and has overcome an abductor injury with flying colours, and the twins from the Czech Republic, Kamila and Michaela Dubcova, are great athletes. They are physically stronger than all the other players, and they will be phenomenal if they improve tactically”. The Mapei-owned club bought a forward from AC Milan in June who played for Italy in the World Cup: Daniela Sabatino aged 34. “Sabatino - so the team manager told us - really knows how to take her chances and can turn even the most innocuous situations into goal opportunities. She is also quick to pass the ball to her teammates if they are unmarked. She also has plenty of experience and great charisma”. Other new signings include the Belgian player Heleen Jacques. “She is definitely the linchpin of our defence and is like a

deep-lying midfield general”. Grace Cutler, on the other hand, comes from the USA. “A defender who knows how to attack”. The young Dutch player, Sofieke Jansen aged 20, used to play five-a-side. “She has incredible skill and agility in tight spaces although she has not really mastered playing on an 11-a-side pitch yet, but when she improves her passing and learns how to make use of all the extra space on a full-size pitch, she will be one of the best players in the Italian Serie A.” Mr Piovani’s squad includes three goalkeepers: the first-choice keeper is Diede Lemey from Belgium. “I think Nicole Lauria, who deserves to play for the Italian Under 21 team, and the youngster Chiara Bini are both outstanding. In any case, I am pleased with the entire squad: the important thing is that the girls learn how to impose their play even against the big teams”.



BELOW.  
Michaela  
Dubcova.

## SASSUOLO WOMEN’S TEAM IS SUPPORTING RESEARCH AND SOCIAL PROJECTS

Sassuolo women’s football team also backed the “brave women” project as part of “Pink October”, a month dedicated to breast cancer prevention. The project is a joint-venture between Gomitolorosa Onlus no profit organization and the Folletti Laboriosi Association. These two no profit associations handed out items made from 400 km of wool yarn to help support research into women’s tumours carried out by the Umberto Veronesi Foundation. Needless to say, the Sassuolo players posed with pink scarves and balls. Talking of solidarity projects that go beyond sport, a delegation from Sassuolo took part in the “Paintings of change” exhibition promoted by Elisabetta Illy to promote multi-culturalism in sport. A number of Sassuolo players visited the National Museum of Science and Technology in Milan, where the footballer from Pakistan, Karishma Ali, described the sacrifices girls/women have to make and the difficulties they encounter if they want to play football in her country. Sassuolo footballers donated personalised Sassuolo shirts to both Elisabetta Illy and Karishma Ali (see the photo on the left).







**FROM LEFT.**  
Marcello Pellicciari,  
Giovanni Carnevali,  
Andrea Fabris.

# An alliance between sport and education

## A PILOT PROJECT WITH MODENA AND REGGIO EMILIA UNIVERSITY

It is official: Sassuolo is a partner of Modena and Reggio Emilia University (Unimore) in Central Italy. The agreement was signed at the Modena University Rectorate in the presence of Marcello Pellicciari, the University's delegate for sport, Giovanni Carnevali, General and Managing Director of Sassuolo Calcio, and Andrea Fabris, Sassuolo's General Secretary. The agreement will last for three years, tacitly extendable to six.

### MISSION

The agreement will allow Unimore students to complete internships at Sassuolo's facilities and, eventually, those of any partners that might be interested. They will also benefit from reduced prices for ordinary tickets and season tickets to the club's matches. Sassuolo will make its technicians and facilities available to Modena and Reggio Emilia University Committee to help promote sport. The Mapei-owned football club and Unimore will arrange incentives to reward the best students, also promoting international trips to attend training courses, conventions and sports events etc. It is the first time an Italian Serie A football team has been so committed to officially engaging with the academic world.

