

INTERNATIONAL

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69



ADRIANA SPAZZOLI.
Realtà Mapei International's
 Editor-in-Chief.

Brains in Milan, brawn all over the world

Milan and the world. A neat way of encapsulating Mapei's "philosophy" and business operations. Take, for instance, the latest example of this business strategy, much more than just a symbolic gesture. Over the last few weeks Mapei has joined the Veneranda Fabbrica del Duomo's "Adopt a Spire" project becoming one of the Milan Cathedral's Golden Donors. At the presentation press conference, Giorgio Squinzi said: "This is an important project embodying Mapei's Milanese essence and my own roots in Milan". The Cathedral symbolises Milan for the entire world and Milan is at the very forefront of Mapei, a company that has always focused on its internationality opening up manufacturing plants in 34 countries across 5 continents.

The devastating economic recession over the last ten years has seen people and opinions divided between the "global" and "local". The term globalisation has had its ups and downs, for some people it is the cause of so much misery in more developed nations, while for others it is the direction in which the contemporary world must inevitably move. Let's leave this to be debated by economists and sociologists. The facts and figures, however, tell us that

the companies that have reacted best to the crisis and become more competitive are those projected towards new horizons and, consequently, towards new markets.

Mapei's process of internationalisation first began way back in the 1970s. A process that has always been inspired by a defining principle: Mapei's headquarters are in Milan, where the company was founded in 1937. Thinking about the company's background, in this issue of *Realtà Mapei International* we have created a "Milan Special", an extensive collection of articles and interviews paying testimony to the city's intellectual vivacity and lively business scene. Works that have just been completed (like, for example, the Prada Foundation Tower) and construction operations currently under way (such as those for the new underground railway lines and the third City Life tower) all draw on Mapei technology and innovation. But we will not just be talking about Milan: this issue also contains lengthy articles on Russia, Hungary and Africa. So, Milan and the world are the guiding thread for our company. And when we look at a world globe, as we can make out from the cover, we almost instinctively think of a football, tennis ball or golf ball. And what could be more global than sport? And football in particular. Here again, Mapei has been a trailblazer, like, for instance, from 1993 to 2002 when cycling champions raced along the roads all over Europe wearing the distinctive Mapei jersey decorated with little coloured cubes that became a sort of trophy for so many cycling fans. And the same can now be said about Sassuolo football team's black-and-green shirt that pops up around the world every Sunday, so that a small city gets great publicity through a big company. The power of increasingly global communications strategy and, above all, a very carefully defined corporate strategy. Talking of football, we must mention the FIFA World Cup in Russia to which *Realtà Mapei International* is focusing plenty of attention: once again as a leading player, because Mapei products were used for building or renovating 8 of the 12 stadiums hosting the matches.

Enjoy your reading

Adriana Spazzoli

SUMMARY

EDITORIAL

Brains in Milan, brawn all over the world
inside back cover

SPECIAL FOCUS MILAN

- 2 Mapei flies high on Milan Cathedral
- 8 The Renaissance of Milan
- 12 Milan, capital of research and sustainability
- 14 The Library of Trees
- 16 Private-public relationships to be replicated
- 18 CityLife Shopping District
- 20 Architecture between memories and experimentation
- 26 A city for everyone, without suburbs
- 28 Prada Foundation Tower in Milan
- 30 PwC Tower at CityLife
- 31 The new Bocconi University Campus
- 32 M4 Line: Linate-San Cristoforo
- 33 Teatro Lirico
- 34 Mapei at Fuorisalone
- 38 The responsibility of creation
- 40 Studying earthquakes
- 41 Between reality and illusion
- 42 Mapei Specification Center in Milan

NEWS

- 62 Europe and Africa: the future is closely entwined

TEAMWORK

- 46 ZAO Mapei and the FIFA World Cup
- 52 Mapei Kft. helping the building industry in the present... and the future!

PROJECTS

- 48 Russian stadiums hosting the 2018 FIFA World Championships
- 54 Hungarian projects

SPORT DIVISION

- 68 The 8th Mapei Sport Research Centre Conference
- 71 A Diploma for sport merit for Giorgio Squinzi
- 72 Sassuolo: a grandstand finish to the season
- 73 Carnevali: "Sassuolo is ready for a fresh start"
- 74 Roberto De Zerbi is Sassuolo's new team manager
- 76 Andrea Tafi: "I was Mapei's gladiator on the cobbles"

ART AND CULTURE

- 22 The 2018-19 season at La Scala Theatre
- 58 The 2018-19 season at Accademia Nazionale di Santa Cecilia

SOCIAL RESPONSABILITY

- 64 Business culture for Africa
- 66 Winning projects for Africa's future

QUESTIONS & ANSWERS

- 80 Paints & varnishes. Dispelling the myths

IN THE SPOTLIGHT

Purtop 1000 p. 15, Ultratop p. 19, Dynamon SR3 p. 24, Dursilite back cover

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COVER STORY

Passion for sport, a love of Milan and internationality are interwoven on this issue's cover. The image is designed by Luigi Carrozzo.

EDITOR IN CHIEF
Adriana Spazzoli

EDITORIAL SUPERVISOR
Guido Palmieri

EDITORIAL CONTRIBUTORS AND ENGLISH TRANSLATION
Martyn Anderson, Nicholas John Bartram, Federica Pozzi, Tiziano Tiziani, Federica Tomasi, Alessandro Brambilla

PRODUCTION AND EDITORIAL COORDINATION
Metella Iaconello

PHOTOGRAPHIC RESEARCH
Davide Acampora

SOCIAL MEDIA
Francesca Molteni

GRAPHIC DESIGNER
Barbara Mennuni

PRINTED BY
Rotolito SpA - Pioltello (Italy)

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Mapei SpA
Via Cafiero, 22 - 20158 Milan (Italy)
Tel. +39/02/376731
Fax +39/02/37673214
website = www.mapei.com
E-mail = realtamapei@mapei.it

PRESIDENT & CEO
Giorgio Squinzi

OPERATIONAL MARKETING DIRECTOR
Adriana Spazzoli

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CREDITS
Avisa, Mario Botta, Alberto Quadrio Curzio, Diana Bracco, Manfredi Catella, Eucentre, Fondazione E4 Impact, Luca Casonato, Letizia Moratti, Mapei Kft., Fabio Castellanza, Mirko Cecchi, Livia Pomodoro, Maire Claire Maison, Mosaico+, Mapei Sport, Andrea Tafi, Fondazione Sodalitas, Sassuolo Calcio, Jürgen Eheim, Teatro alla Scala, Mirko Cecchi, Accademia Nazionale di Santa Cecilia, Veneranda Fabbrica del Duomo, ZAO Mapei



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MAPEI FLIES HIGH ON MILAN CATHEDRAL



MAPEI HAS
ADOPTED
A SPIRE ON MILAN
CATHEDRAL TO
KEEP AN AGE-OLD
TRADITION GOING

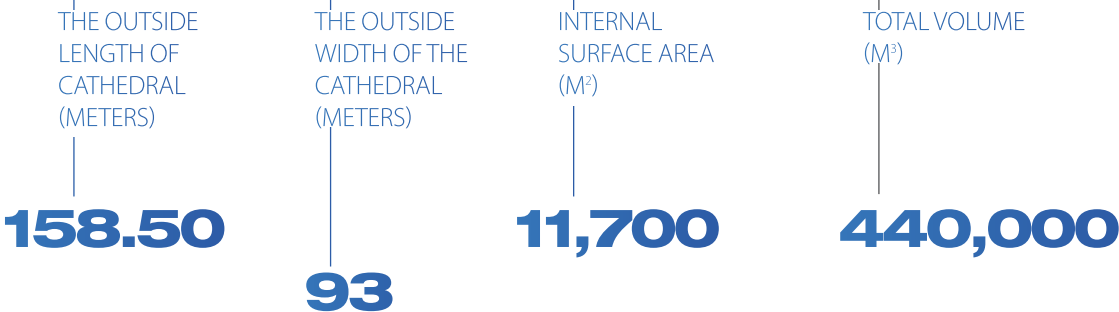


"The 'Adopt a Spire' campaign has another important sponsor: Mapei, which, thanks to the Squinzi family's generosity and keen interest in art, has decided to sculpt its own name in Milan Cathedral's marble in response to the appeal made by the Veneranda Fabbrica to raise support for restoration work on the Cathedral. Lots of work is currently underway: from major restoration work on the dome's lantern and apse to the completion of the lighting system. The Veneranda Fabbrica has to cover the costs of approximately 30 million Euros a year and so we need patrons, who – like Mapei – are willing to offer their experience and expertise to help carry out the construction work. We plan to set up a working partnership between Mapei's Research Laboratories and Veneranda Fabbrica to identify and experiment with new materials that may turn out to be more suitable for the Cathedral and its specific needs. On a par with fundraising, this is another way of supporting the Cathedral

and helping the Fabbrica set about the tricky task with which it is faced: a *modus operandi* that has been etched into its gene pool down the centuries, since the people of Milan have always lent their support to this building, gladly donating their skills and expertise. We only hope that other companies, particularly businesses in Lombardy, will follow Mapei's example." This is what the President of the Veneranda Fabbrica del Duomo di Milano, Fedele Confalonieri, had to say on this matter. It was officially announced at a press meeting held on the 15th May that Mapei joined the Golden Donors of Milan Cathedral (which is called "Duomo" in Italian) and exclusive Spires Club, so that its own corporate history may be further associated with Milan's most symbolic landmark. Mapei has decided to get involved in a project organised by Veneranda Fabbrica del Duomo called: "Get your Spire. Carve your name in history". This is an important fundraising cam-



FACTS AND FIGURES ABOUT MILAN CATHEDRAL





The spire adopted by Mapei (left) depicts a Young Saint.



paign set up in 2012 to try and get all the local inhabitants - ordinary people, businesses, associations - involved in supporting restoration and repair work on Milan Cathedral's 135 spires, whose history has always been linked with the generosity of important families and illustrious patrons.

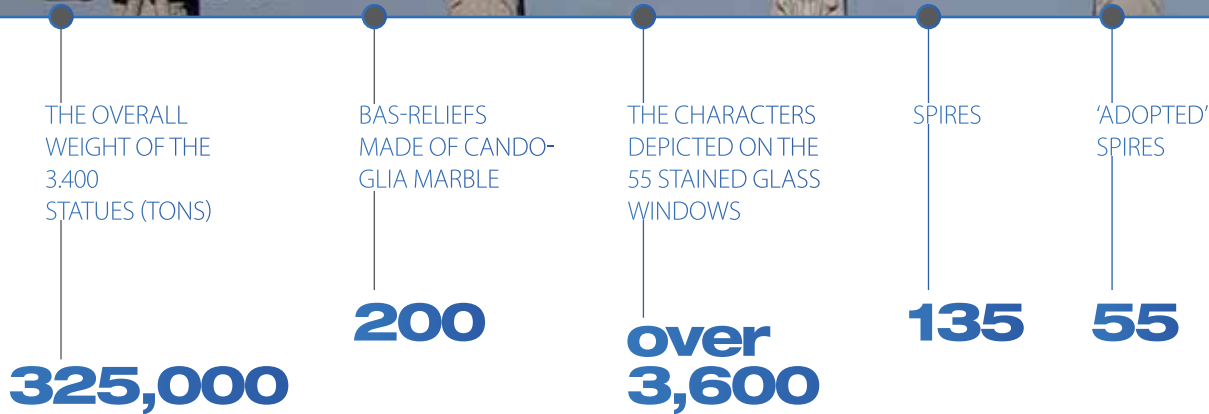
PROUD TO BE FROM MILAN

"This is a day I will always remember with pride: as somebody from Milan I am delighted to have become part of the Veneranda Fabbrica del Duomo. For my family, the city's most important landmarks - so Giorgio Squinzi told us, CEO of the Mapei Group - have always been Duomo Cathedral, La Scala Theatre, Vigorelli Velodrome and San Siro Stadium, but at the moment it is the Cathedral and La Scala Theatre that really boost our city's reputation".