### BRITISH INSPIRATION

"This Protocol – so professor Marcello Pellicciari told us at the official presentation - will allow our university to take another step forward in building an Anglo-Saxon style university aimed at combining education and physical well-being viewed

as complementary aspects of everyday life. Partnering a successful club like Sassuolo will raise the status of our university". Giovanni Carnevali had this to say: "We are delighted to sign this contract with Unimore to strengthen our ties with the local region. Our aim is to provide the means for both Unimore and Sassuolo to grow, creating interaction between two seemingly distant worlds whose common denominator is young people. I hope this will provide young people with plenty of opportunities for study and work: the sports industry is growing rapidly and requires increasing expertise in various fields. We hope to be able to find them in partnership with Unimore". Andrea Fabris has been working on this project for over a year: "Our ambition was to reach this goal - so Sassuolo's General Secretary told us - so that we could arrange an agreement that was a real opportunity to create continuity between various realms of activity. The partnership is already underway: some students from Unimore are already working with our experts in orthopaedics". The working partnership will not just be in the realms of physiotherapy, medicine and orthopaedics. "It will also encompass communications, marketing and administration", so Mr Fabris concluded. A steering committee has also been set up: this "Technical Table" will be composed of the President of Unimore Sports Committee and the President of Modena and Reggio Emilia University Sports Committee, together with Mr Carnevali and Mr Fabris. Annual reports will be drawn up on various projects underway or already completed.



# Worksite: health at the workplace through physical exercise

AT MAPEI SPA FITNESS CENTRES STAFF HAS THE CHANCE OF BEING MONITORED BY MAPEI SPORT EXPERTS

The word “Worksite” refers to a multidisciplinary approach aimed at promoting and improving people’s health and well-being (particularly that of workers) implemented at the workplace.

It dates back to the mid-1970s when various programs to encourage people to take physical exercise at the workplace were implemented in response to a growing interest in physical fitness. The key concept behind the development of physical fitness programs inside companies is to exploit the benefits of physical exercise as a potential “drug” (perhaps the only without side-effects) for preventing certain illnesses, notably cardiovascular diseases.

Worksite projects were introduced to reconcile the desire expressed by workers

to stay healthy through physical exercise and the benefits for businesses of promoting well-being among their workers. Nowadays anybody working for Mapei SpA has the good fortune of being monitored as if they were a professional athlete. And since 2004 experts from the Mapei Sport Research Centre run health programmes inside corporate fitness centres in the company offices in Milan and at the manufacturing plant in Robbiano di Mediglia (in the outskirts of Milan), where anybody working for the company can take part in the Worksite Program.

People working at the production plant or behind a desk in the administration centre have the chance to “stretch their legs” and keep fit without leaving their workplace by simply following the advice

of instructors with degrees in the Motor Sciences, who also train top athletes on a day-to-day basis.

Thanks to its own cutting-edge Mapei Sport centre specialising in research applied to sport based in Olgiate Olona in the province of Varese (Northern Italy), Mapei SpA has highly qualified sports technicians who can provide extremely useful advice for colleagues who want to keep healthy and improve their fitness through training.

The Mapei Sport Worksite Program was first set up 15 years ago based on a combination of the experience and know-how Mapei Sport had gained working with top athletes and also the needs of people interested in improving their quality of life through sport.





**THIS PAGE.** Mapei SpA staff training at the company fitness center in Milan under the supervision of experts from Mapei Sport.

**IN THE FACING PAGE.** Matteo Lissoni, one of the Mapei Sport trainers working in the Mapei fitness facilities in Milan and Robbiano di Mediglia.



## CUSTOMISED FITNESS PLANS FOR HEALTH AND WELLBEING

“The Worksite Program is basically divided into three parts: a yearly medical check-up, including such key examinations as blood tests and a stress ECG test, a fitness check-up and proper training plan”, so the head of the Mapei Sport Research Centre, Dr Claudio Pecci, told us. “A detailed medical history is vital: we need to take a careful look at the individual’s state of health, fitness, physiology and diet. As well as the case history and medical check-up, further tests may be required after visiting the clinic. Nowadays a person’s health is not just a matter of being illness-free, it also concerns their lifestyle, habits and diet, all factors taken into consideration”.

At the end of the check-up, a fitness plan is prescribed to prevent illness and improve psycho-physical fitness.

Mapei Sport trainers use the information from the health-check to customise the right fitness plan for each individual training at the Mapei Group’s corporate fitness centres.

## MENS SANA IN CORPORE SANO

Those taking part in the Worksite program include people who are involved in amateur sport on regular basis, people who train occasionally, and people who do not do any sport but would like to benefit from a more rational and conscientious approach to improving their health.

Movements is not just good for your

mind and body, *mens sana in corpore sano* as they say, physical exercise can also help improve interpersonal social relations and individual motivation at the workplace.

Promoting health through physical exercise is not just important for staff, it can also boost the company’s productivity, since long-term data show that the more active people are, the more productive they are. They will be absent from work less, because they are less likely to be ill. So, benefits for the individual also cascade down right through the company. The statistics also confirm how effective this project is: over the last 12 months there have been 7000 accesses to Mapei SpA’s fitness centres, which have approximately 200 members.

It is hoped that projects like this will catch on even more in the future, so that people’s health can really be improved. Health which, as the World Health Organisation points out, must be seen as a combination of physical, mental and social well-being and not just being free from illness.

Along similar lines, several Mapei Group’s subsidiaries are introducing various fitness programs at the workplace or other kinds of sports activities, acknowledging the benefits for workers and the company in both the short and long term.

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**Giulia De Maio.** Mapei Sport, Olgiate Olona (Varese)

## A TEAM OF EXPERTS IN THE COMPANY FITNESS CENTRES

“The Worksite Program is a service aimed at improving and boosting health and fitness drawing on a rational approach based around health-related sports activities and physical exercise in general”, so the head of the program Domenico Carlomagno told us. Mr. Carlomagno, together with Matteo Lissoni, Federico Donghi, Maurizio Chiassarini e Luca Demolli, works with Mapei staff on a daily basis at the fitness facilities in Milan, open at lunchtime and in the evening, and in Robbiano di Mediglia, open all hours to meet the needs of people working different shifts.

As well as following the guidelines from the check-up, the trainers work out training programs in accordance with the guidelines set by the American College of Sports Medicine (ACSM), the world’s leading organisation in the field of physical exercise. For example, according to ACSM guidelines, it takes at least 150 minutes of weekly exercise (average-to-high intensity) to maintain your weight and over 250 minutes to lose weight. Training programs are worked out according to an approach based on scientific research and evidence. The goals and time people have available are also taken into account when drawing up just the right training plan, which must be geared to individual needs: “Everybody has their own requirements, so we need to study personalised programs”, so Mr. Carlomagno went on to say.



# NEWS FROM THE MAPEI WORLD

EVENTS, SPONSORSHIPS AND PROJECTS BY THE GROUP'S SUBSIDIARIES

## BAHAMAS - POLYGLASS U.S.A. HELPS TO REBUILD COMMUNITIES

The Bahamas has begun to rebuild after category 5 Hurricane Dorian destroyed infrastructure, damaged buildings and displaced thousands of people. Throughout the island, volunteers are replacing temporary blue tarp roofs on homes and businesses with permanent roofs. Polyglass U.S.A., a subsidiary of the Group, has donated more than 5,000 rolls of ELASTOFLEX SA V self-adhered modified bitumen membranes and nearly 400 pails of WB 3000 water-based acrylic primer. The donation will help restore about 330 roofs. With watertight roofs in place, electrical repairs on the homes can begin and families can soon return to their residence.



## SWITZERLAND - MORTAR STATUES FOR A GOOD CAUSE

In conjunction with its 25<sup>th</sup> anniversary, Mapei Suisse, the Group's Swiss subsidiary, organised an exhibition of sculptures the artist Peter Amherd made using MAPEGROUT FAST-SET, fast-setting and drying, shrinkage-compensated, fibre-reinforced mortar normally used for repairing concrete. This provided the subsidiary with the perfect opportunity to focus on the versatility of this product and, at the same time, its commitment to social responsibility. The artist decided to donate three of his sculptures to be put up for auction.