By becoming part of this project, Mapei intends - once again - to underline its Milanese identity ready to be exported worldwide. The Duomo is a cathedral but, above all, it is the church of the people of Milan. But that is not all: it is the symbol of Milan worldwide and the driving force behind the city in terms of tourism, culture and religion. The figures speak for themselves: 80% of visitors (over 2.2 million tourists a year, plus regular wor-



FACTS AND FIGURES ABOUT MILAN CATHEDRAL





shippers) come to Milan to visit the Cathedral, which - so it is estimated - contributes 82 billion Euros to the overall value of the Milan brand, estimated to be worth 400 billion Euros.

Closely tied to Milan's economic and cultural fabric - its products keep on being used for the most important projects in modern-day Milan - Mapei is once again underlining its love for the city where it was originally founded.

The company's involvement with Milan Cathedral is one of its latest business enterprises aimed at supporting the city's most symbolic building. In actual fact, its products and technology have already been used here in the past for repairing masonry, waterproofing and sealing on the Cathedral terraces and help protect all facade decorations.

As well as donating 150,000 Euros, Mapei will provide its know-how and Research and Development Laboratory to find just the right product to slowdown the ageing of the Cathedral's Candoglia marble. When subjected to atmospheric agents and thermal stresses, this particular marble expands and shrinks allowing water to get in. Mapei's Corporate R&D Centre in Milan is, therefore, working on "inventing" a new cement-free product that can penetrate into the marble to make the stone impermeable and longer lasting.

2,200,000
A-YEAR TOURISTS

4,500 THE NUMBER OF
HOURS IT IS OPEN TO THE PUBLIC
EACH YEAR

MILAN CATHEDRAL IS ONE OF THE
FEW IN EUROPE WITH TERRACES
THAT CAN BE ACCESSED AND
WALKED ACROSS

ACCORDING TO TRIPADVISOR,
MILAN CATHEDRAL IS ONE OF THE
7 MOST INTERESTING MONUMENTS
IN THE WORLD



THE NUMBER OF
PIPES IN THE
CATHEDRAL OR-
GAN, THE BIGGEST
IN ITALY

15,800

DUOMO'S CON-
TRIBUTION TO THE
MILAN BRAND,
WHICH IS VALUED AT
400 BILLION EUROS
(BILLION EUROS)

82

THE HEIGHT ABOVE
THE GROUND OF
THE MADONNINA
STATUE (METERS)

108.50

THE ACTUAL
HEIGHT OF THE
MADONNINA
STATUE (METERS)

4.16

NEWS

THE “ADOPTED” SPIRE

The spires are amongst the most fragile architectural features of the Cathedral and require constant care and intricate operations, so that they can continue to tower up in the skies of Milan in complete safety. Milan Cathedral can boast one hundred and thirty-five spires: they are located not only on the perimeter buttresses but also on the dome lantern, where they are arranged in a crown shape around the main spire at the top with the famous “Madonnina” statue perched on it.

In the end, it was decided to adopt a spire on the Cathedral's Central Terrace, over on the north side. At the top, there is a statue of a young-looking saint, most probably dating back to the mid-19th century. Its face, rotated three quarters in relation to its body, is extremely expressive. Dressed in a robe revealing his chest and back, his arms are placed across his chest and he is barefoot.

This statue has also been chosen because it is located over on the north-west side of the building as if facing Milan but pointing towards Mapei headquarters. “It is no coincidence that we chose to adopt this statue – so Adriana Spazzoli told us – it is the company's duty to look to the future and the decision to choose a young saint, who is looking out towards the north-east, embodies this concept nicely: offering opportunities to young people and looking ahead”.

A plaque made of Candoglia marble was bonded (with KERAPOXY ADHESIVE) at the foot of the spire with the name Mapei engraved on it, so that visitors can see just how committed the company is to this monumental complex.

After the press conference, the guests went up onto the terrace where the plaque at the base of the spire adopted by Mapei was unveiled by Marco Squinzi and Pasquale Zaffaroni from Mapei SpA. The plaque was bonded with KERAPOXY ADHESIVE in its white color shade.





The presentation conference on the 15th of May was attended by Giorgio Squinzi, Fedele Confalonieri, President of the Veneranda Fabbrica del Duomo (top left), Mons. Gianantonio Borgonovo and the engineer Francesco Canali, the Fabbrica's Site Director (at the table for the official speakers)".



GENEROSITY AND MILANESE-NESS IN THE NAME OF MODERNITY

The Veneranda Fabbrica del Duomo di Milano is the famous old organization in charge of conserving and enhancing Milan Cathedral. It was originally set up by Duke Gian Galeazzo Visconti in 1387, who at the time ruled over the city of Milan, for the specific purpose of designing and construct the monument. For over 600 years the Veneranda Fabbrica has been working with a great

sense of civic duty and responsibility on conserving and architecturally-artistically restoring and repairing Milan Cathedral, keeping its religious services running smoothly, and enhancing and promoting the extraordinary wealth of art, culture and history of Milan's most symbolic landmark. Both in the past and the present day, the Cathedral has always relied on the generosity of the city's inhabitants to enable the Fabbrica to overcome the everyday difficulties it encounters and continue with its work.

Back when it was first set up, the General Assembly, now the Board of Directors, was composed of members representing the Duke, Archbishop, city magistrates, clergy, the most prestigious families and all the inhabitants of Milan.

Today Giorgio Squinzi is a member of the Board of Directors of the Veneranda Fabbrica del Duomo di Milano, which is chaired by Fedele Confalonieri. His position on the Board of Directors underlines the very close bonds between the company and Veneranda Fabbrica, which grow stronger year by year, proving just what a keen sense of civic duty Mapei shares with all the inhabitants of this big and increasingly beautiful city.

Milan Cathedral is not just a place of worship, it also stages important cultural events, like grand concerts, and has its own museum and library.

THE RENAISSA



MIND (MILANO INNOVATION DISTRICT)
(p. 7)

Surface: 1,200,000 m²

Period of construction: 2018-2022



SFORZA CASTLE EGYPTIAN MUSEUM

Surface: 500 m²

Period of renovation: 2015-ongoing



CITY LIFE SHOPPING DISTRICT (p. 18)

Figures: 366,000 m², 3 floors, 100 shops
Period of construction: 2015-2017



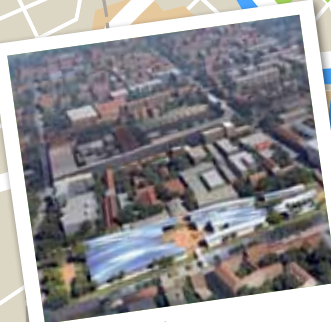
CITY LIFE (p. 30)

Libeskind Tower/PricewaterhouseCoopers
Figures: 175 m, 31 floors, 33,500 m²
Period of construction: 2018-2020



CITY LIFE

Allianz Tower
Figures: 220 m, 50 floors, 50,000 m²
of office space
Period of construction: 2012-2015



7 RAILWAY HUBS

Farini, Greco-Breda, Lambrate, Porta Romana, Rogoredo, Porta Genova, San Cristoforo
Surface: 1,200,000 m²



PALALIDO - ALLIANZ CLOUD

Figures: 5,347 spectators, 2 rings, 4,950 m²
Period of construction: 2010-2018

Dergano

Selinunte

Tortona

DUOMO

NICE OF MILAN



M4 SAN CRISTOFORO-LINATE "BLUE" METRO LINE (p. 32)
 Figures: 15 km, 21 stations
 Period of construction: 2014-2022



LIBRARY OF TREES IN PORTA NUOVA (p. 14)
 Figures: about 170,000 m², 23 plants species, 5 cycling tracks
 Period of construction: 2015-2018

CULTURE, BUSINESS AND INNOVATIVE ARCHITECTURE FOR A VIBRANT CITY

Who would have thought, just two years ago, that there would be organised tours to admire Milan's new skyscrapers which, along with the spires on the city's Cathedral, tower above the metropolitan skyline? Probably nobody. It is not as if there was a lack of buildings worth visiting even before they were built: for quite a while Milan has been one of the leading cities for modern, twentieth century architecture. Not only have the new skyscrapers changed the architectural horizon of the city, however; they also seem to have triggered a change, a new feeling, that started with the inauguration of Expo 2015. The economic figures speak for themselves: a GDP per capita of around twice the Italian national average, a growing number of multinational companies looking to open new branches in the city, a growing number of real-estate transactions, youth unemployment of 22% compared with a national average of 35% and millions of tourists visiting the city every year, with a higher rate of growth than other large European cities. Also, both Italian and foreign tourists often visit Milan not just for pleasure, but also on business, due to the numerous trade fairs and the fashion, design and culture sectors that are playing an increasingly decisive role in the growth of Milan.

In fact, the European Commission considers Milan to be one of the most popular tourist destinations and a global hub of the creative economy, and is recognised at a global level for its fashion and design, thanks also to international events such as Milan Fashion Week, Design Week (including the Salone del Mobile furniture fair with its Fuorisalone exhibitions and events), as



NEW BOCCONI CAMPUS (p. 31)
 Surface: 36,000 m²
 Period of construction: 2015-2019



PRADA FOUNDATION TOWER (p. 28)
 Figures: 18,900 m² (including Podium, Cinema and a 60 m high, 9-storey Tower)
 Period of construction: 2015-2018

Stazione Centrale

Città Studi

Mecenate

Piazzale Lodi



well as its numerous examples of urban regeneration and the redevelopment of former industrial sites. Figures that were also published in the 2017 edition of the “Cultural and Creative Cities Monitor” report by the European Commission, which compared the initiatives taken by 186 European cities to promote culture and creativity. In a league table drawn up for the report, amongst the 21 cities with more than one million inhabitants, Milan was placed fourth after Paris, Munich and Prague. Going into detail, for “Cultural vibrancy” Milan is in third place, but in first place for the number of visitors to museums and, in the “Creative economy” category, Milan is in second place after Paris for the number of people working in the fashion, culture and entertainment sectors. For its “Enabling environment” approach, Milan is in third place after Paris and Barcelona in the human capital category and in second place for the number of university graduates in art and humanistic studies.