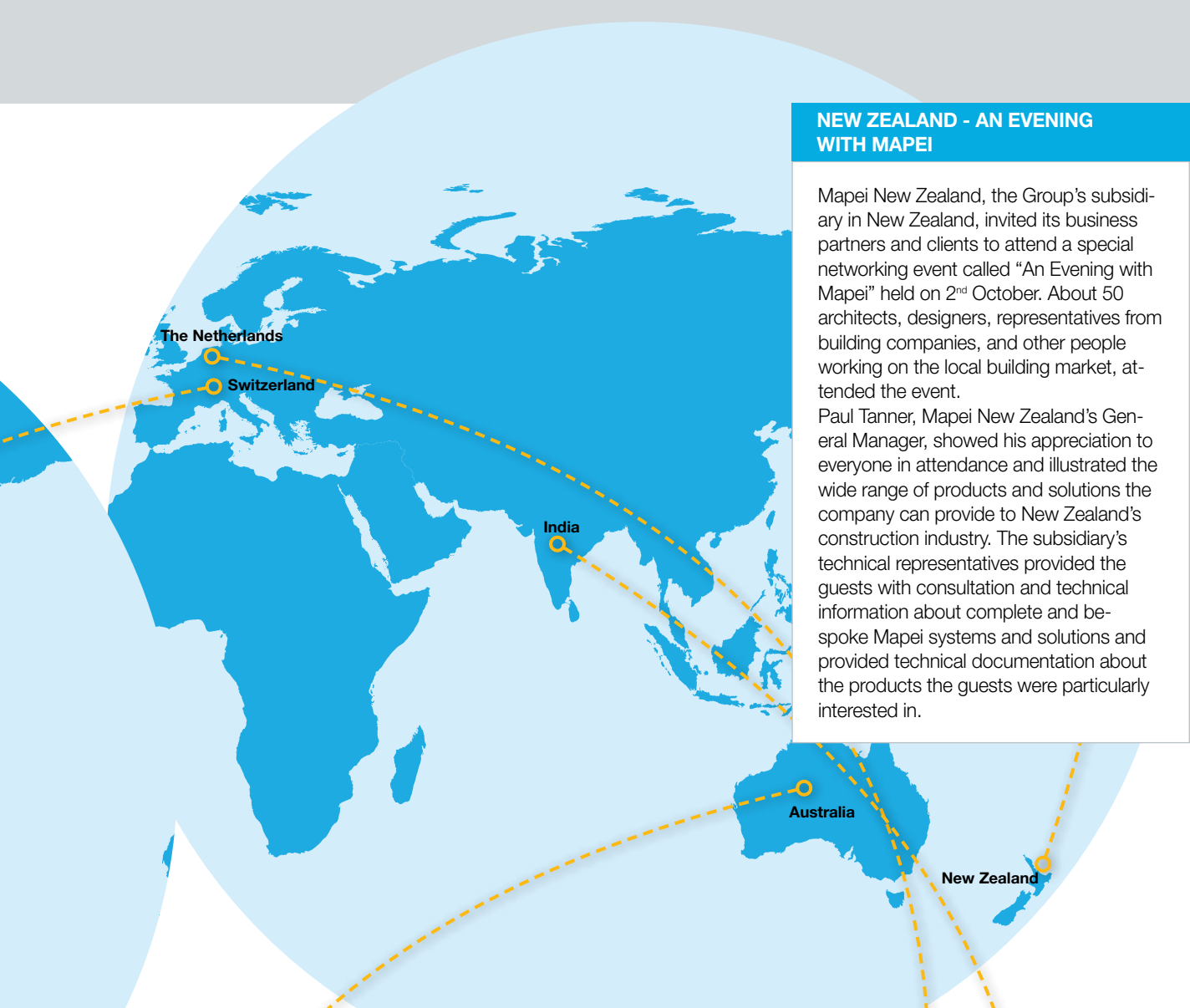
The money from the auction, together with the takings from a raffle and a contribution made by Mapei Suisse, were donated to three

Swiss non-profit associations: Greenhope Foundation, Association St-Camille and Theodora Foundation.



In the picture, Peter Amherd (left) and Martin Schneider, General Manager of Mapei Suisse (right).