THE SCIENCE HUB

Situated in the Rho area on the outskirts of Milan, the Expo site (covering around one million m²) will be used to construct Human Technopole, a hub of excellence dedicated to the genomics, for which public funds amounting to 1.5 billion Euros have been set aside to be spread over ten years. Situated near the Tree of Life, the hub will interface with the science

faculties of the Università Statale, the new Galeazzi Hospital and with dozens of companies and multinationals, including IBM, Novartis, Bayer and ABB, which will attract investments for 2 billion Euros and 1,500 research scientists. Scheduled launch: 2022 or 2023.

CULTURE AND ART

Theatres, museums, concerts and events. In recent years Milan has been offering a rich programme of initiatives and the opening of new structures, culminating this year in the inauguration of Palazzo Citterio, the ideal site to house the Pinacoteca di Brera's collection of contemporary art. Around 15 years of slow but constant change have taken Milan from being a city of excellence, with its offices and factories, to the point where it now has fewer manufacturing activities and has become a promotor of a new cultural industry based on creativity and education, which also seems to have changed the face of its inhabitants. An example of this change is the La Scala Theatre with its much-discussed intervention entrusted to Mario Botta, which this year will witness the renovation of its rear side overlooking Via Verdi, as well as cultural activities often promoted by private companies, such as in the case of the pyramid of the Feltrinelli Foundation or the towers of the Prada Foundation.

THE ARRIVAL OF THE MULTINATIONALS

One third of the 3,600 multinationals that have established roots in Italy have chosen Milan as their base, along with 280,000 employees, generating a turnover of around 170 billion Euros. The sectors that have the city as their base are mainly finance, fashion, food and technology. Starting with Samsung, which has created an innovation district in the Porta Nuova area, while Huawei has inaugurated its first European flagship store in the Citylife district, without forgetting Apple which, in the next few months, will open a new store designed by Norman Foster in Piazzetta Liberty, not far from the Milan Cathedral. The coffee-shop chain Starbucks has also chosen Milan as the base for its first Italian branch, in Piazza Cordusio, in the very heart of the city, where they plan to inaugurate the first Italian "coffee factory", which will extend over an area of 2,400 m² and have seating for 350 clients. And also in Piazza Cordusio, the Japanese clothing brand Uniqlo is planning to open its first Italian store in the spring of 2019.

UNIVERSITIES

The first Italian campus of a public university will be built on the former Expo site to house the science faculties of the Università Statale that will be leaving Città Studi. In the south part of the city, the Bocconi University is finishing off its new campus designed by the Japanese design studio Sanaa: over an area of more than 36,000 m² there will be a 10-storey tower block, 4 buildings, a student residence block, a sports centre and a large park, for a total investment of 130 million Euros. Not to mention the new campus of the Milan Polytechnic to be built in the historic headquarters in Piazza Leonardo da Vinci, designed by Renzo Piano.

THE METROPOLITAN RAIL NETWORK

The first 15 km stretch of the new M4 line will open in 2021, which will pass through the old city centre to connect the western outskirts of the city to Linate Airport. It is estimated that the new line, with its 21 stations, will carry 86 million passengers every year on driverless trains passing every 90 seconds, as well as crossing with three other lines of the underground railway network and 5 terminuses to connect to the suburban rail network. This will make the M4 "Blue" line the main artery for a new polycentric Milan which, on paper at least, will reduce the number of car journeys by 30 million, thereby lowering the level of polluting emissions. As far as the other lines of the underground rail network are concerned, an extension to the M5 line up to Monza and the M1 line up to Baggio have already been planned.

URBAN TRANSFORMATION

After the projects in the former Expo area, Porta Nuova and Citylife districts, and after negotiations lasting twelve years between the Italian State Railway, Milan City Council and the Lombardy Regional Council, the next urban transformation project for the city will see the development of decommissioned areas and the change in use of 7 old railway hubs, starting with Farini, Porta Romana and Porta Genova, followed by San Cristoforo, Greco, Lambrate and Rogoredo. A total area of 1,250,000 m², around half of which will be turned into parkland. Following the presentation and announcement of the winning masterplan, the second phase of the urban and architectural redevelopment plan will be launched and, lastly, there will be a search for partners for the development of the entire project.



THE MILAN OF THE FUTURE

Designed by the Milanese architect Emanuele Genuizzi and his team, the winning design for the restyling of Piazza Castello in front of the Sforza Castle has received favourable reception from the city's Superintendence of Architectural Heritage and Landscapes, but with a request to the designers to reduce the areas covered with macadam in Piazza Castello and to use Montorfano granite in Largo Beltrami. The budget allocated by the City Council is 12 million Euros and work is scheduled to commence by 2021. Also set to get underway is the plan to develop and regenerate the area around Central Station and the Raccordati Warehouses. The aim is to make the nearby square safer and more habitable and to free up new pedestrian areas as part of a more comprehensive urban regeneration programme, with a similar type of intervention scheduled for Piazza IV Novembre in 2019. The metropolitan rail network will also be extended, with the M1 Red Line scheduled to arrive right up to the new Monza Bettola hub within the next two years, while the M5 Line will continue on to Monza after passing through Viale Fulvio Testi and Cinisello Balsamo, and then from the San Siro area it will be extended up to Settimo Milanese. The City Council's Suburbs Plan to redevelop around 3,000 empty council houses is also ongoing and they should be ready to be handed back to the city by the end of Mayor Giuseppe Sala's current mandate.

Milan, capital of research and sustainability

INTERVIEW WITH DIANA BRACCO:
THE CHALLENGE OF EXPO, HER LOVE OF ART
AND RELATIONSHIP WITH MILAN



© Bob Krieger

Dianna Bracco was born in Milan and graduated in chemistry from Pavia University, where she was also awarded an honorary degree in pharmacy, before going on to take a degree in medicine from the Università Cattolica del Sacro Cuore in Rome. She is President and CEO of the Bracco Group, a major pharmaceutical-chemical company founded in 1927, which also encompasses the Centro Diagnostico Italiano (Italian Diagnostics Centre), a multi-clinic facility providing a full range of preventative services of the very highest European standards.

Under her leadership, the Bracco Group has reached the very cutting-edge globally in the diagnostic biomedical imaging sector. The company now has a consolidated turnover of approximately 1.25 billion Euros, 87% of which coming from foreign markets, and employs approximately 3450 staff. Every year it invests approximately 9% of its turnover in R&D and can boast a portfolio of over 1800 patents.

Diana Bracco is currently also the President of the Bracco Foundation and President of the National Life Science Cluster – ALISEI. She is also a member of several boards of directors, including those of Bocconi University and the Accademia del Teatro alla Scala.

A member of the Italian Order of Merit for Labour, she was the President of Expo 2015 SpA and the General Commissioner for the Italian Pavilion.

You played a key role in Milan's bid to host the Expo, both during the tricky preparation period and the actual running of the 2015 Expo. What is your opinion about what is happening to the huge area that

hosted the event?

I must admit that I am truly delighted to see that Tecnopole's first researchers are coming to work in our magnificent Palazzo Italia with its futuristic architecture and its biodynamic cement custom-designed by researchers from Italcementi, which stands alongside the Tree of Life. As we envisaged at the time, the Expo site will be taken up by a gigantic Science, Knowledge and Innovation Park, which has already been given the clever acronym "MIND" (Milan Innovation District), which I like a lot. Thinking back over the challenge Expo posed, I would like to add that it was the most difficult thing I have ever undertaken. A challenge so intimidating that it made me tremble at the knees, which was, however, also a crucial turning point for both Milan and the whole of Italy. We showed the world that we can do great things: it was extremely rewarding.

Do you think Human Technopole will really be a great opportunity for Italy?

I certainly do. It is an ambitious and visionary project, which aims to take Italy to the very forefront in the sciences of life. I am sure it will become a world-class integrated multidisciplinary research infrastructure in the fields of health, genomics and data science. Thanks to this extraordinary project Milan will gain credibility and attract leading international professionals in these industries. It is extremely significant and an extremely good omen that a leading figure like the Scottish scientist Iain Mattaj, the current Director General of the European Molecular Biology Laboratory (EMBL) in Heidelberg, is planning to leave Germany to come

to Italy to head the Human Technopole. Congratulations to Arexpo and Roberto Cingolani for the work they have done over the last few years.

Once a city renowned for its often family-run small and medium-size businesses and manufacturing companies, Milan is now turning into a major city focused around the advanced services industry. What you think about this transition?

Like all major cities from London to Paris, it was an inevitable step. Nevertheless, Milan still has an important industrial fabric, as is shown by Mapei or Bracco itself, as well as all the companies associated with Assolombarda (the Associations of the firms located in the Provinces of Milan, Lodi and Monza and Brianza). Nowadays Milan stands for industry, finance, tourism, design and fashion, but it is still very much a centre of research and innovation. I would like to emphasise that the territorial marketing campaign carried out to try get the headquarters of the EMA (European Medicines Agency) transferred from London to Milan demonstrated Milan's new vocation to the entire world: the aim to be one of the leading capitals of in the field of research. Human Technopole will seal its status, significantly benefiting from the work carried out to try and attract the EMA.

The suburbs of Milan are, however, still more a problem than a resource. The city Mayor, Giuseppe Sala, has focused his attention on the suburbs and promised to do something about this issue, even turning to the private sector for

HERE, IN MILAN, A WILLINGNESS TO WORK HARD HAS ALWAYS FACILITATED SOCIAL INTEGRATION

help. As President of the Bracco Foundation, do you have any plans in mind?

The issue of marginalisation and the city suburbs has increasingly been the focus of attention of both researchers and public administrators/practitioners over the last few years, as they have struggled to come up with ideas for regenerating places and communities, well aware that the only way to really grow is to grow together. Faced with the issue of migration, which has such a major impact on life in the suburbs of big cities, we cannot remain indifferent. As the Bracco Foundation, for example, we have at least made a minor contribution in aid of those people who are often forgotten and overlooked. We must all realise that, unless we take action on the social fabric of society, problems can degenerate dramatically, as we can see from what has happened recently in so many major European cities.

Can you describe what concrete action you take?

I can think of two projects. One was a health prevention/aid project called "Prevention in Aid of Migrant Women", promoted in partnership with Milan City Council and the Opera San Francesco per i Poveri non-profit organization, which managed to involve 500 immigrant women over a period of one and a half years, 376 of which were actually taken into care. So far 1300 medical visits and clinical examinations have been carried out, bearing in mind the importance of diagnostics for the current and future health of both mothers and children. Another project on the issue of integration I am particularly interested in is "Oltre i margini (Beyond the Margins)", which operates in an area of the Milan suburbs with a high number of resident immigrants: 1-in-3 people are immigrants and 64% are foreigners. Working with La Rotonda, an extraordinary association headed by Don

Paolo Steffano and Cesvi aid agency, this project provides help in finding work and health care. The tailor's shop "Fiore all'occhiello" also provides immigrant women in Baranzate, a Milan suburb, with a proper job opportunity as part of an intercultural programme.