**NEW ZEALAND - AN EVENING WITH MAPEI**

Mapei New Zealand, the Group's subsidiary in New Zealand, invited its business partners and clients to attend a special networking event called "An Evening with Mapei" held on 2<sup>nd</sup> October. About 50 architects, designers, representatives from building companies, and other people working on the local building market, attended the event.

Paul Tanner, Mapei New Zealand's General Manager, showed his appreciation to everyone in attendance and illustrated the wide range of products and solutions the company can provide to New Zealand's construction industry. The subsidiary's technical representatives provided the guests with consultation and technical information about complete and bespoke Mapei systems and solutions and provided technical documentation about the products the guests were particularly interested in.

**AUSTRALIA - MAPEI WITH RAFA NADAL TO SUPPORT YOUNG TENNIS PLAYERS**

Once again this year Mapei Australia was the main sponsor of the Mapei Junior Tennis Championships held on the Gold Coast in Queensland from 17<sup>th</sup> to 21<sup>st</sup> July. The tournament is open to players who are aged 18 or under and this year, for the first time, it was organised by the Gold Coast Junior Academy in partnership with the famous Rafa Nadal Tennis Academy. The competitors played on tennis courts that have been awarded ITF (International Tennis Federation) certification and had been made using Mapei systems from the MAPECOAT TNS line to create acrylic resin surfaces. The four winners got the chance to take part



in a special two-week training programme at the Rafa Nadal Academy in Majorca, Spain.

**THE NETHERLANDS AND INDIA - REALTÀ MAPEI INDIA AND REALTÀ MAPEI NEDERLAND**

The *Realtà Mapei* family keeps on growing: the Mapei Group is publishing two more magazines in addition to those already published by Mapei SpA (*Realtà Mapei* and *Realtà Mapei International*) the 14 others printed by various subsidiaries. The two new entries are *Realtà Mapei Nederland* published by Mapei Nederland and *Realtà Mapei India* brought out by Mapei India, which both appeared for the first time last September.

The first magazine allocates plenty of space to the new headquarters of Mapei Nederland and interviews by both executives from the subsidiary and important players in the local building industry. In contrast, the second magazine focuses on the building operations Mapei India has contributed to through its wide range of products and systems.



## ECO ADHESIVES FOR QUALITY LIVING



Mapei presents its new one-component, silylated polymer-based adhesives, for perfect installation that guarantees a strong grip, quality and respect for the environment with every type of wooden flooring. **Ultrabond Eco S958 1K**, that complies with ISO 17178 standards in the hard-elastic category - **Ultrabond Eco S Plus** with no methanol emissions - **Ultrabond Eco S Lite**, lightweight adhesive with an extremely high yield.

**Make the difference with Mapei, your partner in construction.**

EVERYTHING'S OK WITH MAPEI







# All the benefits of a lightweight adhesive to install wood flooring

## ULTRABOND ECO S LITE: HIGH PERFORMANCE IN THE NAME OF SUSTAINABILITY

Natural wood adds a touch of elegance and style to any environment it is used in. Wood, however, will always remain a living material; it interacts with the setting in which it is placed and wooden flooring has its own particular requirements when it comes to installation: the correct level of residual moisture in the substrate, the flatness of the installation surface, acclimating the wood before bonding it and choosing the right adhesive to bond it in place. But how do you make the right choice?

### **Which adhesives should you use to bond wooden flooring?**

Adhesives that are tough with the capacity to maintain their hold on different types of building material (from concrete to gypsum, from absorbent surfaces to those with less absorbency), that contain no water so that the wood remains as stable as possible and within the limits specified by the reference standards and, depending on each site's specific requirements, that have a degree of elasticity that allows them to absorb the natural movements of wood during its service life without yielding. Wooden flooring is bonded in place using one-component or two-component resin-based adhesive, or with one of the new generation of silylate-based adhesives.