Thanks also to working partnerships with Sacco Hospital in Milan and the Italian Diagnostics Centre, we are able to prioritise women and children. Lastly, in June 2017 the Bracco Foundation organised the first national conference on city suburbs in partnership with Fondazione Cariplo and Sviluppo Chimica (a service company owned by Federchimica, the Italian Federation of the Chemical Industry), which, together with Fondazione Arché non-profit organization, are working on a project that could potentially have a major social impact in the Milan suburb of Quarto Oggiaro. The conference provided the opportunity to compare successful projects carried out in the city of Milan with other national and European programmes, enabling a network of social players to construct a shared vision, a strategy that can be put into effect to achieve concrete results. It is hoped that this kind of interaction will help spread know-how and expertise, also bringing together different practical/ethical approaches to bridge the gap between profit and non-profit organisations.

Your family comes from Istria and knows what it is like to emigrate. Milan is still a tough city, but is it also welcoming and ready to accommodate and support those willing to make the effort?

Yes, this city is still very much centred around its work ethic. Here, in Milan, a willingness to work hard has always facilitated social integration. Of course, this is being helped along by those employment policies and initiatives, particularly those focused on young people and women, introduced by Milan's institutions and businesses. Here the concept of "good citizenship" has held sway for some time, providing real support for entire communities. Doing business and philanthropy are becoming two sides of the same coin. A way of paying back part of what you have received. This is the same feeling my family has: real gratitude and a desire to give back.

Everybody knows how much you love art. You are on the Board of Directors of the Accademia del Teatro alla Scala and Museo Poldi Pezzoli. In the past, you were also the only Italian member of the Board of Trustees of the National Gallery of Art in Washington (USA). Hardly surprisingly, you decided to publish a limited edition of a book about 50 cultural projects carried out over the years in Italy and abroad to commemorate the 90th anniversary of the Bracco Group.

Philanthropy has always been in our company's DNA, which is why we asked Moreno Gentili to write an account of all the projects our family has undertaken to support culture as a way of commemorating this extremely important anniversary in 2017.

The projects outlined in the book are multifaceted: restoration works, exhibitions, concerts and tours all over the world in partnership with such major institutions as Palazzo del Quirinale, La Scala Theatre, the National Gallery of Art in Washington, Museo Poldi Pezzoli in Milan, the Metropolitan Museum of Art in New York and the Triennale di Milano. Renovation work has been carried out on extremely valuable fountains in Genoa, Naples, Rome, Palermo, Milan and Varese; attention to the environment, green policies and the urban habitat are mirrored in redevelopment work carried out on parks and gardens like Guastalla Park in Milan and the renovation of industrial sites of great historical value, such as Torviscosa in Friuli (Northern Italy); we have organised major international exhibitions on Fra Carnevale, Giorgione, Titian and Canaletto; concerts involving such great maestros as Claudio Abbado, Riccardo Muti, Riccardo Chailly, Anne-Sophie Mutter, Uto Ughi, Lorin Maazel and Lang Lang, without forgetting all the talented youngsters from the Accademia Teatro alla Scala, musicians, ballet dancers and technicians from the entertainment business, who have all been given a helping hand by the Bracco Foundation.

The philosophy underscoring the Bracco company and Foundation's various enterprises to support culture is the creation of public-private partnerships, so that people can work together towards a common goal.

THE LIBRARY OF TREES

THE LAST PIECE
OF THE JIGSAW IN THE
REDEVELOPMENT
OF THE AREA: A GREEN
LUNG FOR THE PORTA
NUOVA DISTRICT



Extending over an area of 9.5 hectares, the Library of Trees Park is gradually taking shape. It is set to become the central feature of the Porta Nuova district and the third largest public park in the centre of Milan. The park is divided into three main areas: the largest area is between Via Gioia, Via Pirelli and Via De Castilia, a second area is on the roof of the underground carpark in Piazza Einaudi and the third area is a straight strip running alongside Viale della Liberazione. Thanks to the grassland and numerous trees, the aim is that it will have a positive impact on the microclimate and ecosystem of this urban area.

The park, which has around 450 trees of 21 different species, 34,800 m² of grassland and almost 90,000 hedges, bushes, climbing plants, aquatic plants and ornamental plants, is set to become the largest pedestrian area in the city with 170,000 m² of footpaths and 5 km

of cycle tracks.

The final layout of this park, the first in Milan designed according to a contemporary landscape concept, is based on three main elements that are visible particularly when viewed from above: the main pathways that connect the outer areas of the park, irregular shaped patches of land that form the gardens, grassy areas, flower beds and small piazzas, and circular copses made up of groups of trees to create what are considered to be "green rooms".

In 2004, within the framework of a more comprehensive project to restore and redevelop the areas in the Garibaldi-Repubblica zone, Milan City Council issued an international design tender to define the layout of the park. The tender was awarded to the Inside Outside|Petra Blaisse design studio from the Netherlands, in collaboration with the Studio Giorgetta design studio of Milan, and was

approved in 2014. In June 2015 Coima SGR took over from the City Council to carry out work on the public park in lieu of building permit fees for the Porta Nuova development.

The first lot (an area of 7,500 m²) between Via De Castilia and Via Sassetti was inaugurated in April 2017 and has around fifty trees of three different species (ash, hornbeam and black poplar), bocce courts, water features, a playground and a series of vegetable patches for didactic purposes where workshops are held on a weekly basis. The second lot, which has also been completed, will be inaugurated in the autumn of this year, giving the recently planted trees time to grow and become established before the first visitors arrive.

THE ORNAMENTAL POND

There is also a large, triangular shaped ornamental pond in this new area. For



waterproofing below the foundation slabs MAPEPROOF LW was used, a type of bentonite sheet for structures below ground level with a water table less than 5 m. The sheet was folded around the base. IDROSTOP B25 hydro-expanding bentonite joint was also applied for sealing the second pour of concrete. The waterproofing work continued by applying two coats of MAPELASTIC FOUNDATION two-component cementitious mortar with a roller, which is applied in layers at least 2 mm thick. The joint between the two waterproofed surfaces was then sealed with MAPEPROOF MASTIC natural sodium bentonite grout. To waterproof the internal surfaces of the pond (around 500 m²), PURTOP 1000 two-component, pure polyurea membrane was applied by spray, a product used to form high performance waterproof coatings on storage tanks, pools and hydraulic structures directly on site. Before applying it, all the surfaces were treated with a coat of TRIBLOCK P epoxy-cementitious primer, which is used to waterproof damp substrates, followed by a coat of PRIMER SN epoxy primer broadcast while still wet with QUARTZ 0.5 quartz sand. Stone slabs were then bonded inside the pond using KERAPOXY anti-acid epoxy mortar, which is used for both bonding and grouting joints.

LEFT. The internal surfaces of the pond were treated with TRIBLOCK P and PRIMER SN.

BELOW. Waterproofing work was completed by spray-applying PURTOP 1000 membrane.

IN THE SPOTLIGHT

PURTOP 1000

It is a two-component, solvent-free pure polyurea membrane applied by spray with a high-pressure, bi-mixer type pump, to form waterproof coatings for hydraulic works, roofs and bridge decks directly on site. Thanks to its high chemical resistance, exceptional flexibility and tear strength, PURTOP 1000 is suitable for waterproofing membranes on storage tanks, basins and hydraulic works in general. The special properties of PURTOP 1000 also makes it suitable for waterproofing both new and existing structures. It forms an excellent bond and may be applied on various surfaces (concrete, metals, etc.) to create a strong, flexible, continuous membrane.

TECHNICAL DATA

Library of Trees Park, Milan (Italy)

Period of construction: 2014-2018

Year of the intervention: 2017

Intervention by Mapei: supplying products for waterproofing the ornamental pond, installing stone and grouting joints

Design: Inside Outside|Petra Blaisse and Studio Giorgetta

Client: Milano City Council

Installation companies: Sforazzini Srl, Polisolamenti Srl

Mapei coordinators: Giuseppe Dal Mas, Fabio Messina and Andrea Peli, Mapei SpA (Italy)

MAPEI PRODUCTS

Waterproofing below slabs: Mapeproof Mastic, Mapeproof LW, Mapelastastic Foundation, Idrostop B25

Waterproofing internal surfaces: Primer SN, Quartz 0.5, Triblock P, Purtop 1000

Installing stone materials: Kerapoxy

For further information on products see www.mapei.com



Public-private partnerships to be replicated in other cities

MANFREDI CATELLA TELLS US ABOUT THE AMBITIOUS REAL-ESTATE PLANS FOR THE CITY: PORTA NUOVA, PORTA VOLTA AND THE PROJECTS FOR THE FUTURE



After studying Economics at the Università Cattolica of Milan and Real-Estate Planning at the Polytechnic University of Turin, followed by specialising at the London Business School, Manfredi Catella started working in the international finance sector. Today he is one of the most important players in the world of real-estate, a sector in which with Coima SGR – a real-estate investment, development and portfolio management platform – he developed the Porta Nuova and Porta Volta projects in Milan.

Winner at the Mipim Awards in the “Best Urban Regeneration Project” category for the Porta Nuova project and in the “Best Office & Business Development” category for the Feltrinelli Pyramid by Herzog at Porta Volta. Do you consider yourself satisfied?

It would like to start by saying that I consider the awards we received a form of recognition for the entire team. The awards we won recently – and I’m referring to the Mipim Awards – gave us a lot of pleasure for two reasons: they give our work resonance at an international level and, as a consequence, our reputation too. And because, until now, no Italian company has ever received double recognition such as this one. These awards are for an entire sector that also excels at an international level and it has never happened before. So yes, I am satisfied. As we all know too well, however, these awards are just part of a journey and we are already thinking about our new

projects. In fact, the awards are the conclusion to a process: Porta Nuova and Feltrinelli Porta Volta are behind us now and we are already looking to the future.

For international investors, this double victory represents a further attraction for the city of Milan. Have you noticed a growing amount of interest in the real-estate developments you have in your programme?

This is something we will see in the future. Both international and domestic investors can certainly rely on the fact that, over the last 15 years, the projects implemented in Milan are a solid indicator of the quality of the territory, projects which have also been well received by the inhabitants of the city. These are long-term projects with buildings that have been in the pipeline for years and only now are seeing the light of day. In our line of work, you only see the fruit of your labours after many months, or even years. What is more, Milan represents a political model that has never been put into practice before in Italy and, if we take the Porta Nuova project and use this as an indicator, it had to pass through five different administrations; two led by Gabriele Albertini, one led by Letizia Moratti, one led by Giuliano Pisapia and the one currently headed by Giuseppe Sala, under whose administration the new park at Porta Nuova will shortly be inaugurated. Each successive local administration has had the ability to inherit the work left by their predecessors and carry it forward,

right up to actually seeing it completed. Milan has shown how, with political continuity and a long-term vision, projects can be launched and they can also be completed.

The Porta Nuova skyscrapers district is something new for Italy. Do you think this model could be replicated in other cities, such as Rome, or will it remain a one-off?