### **Are lightweight adhesives available on the market for installing wooden flooring?**

Nowadays, yes. Thanks to the advances made in the chemical industry, the Mapei Research & Development laboratories in Milan have been able to modify certain polyurethane resins and obtain a family of silylate-based adhesives. Which is how the lightweight, silylated polymer-based adhesive ULTRABOND ECO S LITE was developed. The recycled material contained in the adhesive is made up of hollow glass spheres.

### **What are the benefits of using this type of adhesive?**

To put it briefly: the average weight of a drum of adhesive is

lower (just 11 Kg), resulting in lower costs and consumption, it is extremely easy to remove the adhesive from trowels and surfaces while still wet, it covers the back of the elements extremely well (in technical terms, excellent rib stability), the consumption rate is around 30-40 % lower than with other adhesives from the same category, it contains high quality recyclable materials, which means it has a lower impact on the environment, it is certified as EMICODE EC1 PLUS (low emission of volatile organic compounds) and it is tough, elastic and perfectly compatible with products used to prepare and finish wooden flooring.

### **Can adhesives for wooden floors create problems between the joints in the flooring?**

If the flooring has been installed correctly, no. If the flooring isn't installed according to specification, on the other hand, such as part of the adhesive is allowed to seep into the joints in the wooden flooring, oils and varnishes normally used to finish off and protect the flooring would come into contact with the adhesive and, in certain cases, form aesthetic or technical defects. Even though there is no substitute for perfect installation, it is important to point out that ULTRABOND ECO S LITE lightweight adhesive is perfectly compatible with all the protection and varnishing systems from the Mapei ULTRACOAT range.

### **And lastly, why Mapei?**

Amongst the leading, if not the only, manufacturer of silylate-based lightweight adhesives, not only does Mapei manufacture and supply adhesives to install the flooring itself, the company also offers complete systems made up of products for substrates, waterproofing products, levelling mortars, adhesives and finishing products so that wooden flooring can be installed correctly and last a long time.

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**Marco Albelice.** Technical Services, Mapei SpA (Italy)



# Products in the spotlight

WATERPROOFING UNDERGROUND STRUCTURES, INSTALLING LOOSE-LAY LVT, REPAIRING CONCRETE AND ANCHORING



## MAPETHENE HT

It is a self-adhesive bitumen membrane made from a mixture of bitumen and special polymers bonded to a double laminated film of high-density polyethylene (HDPE). It is used to waterproof the outside of concrete, brick and block-built foundations, cellars and underground garages. It is highly flexible and features a vulcanized side strip to improve water-tightness at overlaps and good crack-bridging properties once applied. It is impermeable up to a pressure of 8 bar and impermeable to radon and methane. The special mixture used to make **MAPETHENE HT** allows the product to be applied in hot weather at temperatures up to +45°C. Together with MAPETHENE LT, it belongs to the MAPETHENE range.

WATERPROOFING UNDERGROUND STRUCTURES



NEW FORMULA

## ULTRABOND ECO TACK 4 LVT

Anti-slide tackifier for fixing loose-lay floorings, in planks and tiles, onto all kinds of standard substrates, smoothing compounds, existing floor coverings and raised access floor panels.

ULTRABOND ECO TACK 4 LVT is particularly suitable for installing loose lay LVT, SPC and Rigid LVT.

ULTRABOND ECO TACK 4 LVT enables the flooring to be lifted and replaced easily when required.

INSTALLING LOOSE-LAY LVT PLANKS AND TILES



## MAPEGROUT ANCHOR & REPAIR

It is a ready-mixed, compensated-shrinkage, powdered mortar used for repairing badly damaged concrete structures, as well as for anchoring metal structures. When mixed with water, **MAPEGROUT ANCHOR & REPAIR** forms hi-flow mortar suitable for pouring into formwork, when used to reintegrate concrete, or into specially prepared seats, when used for anchoring work, without having to vibrate the mix and with no risk of segregation, including when applied in thick layers. The product complies with EN 1504-9, EN 1504-3 (which regulates products used to carry out structural and non-structural repairs on concrete elements), and EN 1504-6 (which defines products used to anchor rebar in place) standards.

REPAIRING CONCRETE AND ANCHORING







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