I believe that Porta Nuova has had a very important cultural function, which is to have reintroduced to our country a commissioning process and work method that considers real-estate, not just as a profit-driven investment opportunity, but rather an investment in the local territory that will have a social and economic impact on a much larger part of the community than just those behind the initiative. This has progressively led to a regeneration of the relationship between the public and private sectors, which has been acknowledged at an international level through these awards.

So, rather than an architectural and urban redevelopment project, we could maybe focus more on the work method. Porta Nuova is undoubtedly concrete proof of this rather than just a coincidence and, given the success it has had, it could and must be replicated in other cities.

I am convinced that the way to replicate this success does not depend on architecture or the actual buildings, but on the method: the “ingredients” may be different for every city, but not the method.

You will be remembered as the person who revolutionised the Milan skyline. What is the most rewarding acknowledgement you have received?

To go through Piazza Gae Aulenti and see passers-by taking photos of the surrounding buildings. It is a habit that had been lost in Italy; we only took photos of our ancient history. The fact that people are starting to appreciate a more contemporary image or architectural expression of the city again is a very simple reward, but maybe the most important prize.

The new green lung at Porta Nuova, the Library of Trees, will be inaugurated shortly. A central element for the development of the area and a new park open to the public. Is its definition as a “garden quarter” correct?

To be honest I had never heard it before, but I really like it! An important theme for us, and one that we are very sensitive about and which we always design methodically and with great care when we work on the territory, is precisely the idea of public spaces. Leaving aside their actual definitions, what we have tried to do is to lay a kind of “carpet” over the infrastructures that complete the area, such as the metropolitan railway, changing the city plan and turning it into a pedestrianised area. We then worked on the quality of the public spaces by looking at the road surfaces, the lighting and ur-

ban furniture and features, and obviously the green areas, so as to create a kind of fabric that binds the areas together. We consider this to be a real innovation that goes beyond the mere architecture – that may be liked or not liked – and in a certain way it also makes simpler to design and create public spaces, especially if you can count on a good architect.

Do you think we are now more sensitive to green areas as a part of contemporary urban development, at least as far as new spaces open to the general public are concerned?

I believe we are. The nature of public spaces, and of the Library of Trees in particular, is the creation of green areas that do not have the “natural” look of the countryside. They are rather more usable, safer, illuminated, more liveable and designed to hold events and shows. To put it simply, a green communal area.

Cesar Pelli has been entrusted with the redevelopment of the former Inps tower, an historic business centre in Milan. What will it become in your projects? What will remain of the old Milan of the 1960's?

We demolished the tower because it was an inefficient building, in terms of both the height of the storeys and the layout inside the building. So really it was a highly technical decision, which was also influenced by the current market

demand for specific types of spaces. The project will meet these new requirements and will be integrated with more attention on environmental sustainability. The benchmark will not be Porta Nuova; for this project, we are raising the bar. The other factor we are integrating into the design of the Gioia 22 tower, a new approach compared with the buildings we have previously constructed, is technology. The infrastructure-technological “web” of analysis and data collection sensors that characterises it will be a prerequisite to improving the building.

Work on the 7 Milan rail hubs has been suspended, but surely these urban areas are strategic. Do you think you will also invest in these in the future?

As far as Coima SGR is concerned we are obviously very interested in this project. These hubs are an important opportunity because they are central and account for a considerable amount of land. They certainly have an important function in the mosaic that will define the Milan of the future.

For the moment, I can say that Coima SGR will be looking at them with interest.

The final question is more personal: do you enjoy living in Milan?

Yes. As a family, we could have chosen to live in any city and we chose to live precisely here, in Milan, because we are convinced that the quality of life in Italian cities in general, and in this city in particular, is very high and here we can find innovation and internationalism.

In our opinion, urban densification, which seems to be proclaimed constantly as an almost absolute rule, is not true. You can only densify a territory up to a certain point. If you go too far a city can become a complex megalopolis with enormous traffic and security problems. Personally, I don't believe that is the model of a city any of us aspire to.



PORTA NUOVA: AN INVESTMENT IN THE LOCAL TERRITORY WITH A SOCIAL AND ECONOMIC IMPACT ON THE WHOLE COMMUNITY



CITYLIFE SHOPPING DISTRICT

THE MALL DESIGNED BY ZAHA HADID
ALSO INCLUDES A CINEMA
AND PLENTY OF SHOWROOMS



The CityLife Shopping District, inaugurated in Milan last December, got off on the right foot, also due to the nearby catchment area which includes the more than 5,000 employees of the Allianz and Generali Towers. And in three years' time, forecasts indicate there will be around seven million visitors per year. A great result considering the shopping centre, the penultimate phase of the CityLife real-estate project – the last piece being the tower designed by Daniel Libeskind scheduled to be completed by the end of this year – will have to do battle with the competition of nearby malls such as the “Centro” shopping centre of Arese (see *Realtà Mapei International* no. 59).

With a floor space of 32,000 m², the CityLife Shopping District is now the largest urban shopping centre in Italy. Inside the centre there are around one hundred different brands offering an extensive range of goods, some of which will be making their debut in Italy, including leading fashion brands, a mark of prestige for the centre compared with its rivals, restaurants, and an area dedicated to other services, such as a cinema.

The mall was designed by the architect Zaha Hadid, who used bamboo to dress floor-to-ceiling columns to make them look like trees.

One of the new names that will be appearing for the first time in Italy, and also in Europe, is the Chinese telephony brand Huawei,

LEFT. The entrance to the CityLife Shopping District and the Generali Tower, both designed by Zaha Hadid.

Photo 1. The floor in the Huawei store was realized with ULTRATOP.

Photo 2. LVT flooring was installed in the CityLifeAnteo cinema with ULTRABOND ECO V4 SP adhesive.

Photo 3. The floor in the Adidas showroom was realized with ULTRATOP with a special "aged" effect.

which will be fitted out with cutting-edge, eco-sustainable systems.

To make the floors, Mapei Technical Services recommended using ULTRATOP ultra-fast setting, self-levelling mortar. The first step was to prime the surface with PRIMER SN epoxy pre-filled primer. ULTRATOP, in its light grey color shade, was then applied in a layer with an average thickness of 2 cm. To help the floor maintain its colour over the years, it was then protected with a coat of MAPEFLOOR FINISH 58 W, two-component polyurethane finish in water dispersion.

The floor in the Adidas showroom was also made from ULTRATOP to obtain floors with a very attractive finish which is also particularly resistant to abrasion. The colour chosen by the designers was light grey with a ROC (Rugged Old Concrete) effect that makes it look like used concrete, with worn areas and marks typical of floors found in old, reconverted buildings. MAPEFLOOR FINISH 630 protective acrylic filming agent was used to complete the final finish providing an anti-dust treatment.

The CityLife Shopping District also has a cinema with seven screens and seating for 1,200 cinemagoers. Each screen has been named after one of the historic Milan cinemas that have been closed down over the years: Ariston, Aurora, Capitol, Corallo, Maestoso, Mignon and Zenit. In each of the screens areas, before installing vinyl floor covering, the substrates were smoothed to make them perfectly flat with PLANIPATCH ultra-fast setting thixotropic finishing mortar with very low emission of volatile organic compounds (VOC). To improve their resistance to abrasion, LIVIGUM synthetic resin-based latex in water dispersion was added to the mix.

To bond the wood-effect LVT (Luxury Vinyl Tile) flooring, Mapei Technical Services recommended using eco-sustainable ULTRABOND ECO V4 SP, an universal adhesive in water dispersion with very low emission of VOC.



IN THE SPOTLIGHT ULTRATOP

It is a self-levelling product 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.

After setting, it has a high level of compressive and flexural strength, bonds perfectly to

the substrate and dries quickly so that any further finishing coat may be applied after a very short time. It may also be used to make floors with "Terrazzo alla Veneziana" effect. It is classified as **CT-C40-F10 A9-A2_n-s1** according to **EN 13813** standards.



TECHNICAL DATA

CityLife Shopping District,
Milan (Italy)

Period of construction:
2016-2017

Period of the intervention:
2016-2017

Intervention by Mapei:
supplying products for realizing cementitious floors, smoothing the substrates and installing vinyl floors

Design: Zaha Hadid Architects
Clients: CityLife, Retail HW, Adidas

Main contractor: CMB
Installation companies:
Cudicini, Gianni Cortez,

VSA-Vissa

Mapei coordinator: Andrea Siboni, Antonio Salomone, Alberto Arosio, Mapei SpA (Italy)

MAPEI PRODUCTS

Preparing the substrates:
Livigum, Planipatch, Primer SN
Building cementitious floors:
Mapefloor Finish 58 W, Mapefloor Finish 630, Ultratop (ROC, Light Grey)
Installing vinyl floors: Ultrabond Eco V4 SP

For further information on products see www.mapei.com

Architecture: between memories and experimentation

MARIO BOTTA TALKS TO US ABOUT HIS WORK AND THE TRANSFORMATION OF MILAN



© Studio_foto Enrico Cano

Mario Botta was born in 1943 in Mendrisio (Switzerland) and, at the age of just 16, he had already designed his first single family house. It was while studying at university (from 1964 to 1969) that he got the chance to meet those he considers to be his points of reference: Le Corbusier, Louis Isadore Kahn and Carlo Scarpa. In 1970 he opened his own office in Lugano and, apart from design work, he also went into teaching and research, holding conferences, seminars and courses in architecture in various schools in Europe, Asia and America. Over the years he has received numerous international awards. His most notable works in Italy include the Mart (the Museum of Modern and Contemporary Art of Rovereto and Trento), the Petra wine cellar in Suvereto, the Papa Giovanni XXIII Church in Serrate, the refurbishment and extension of the La Scala Theatre in Milan, the Church of Santo Volto in Turin, the new Campari head offices in Sesto San Giovanni, the urban redevelopment of the area ex-Appiani in Treviso, the new wing of the Law Faculty at the University of Trento, the Faculty of Biology and Biomedicine at the University of Padua and the Church of San Rocco in Sambuceto, which is currently under construction.

You were responsible for the previous renovation of La Scala Theatre and your name will also be on the project for the second tower, which will soon be constructed next to the first one built in 2004. How will the project be developed

and what kinds of problem did you have to overcome, starting with the limited amount of land available?

As you rightly pointed out, the parcel available for the further extension of the theatre along Via Verdi is slightly more than 500 m² whereas around 5000 m² of useful surface is required. The La Scala Theatre is completely enclosed and delimited by Via Verdi, Piazza della Scala and Via dei Filodrammatici (at the back there is Intesa Bank and related buildings) so this piece of land, though small, is valuable as it will house the necessary spaces to update the organisation of the theatre to the current requirements. The project envisages the excavation of the orchestra pit to a depth of 16 m below street level and the raising of a tower (with offices, services and ballet rehearsal rooms) as high as the adjoining stage tower (around 38 meters).

The modernity of the first project in 2004 had a mixed reception. As if it were a forerunner of the changes to come and that have taken place in Milan over the last ten years, with new projects that have completely changed the face of the city. Do you consider yourself a sort of pioneer of the architectural rebirth of Milan?

The 2004 project had to be inevitably modern. The stage tower was planned to comply with the technological requirements (involving the stage moving equipment) essential for a contemporary theatre. Moreover, the need for higher

flexibility in the use of the different spaces depended on economic factors that could not be overlooked. These were the necessary conditions that led to the contemporary language of the stage tower and the elliptic volume housing the artists' dressing rooms that hovers above the historical buildings. Its modernity was also highlighted by the fair and accurate choice of the materials used to meet, as I was saying, the cultural needs of our time.

You visit Milan quite often. Can you tell us how the face of the city has changed? And how do you think it will change in the future?

The city of Milan has undergone an astonishing acceleration over the last decade with choices (or no choices at all) imposed by globalisation and consumerism. Cities have become points of reference that require iconic images to cope with the current needs of marketing. In this sense, Milan has been transformed – not without reservations – into a new agglomeration in tune with the globalised society. In the future, however, it will have to make an effort to salvage the still possible territory of history and memory that makes up the important heritage of living and identity values for the future generations.

Your very first constructions were already characterised by your diligent search for a choice of styles and materials to best describe the function and personality of an architectural structure. On the sub-

ject of materials, which element of your constructions would you say is the dominating feature?

When possible, I prefer to use "natural" materials: terracotta, natural stone, reinforced concrete and wood. This latter mainly on the interior as, in our latitudes, it is not very suitable to being used on the exterior. All these materials are connected to the environment, the climate and, in general, the territory where we are asked to build.

What architectural references from the past have had the great-

est influence on your work?

The great architecture of the past is the real "school" of reference. Architecture finds expression through its buildings because, besides the architect's sensibility and language, it also interprets the history of its own time. That's why we can maintain that the works of architecture are the formal expression of history. There is an anthropological element that connects the buildings to the past, to a space of our memory that powerfully resurfaces also in modern times. Architects are very privileged as their sources of inspiration from the art of building are linked to the history of the whole mankind.

A while ago you said you found it "unsettling" to work on just one

project and that you would rather work on different sites. Do you still feel the same way?

I most certainly do. In the modern fast-moving culture, the building process is paradoxically taking more and more time and, in some cases, many decades may intervene between the initial project and its completion ... and unfortunately the architect has but one life. The possibility of following more building sites allows to carry out a constant check on one's work.

You are an internationally acclaimed architect who designs buildings and structures all around the world. Where are your main projects at the moment?

Europe remains the main point of reference for both a sort of elective affinity and for the ease and convenience of the relationships, which are important aspects of our work. Over the last decades I've had the possibility to widen my horizons and interests and many job opportunities have arisen in the Far East: South Korea, India and above all China. Distant countries that are surrounded by an air of mystery even in the design process but that offer new forms of expression and experimentation. Most of the time architects cannot choose what to build; they are actually chosen, thus becoming the last instrument of a design process that often goes beyond their own judgement.

You are celebrating your 75th birthday this year. If you were to take stock of all the architectural research you have done, which of your works are you most proud of or most satisfied with?

Undoubtedly the "next one". Ours is a work of constant approximation that grants a sense of expectation for what is yet to be planned. The accomplished works are interesting but can be assessed only in retrospect. They are a "property" of the community and the architect, even when spurred on by the best intentions, cannot modify them. The moment you start a building site there is always a nice feeling of expectation but, at the same time, a lurking dissatisfaction for the changes you may no longer be able to carry out.

THE NEW TOWER OF LA SCALA THEATRE WILL BE A VERTICAL DEVELOPMENT, NEXT TO THE EXISTING STAGE TOWER



The 2018-2019 season at La Scala in Milan



MAPEI'S
PARTNERSHIP
WITH MILAN'S
MOST FAMOUS
OPERA HOUSE
WORLDWIDE
GROWS
STRONGER
YEAR BY YEAR

Milan, La Scala Theatre, Mapei. A city projected into the future without losing track of its traditions, the most famous Italian opera house in the world and a business - first established in Milan over years ago - that has created a winning corporate model based around fruitful and interactive relations between art and work.

The bonds between Mapei and La Scala Theatre are strong and become closer year by year, thanks to the company's deeply-entrenched business philosophy.

An official Corporate Subscriber of the opera house since 1984, Mapei has been a Perpetual Founder since 2008, the year when its products and technology were used to renovate this famous old theatre.

Giorgio Squinzi, the CEO of the Mapei Group, became a member of La Scala Theatre's board of directors in 2016 and the theatre is the location the company has chosen to celebrate - with its friends, customers and partners - some of the most important events in its history, like for example its 80th anniversary last year with such an important opera as *La Traviata*.

Over recent years, La Scala Theatre's schedule has been re-



MAPEI IS ONCE AGAIN SUPPORTING LA SCALA THEATRE

The bond with **La Scala Theatre** has deep roots in the story of **Mapei**. It has been a concrete reality since 1984 when Mapei became **Corporate Subscriber** and continued with the Company's contribution to the renovation and restoration of the Theatre, thanks to the **Mapei** research and technology. Since 2008 the bond has been reinforced with Mapei becoming a **Perpetual Founder** of the Theatre to support its prestigious artistic projects.

Learn more on mapei.com

MAPEI
ADVANCED CHEMICALS. CHEMICAL. PRODUCTS FOR BUILDING

vised in accordance with a cultural project, whose underlying tenets (carefully planned over various seasons) clearly emerge in the 2018/2019 season that features 15 important works, nine of which are new productions and two are being performed for the first time at La Scala.

"The La Scala Theatre's artistic programme - so the CEO Alexander Pereira told us - is still focused on its Italian repertoire, which we are committed to perform in its entirety completing our schedule of Verdi operas that have always been part of the theatre's seasonal programs with other cycles devoted to Puccini, Verismo (that will be back in 2020, with Giordano's *Fedora* and Montemezzi's *L'amore dei Tre Re*) and Bel Canto".

NEW WORKS AND TRADITIONAL COMPOSITIONS

The official opening of the 2018/2019 season - presented at an extremely well attended press conference held on 30th May - sees the return of *Attila*, one of Verdi's most important early works, which continues a sequence that began with *Giovanna D'Arco* that was written the previous year. "*Attila* marks a crucial turning point in the composer's development and the



The presentation of the 2018/2019 season was attended by, from the left, the Mayor of Milan, Giuseppe Sala, the Musical Director of La Scala Theatre, Riccardo Chailly, and the CEO and Artistic Director, Alexander Pereira.

ART AND CULTURE



Pictures taken at the Mapei event held on 8th February in conjunction with the performance of Giuseppe Verdi's opera *Simon Boccanegra*.



production of 7th September, staging Davide Livermore and performed by an important cast - so the Musical Director, Riccardo Chailly, noted - sets out to emphasise the complexity and innovation of the musical score".

January will feature *La Traviata*, staged by Liliana Cavani with sets designed by Dante Ferretti. Puccini's *Manon Lescaut*, one of Chailly's favourite works, will be staged in March-April and be part of a carefully structured programme of key musical works rethought in light of the latest lines of musical research and experimentation.

Verdi will feature again in July with his *I Masnadieri* and a cast of singers that are extremely popular with the La Scala's audiences: such as Fabio Sartori playing the part of Carlo and Michele Pertusi, who will play Massimiliano.

The great classics will be back in September and October: Verdi's *Rigoletto* and Donizetti's *Elisir d'Amore*; the season will

draw to a close in November with Georg Friedrich Händel's *Giulio Cesare*.

Focusing on the Italian repertoire does not mean La Scala is less committed to European composers. There will be again cycles devoted to Strauss and Mozart and the return of its Russian repertoire, while also emphasising the vital role of contemporary music and enhancing the Baroque Project with performances by Cecilia Bartoli.

"Over the last few years La Scala Theatre has made an effort to enhance its repertoire and interact more closely with the city, striving to take new paths while proudly holding onto its tradition", so Riccardo Chailly told us.

Words that Mapei agrees with in their entirety, happy to support an institution, which, as Chailly pointed out when talking about the forthcoming season at La Scala, "consolidates the path we have taken and is also another step forward into the future".

Mapei invited a group of customers and partners to attend an exclusive event held on 19th April in conjunction with a performance of Gaetano Donizetti's opera *Don Pasquale*.





» **LA SCALA THEATRE
IS ONE OF THE
LOCATIONS MAPEI
CHOOSES TO
CELEBRATE THE MOST
IMPORTANT EVENTS
IN ITS HISTORY**

Friends and partners of Mapei congregated at La Scala Theatre on 6th May for a performance of Riccardo Zandonai's opera *Francesca da Rimini*.



THE "INTERNATIONAL OPERA AWARDS" IN LONDON

And the Best Orchestra is... the La Scala's, now rated the best in the world. Musicians from this famous Milanese theatre received this important award on 10th April in London during the official prize-giving ceremony for the International Opera awards, considered to be opera's Oscars. They are divided up into different categories just like their counterparts for the film industry: best conductor, best singers, best chorus, best director, etc. The Opera Awards receive thousands of entries, who are then carefully assessed by a panel of experts. In the end there are about one hundred nominations for the 20 awards. These awards include Best Orchestra, the most prestigious prize that has only been awarded twice during the seven years these awards have been made, going to the Metropolitan Opera Orchestra in 2013 and now to La Scala Theatre's orchestra.

Alexander Pereira received the treble-clef shaped statue. "I am delighted with the wonderful work our musicians have done over the years. - so the CEO began - I would like to thank Riccardo Chailly, who has devoted himself to them. I have also worked extremely hard to bring some great conductors to the podium of the La Scala Theatre, such as Haitink, Blomstedt, Järvi and Jansons." He went on to point out that the uniqueness of the Scala sound is also due to its closely-knit troop "mainly composed of Italians, and this really counts towards the uniqueness of its sound, whose sweet tones also owe so much to all its fine female instrumentalists".

The La Scala Theatre's orchestra beat off strong competition from the Bayreuth Festival Orchestra, the Deutsche Oper, the Lyric Opera of Chicago, the Bayerische Staatsoper, and the MusicAeterna founded by Currentzis.



A city for everyone, without suburbs

A JUDGE AND PRESIDENT OF THE BRERA ACADEMY OF FINE ARTS, LIVIA POMODORO TALKS ABOUT HER COMMITMENT TO MILAN IN BOTH THE PAST AND PRESENT



A judge and the first woman to become the President of the Milan Court in 2007, Livia Pomodoro has been the President of the Milan Center for Food Law and Policy since 2014, which manages the legacy of Expo 2015. In 2016 she was appointed President of the Brera Academy and Director of No'hma theatre, which is built in an old abandoned waterworks in Milan and was devised and founded by her sister Teresa.

You were the President of the Milan Youth Court from 1993-2007. How have young people changed over the years, particularly in a big city?

I was President of the Milan Youth Court until 2007 but over 11 years have gone by since then. Society has changed considerably and, unfortunately, not always for the better, as we can see from the news over the last few times, but that would be a superficial assessment of

how things stand. Nowadays families have all kinds of problems in the notoriously difficult task of bringing up and educating their children, particularly at a time like the present when the world of schools and the families are becoming increasingly detached. Talking about the way young people have changed is like talking about the way Italian society has changed. After all, our children are the offspring of the society in which they live, which, at the moment, is not grounded in particularly strong values and, even more significantly, these values are not always positive.

Nevertheless, I have great faith in young people's ability to build a brighter future, provided they have good role models and can take advantage of all the opportunities now available to them.

You worked as judge in Milan for years and were in charge of plenty of high-profile cases. What have

you gained from all that experience?

People's life experiences, even the briefest, are all extremely important. I was a judge and attorney for fifty years and I cannot deny that this was an extremely important experience that has certainly left its mark on my character and personality. I was also President of the Milan Court for eight years and that was not so long ago. It was an extremely enriching, tricky and complicated experience, but I would like to be judged by the results I achieved. Under my jurisdiction, the Milan Court introduced the social responsibility reports and fundamentally changed the way it operated by introducing telematics civil proceedings and applying computerisation to its systems on a much vaster and more coherent scale. Nowadays it is seen as a law court whose working method and operations have no equal in the rest of Italy (and perhaps even abroad).



THE RIGHT TO FOOD: LIVIA POMODORO IS AWARDED THE FIRST UNESCO CHAIR

Livia Pomodoro has been awarded the first UNESCO Chair on the Right to Food. Teachings will be held at Statale University in Milan and will be part of the specialization program coordinated by Pier Filippo Giuggioli on 'Food between health, the law and market'. This is an important recognition for the research and education system in Milan and Lombardy that may be considered as part of the intangible legacy of Expo 2015. The UNESCO chair is recognition for the Expo held in Milan, encouraging the city to maintain its international vocation even now that this great event is over. Speaking at the presentation of the course on 14th May, Hilal Elver, the UN Special Rapporteur on the Right to Food, stressed that the fact that the Chair was given to Milan "holds special meaning because Italy already

You are in charge of a very unusual kind of theatre that does not charge for tickets. How did you get involved in the theatre?

In actual fact, I became President of Spazio Teatro No'hma when I was still the President of the Milan Court, because the theatre was once run by my twin sister Teresa, who was the real driving force behind it. When she sadly passed away in 2008, I decided to take over as President and carry on her work by keeping

the theatre open. A very special kind of theatre that does not charge any entrance fee to allow everybody the chance to enjoy culture. The theatre resumed its normal schedule the same year my sister died because, as we all know, the show must go on regardless of what happens. I began my first theatrical season in 2008/2009 with a series of shows I called "The Forgotten Wars". The subject matter was genuinely dramatic, and we put on some extraordinary shows with the help of some very talented actors and directors. In actual fact, I was just an apprentice sorcerer but now, ten years after what was for me a truly heartrending and terrible event that also gave me the strength to get involved in theatre, I am a real "theatre person" in every respect!

You have been the President of a great Milanese institution, Brera

Academy, since 2016. Back then you said that this "would be an extraordinary venture. A wonderful and tricky challenge. Just the kind of thing I like". What are your plans?

It has not been an easy task, because Brera Academy is run in an extremely old-fashioned way and, until recently, I had to deal with the tricky business of so-called 'Grande Brera' or, in other words, of finding the chance and taking the opportunity to make

the Academy bigger. A problem that went on for about 40 years,

but which I hope to have finally solved by acquiring the Farini railway premises for the Academy. These extraordinary spaces will soon become our campus of the arts, and we will immediately set about furnishing the premises so that they are fully operational in time for the next academic year. We have been lucky enough to work with an exceptional partner like Milan Polytechnic on this project. As the head of the Italian railways (from whom we purchased these facilities) pointed out, the Farini/Brera railway station will be indicated on every map of the Milan transport system, no mean achievement. Both the Brera Academy and No'hma theatre are in contact with Mapei and I have asked the Group to work together to transform Milan and turn it into a place that will embrace and embody art in a way the city never has done before.

You were extremely young when you first came to Milan from Southern Italy. What do you think of the city you have chosen to live in? Does it offers opportunities?

It has always been a city that offered great opportunities, perhaps even more so today now that foreigners are showing an interest in it, too. But Milan must be wary because opportunities are important but what really counts are the foundations and solid values on which it is built. The city needs a system that can manage everything new without forgetting about the past and, most importantly, without forgetting those most in need. In my opinion, cities do not have suburbs, cities expand outwards and when people say we need to work on the suburbs, it should mean that we are striving to include everybody in a city that belongs to all of us: a city - like all groups - is a combination of different parts. Milan has a European vocation, which, in some sense, makes it different from other Italian cities. Everybody must do their part in the realms of science, technology, art and town-planning, without ever forgetting that all this should, ultimately, be focused around people and not just an unbridled profit-making enterprise.

After being a judge, theatre impresario and President of Brera Academy, what is next for you?

The sky is the limit and there are plenty of things I would still like to do, but it all depends on what kind of opportunities present themselves!

hosts other international organizations connected to the right to food and food security, including FAO. It also represents a tool to remind policy-makers of the urgency of such themes and to bring awareness and knowledge among young generations".

Livia Pomodoro said that "The Chair can promote an integrated system of research, training, information and documentation on the necessary scientific and legal tools to contribute to raise public awareness and engagement so access to food can become a concrete reality for an increasing number of citizens in the world. The Chair will also need to facilitate and encourage an important cooperation between centers for research and high training, between universities and dedicated institutions, in Milan as well as in Italy and abroad".

Operating through her Milan Center for Food Law and Policy, ever since 2014 Livia Pomodoro has been busy promoting issues related to food and nutrition and, more generally speaking, the UN 2030 agenda, a

programme of action aimed at people, the planet and prosperity that was signed by the governments of the UN's 193 Member States in September 2015.

Population growth, immigration, urbanisation, fluctuating food prices, water shortage, desertification, climate change and natural disasters: all these phenomena combine to create an intricate overall scenario that gives cause for concern and, so far, the proposals put forward and measures taken to combat them have been quite inadequate.

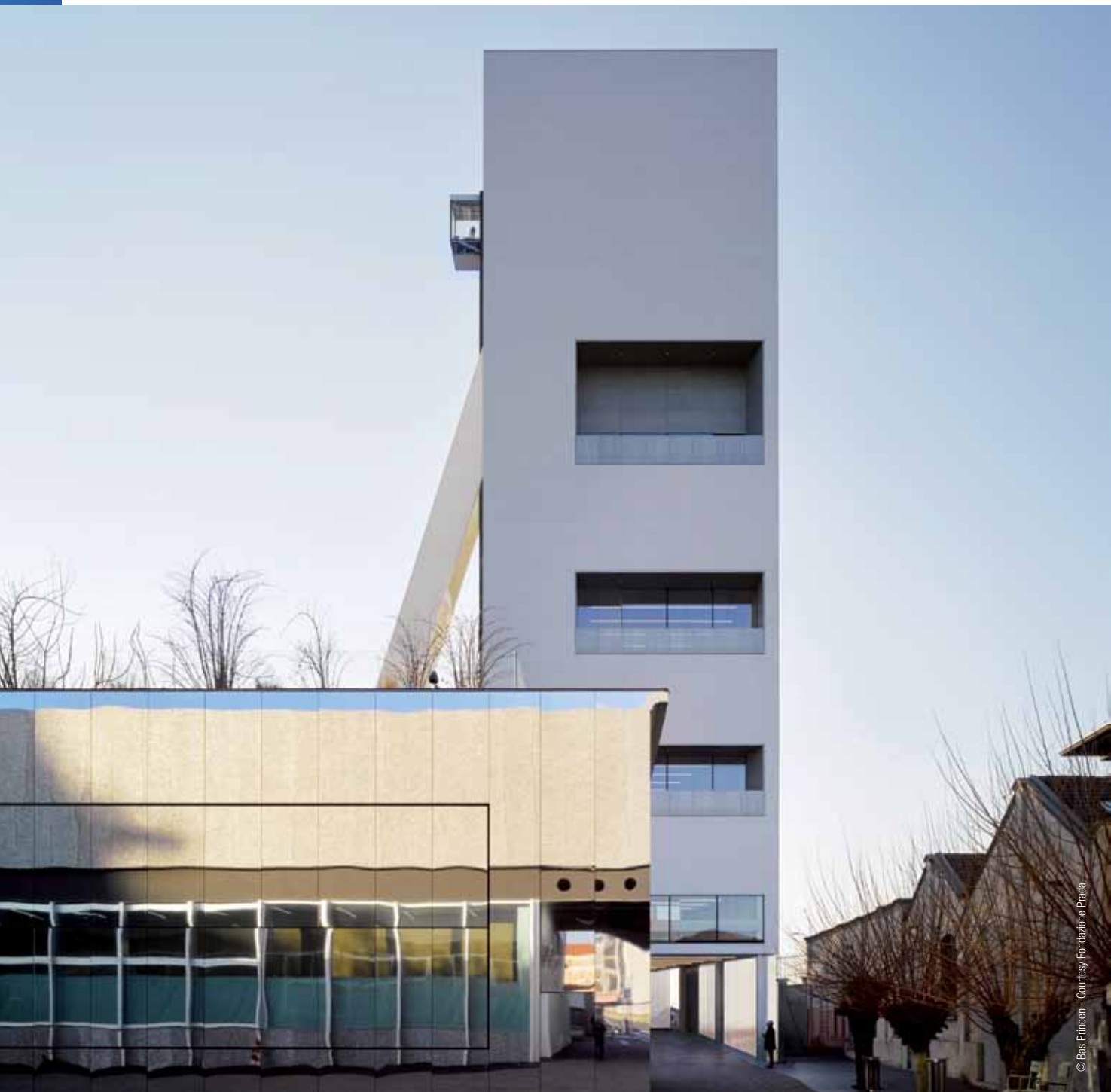
That is why the law and regulation are so important for ensuring that new and internationally shared rules are implemented to help create a fairer world in which human rights are truly respected.



PROJECTS

PRADA FOUNDATION TOWER

THE COMPLEX DESIGNED BY THE DUTCH DESIGN STUDIO OMA HAS BECOME A POINT OF REFERENCE FOR THE EUROPEAN CONTEMPORARY ART SCENE





© Bas Princen - Courtesy Fondazione Prada

The Prada Foundation Tower, which was officially inaugurated on the 20th of April this year during the Salone del Mobile exhibition, has had quite an impact on the skyline of south Milan. The complex that incorporates the Tower (which extends over an area of 19,000 m², 11,000 of which are used for displays) was opened in 2015 and has been witness to the redevelopment and transformation of a former industrial structure – a distillery dating back to the beginning of the twentieth century – into what has become one of the most interesting and glamorous exhibition areas in Europe. Miuccia Prada and the Artistic and Scientific Director of the Foundation, the art critic Germano Celant, have worked together to develop the Atlas exhibition for the Tower, a permanent display of artworks.

The latter construction is a 9-storey structure in which six of the floors are used for displays, while the remaining three floors include a restaurant, which was inaugurated in May, and a range of services for visitors, such as a terrace with a panoramic view of Milan. Connected by a lift with pink onyx walls, the Tower is 60 m high and has a total floor space of around 2,000 m². The characteristic that immediately strikes visitors is its colour, completely white, from its concrete walls right down to the travertine stone slabs used for the floors.

An innovative project by the Dutch design studio OMA, where the variation of three parameters – layout, height and orientation – has successfully achieved its objective of configuring the display spaces according to the direction of the light. Another characteristic of the structure is that it develops vertically from a trapezoidal form into a rectangular form, with each floor having a different height. The external facades are characterised

by a succession of surfaces in glass and white concrete, exposing each floor to light from the north, east and west, while the last room is illuminated from above. The south side of the Tower has a diagonal structure which connects it to the warehouse, inside which there is a panoramic lift. Now that the Prada Foundation complex has been completed, the area where it is located is waiting for work to be finished to become a business park and for the regeneration of the Porta Romana hub.

HIGH-PERFORMANCE ADMIXTURES

The building contractor chose to use a series of Mapei products for this special project. During the preparation phase, a number of admixtures for concrete were selected and tested in the Mapei laboratories. The mix was then tested directly on site, which confirmed the positive results of the laboratory tests.

And so, for the design mix for the concrete, Mapei supplied DYNAMON SR3 superplasticiser based on modified acrylic polymer which is used for ready-mixed concrete with high workability and high mechanical properties; DYNAMON LZ551, a multi-purpose, modified acrylic polymer-based super-plasticiser specially developed to maintain the workability of concrete; MAPECURE SRA 25 liquid admixture specifically formulated to reduce the formation of cracks induced by hygro-metric shrinkage in conventional and self-compacting concrete.

MAPECURE SRA 25 works by reducing the surface tension of the water present in the capillary pores. This process reduces the intensity of the forces which act upon the walls of the pores, guaranteeing better dimensional stability and, therefore, a drastic reduction of cracks caused by this phenomenon.

ABOVE. An external view of the Prada Foundation.

Mapei supplied various admixtures (DYNAMON SR3, DYNAMON LZ 551 and MAPECURE SRA 25) for the concrete mix used for building the Tower.

IN THE SPOTLIGHT

DYNAMON SR3

It is an admixture based on an acrylic polymer designed specifically for the ready-mixed concrete industry, belonging to the Mapei Dynamon SR system. Concretes manufactured with DYNAMON SR3 have a high level of workability (consistency class S4 or S5, according to EN 206-1), and are consequently easy to apply when fresh and offer excellent mechanical performances when hardened. DYNAMON SR3 is particularly suitable whenever there is the need for a strong water reduction, along with long slump retention.

TECHNICAL DATA

Prada Foundation Tower, Milan (Italy)

Period of construction: 2014-2018

Period of the intervention: 2016-2017

Intervention by Mapei: supplying admixtures for the concrete mix

Design: OMA, Rem Koolhaas, Chris van Duijn, Federico Pompignoli

Client: Fondazione Prada

Main contractor: Colombo Costruzioni SpA

Concrete supplier: Calcestruzzi SpA

Mapei coordinator: Andrea Siboni, Mapei SpA (Italy)

MAPEI PRODUCTS

Admixtures for concrete: Dynamon SR3, Dynamon LZ 551, Mapecure SRA 25

For further information on products visit www.mapei.com

**LEFT.**

A rendering of the tower designed by Daniel Libeskind.

RIGHT.

A sketch of the Tower by Libeskind.



PWC TOWER AT CITYLIFE

ALL 31 FLOORS OF THE TOWER ARE SCHEDULED TO BE COMPLETED IN DECEMBER. ALLIANZ TOWER WAS OFFICIALLY INAUGURATED ON 13TH JUNE. THE TWO STRUCTURES WERE BUILT BY COLOMBO COSTRUZIONI

Following the Allianz Tower by Arata Isozaki (described in *Realtà Mapei International* no. 52) and the Generali Tower by Zaha Hadid, it is now Daniel Libeskind's turn, with his tower being rented out for 18 years to the accountancy and consultancy firm PricewaterhouseCoopers (PwC).

In July, the tower will be up to the sixteenth floor and, by Christmas, up to the thirty first floor, with the company's 3,500 employees scheduled to relocate in 2020. The PwC Tower is situated at the centre of the CityLife district, one of the most important urban regeneration projects in Europe (366,000 m²), a mixture of residential, office and commercial spaces.

The concrete for the foundations was poured in 2015, while the actual construction work got under way in the spring of 2016. The skyscraper is characterised by its curved form and, once completed, it will have 33,000 m² gross floor space and will be 175 m tall, becoming the third tallest skyscraper in Milan after the nearby Allianz Tower (242 m and 50 storeys) and the Unicredit Tower (231 m).

Mapei had already taken part in the construction of the Allianz Tower in 2012-2015 (see *Realtà Mapei International* no. 58) and became the first European company to patent a new

family of acrylic super-plasticisers, enabling the ready-mixed concrete and pre-cast concrete industries to produce highly plastic concrete with a very low water/cement ratio. This is an indispensable characteristic for complex architectural projects that require longer workability times, so that concrete can be poured, including in warm climates, without having to add more water. Working alongside the manufacturer of the concrete, the most suitable acrylic super-plasticisers for the concrete for the PwC tower were singled out: DYNAMON XTEND W300 N, used to disperse cement particles, so that the amount of water required for mixing is considerably reduced, and DYNAMON SP 1, which is used to make precast concrete characterised by its low water/cement ratio and very high initial and final mechanical resistance.

TECHNICAL DATA

Client: CityLife SpA

Design: Daniel Libeskind

General contractor: Colombo Costruzioni SpA, CMB

Concrete supplier: Holcim Italia

Mapei coordinators: Pietro Lattarulo, Andrea Siboni, Stefano Citton, Massimo Seregini, Mapei SpA (Italy)

THE NEW BOCCONI UNIVERSITY CAMPUS

THE COMPLEX, WHICH INCLUDES ACCOMODATION FACILITIES FOR STUDENTS AND A SPORTS CENTRE, IS TAKING SHAPE IN THE SOUTHERN PART OF MILAN

The aim is to complete the university campus by next year but, for the start of the new academic year in September, the residential tower block should already be accessible.

Located in the southern part of Milan, the former Centrale del Latte area (extending over 35,000 m²) will be the site of the new campus of the Bocconi University. Inside the site a 10-storey, 300-room tower block for students and visiting professors has been built, the first phase of the complex designed by the Japanese design studio Sanaa.

The campus will also be the site of the new home of the SDA Bocconi School of Management, made up of three combined volumes: a building for the Masters courses at the School of Management and one for the executive program, joined by a third building which will house the offices for the teaching staff and the technical-administration departments. The campus will also be equipped with a sports and recreation centre with outdoor facilities and will include a swimming pool, a gymnasium, multi-purpose sports pitches and a fitness centre.

A convention has been signed by the Bocconi University and the Milan City Council for the redevelopment of the adjacent Ravizza Park and the renovation of Piazza Sraffa and two nearby roads (Via Bach and Via Sarfatti) in lieu of all other payments. Bocconi University will also bear the costs of creating a new access to the Pane Quotidiano no-profit organisation's structure designed by the architect Stefano Boeri.

Mapei Technical Services were contacted for advice on the most suitable admixtures for the concrete used to make the foundation plinths and for the concrete to make the floor on the precast slabs. It was proposed to use admixtures from the DYNAMON XTEND range, in this particular case the super-plasticisers DYNAMON XTEND W100 R and DYNAMON XTEND W300 N. These two products are liquid admixtures used to make high quality concrete and are specifically formulated to make concrete with a low water-cement ratio and good maintenance of workability including, in the case of DYNAMON XTEND W100 R, in warm climates and at high temperatures.



LEFT. Mapei supplied innovative admixtures from the DYNAMON XTEND line for concrete mixes used in the new Bocconi University campus, which will be completed in 2019.

TECHNICAL DATA

Client: Bocconi University

Design: Kazuyo Sejima+Ryue Nishizawa/SANAA

General contractor: Percassi

Concrete suppliers:

Calcestruzzi SpA,
Unicalcestruzzi, Betonrossi

Mapei coordinator: Andrea Siboni, Mapei SpA (Italy)



CONSTRUCTION OF THE METROPOLITAN RAIL LINE TO CONNECT THE CITY FROM EAST TO WEST IS ONGOING

The Blue Line, the colour used to indicate this underground railway line in Milan on transport maps and in stations, will have its two terminuses at San Cristoforo (south-west) and Linate (east).

The M4 Line will meet the M1 Line at San Babila station, the M2 Line at Sant'Ambrogio station and, in the station at Sforza Policlinico, will connect via a tunnel to the Missori station on the M3 Line.

It will also be connected to the "passante" transit line at the Forlanini FS, Dateo and San Cristoforo stations and with the Linate airport. It will be a light, driverless railway and, similar to the M5 Line, will have a capacity of around 50,000 passengers every hour. Once completed, it will be 15,2 km long and have 21 stations.

Last March the boring machine reached Piazza Tricolore from the Forlanini district, and broke through the last diaphragm for the excavation of one of the two tunnels, bringing the progress of work on the tunnels to 38%.

The next step will take place in July, with the tunnelling machine setting off from San Cristoforo to bore the tunnel up to Parco Solari.

In the second half of 2019, the tunnelling machine used to bore out the central section will set off from Piazza Tricolore.

Completion of all boring operations, with the two digs meeting in what will become the station at Parco Solari, is scheduled for the second half of 2020 and work is scheduled to be completed in 2023.

Mapei Technical Services has followed the work on site right from the very start and has been in constant contact with the suppliers of the concrete and, after carrying out tests in the laboratories, recommended the most suitable admixtures for the concrete to meet the requirements of such a complex site, which is still ongoing.

Amongst the products supplied were the super-plasticisers DYNAMON SR 912 and DYNAMON SR 914, the viscosity modifying admixture VISCOSTAR 3K, MAPEAIR LA/P and the acrylic super-plasticisers DYNAMON XTEND W400 N, DYNAMON XTEND W300 N and DYNAMON XTEND W300 R.

TECHNICAL DATA

Client: M4 SpA

General contractors: Consorzio MM4 (Impregilo - Astaldi) and Consorzio Metro Blu Srl

Concrete suppliers: Holcim Italia, Monvil Beton, Monteverde Calcestruzzi, Colabeton, Betonrossi

Mapei coordinator: Andrea Siboni, Mapei SpA (Italy)



TEATRO LIRICO

EXTENSIVE RESTORATION COMPLETED ON THE HISTORICAL CITY CENTRE OPERA HOUSE

Built in 1776 according to a design by Piermarini, the Teatro Lirico opera house (which was lately named "Giorgio Gaber Theatre" after the famous Italian singer-songwriter) was closed for a considerable length of time.

Following several tenders, redevelopment work started in 2015.

Apart from opting for a conservative restoration to eliminate the previous work carried out over the years that had modified the architecture and original forms of the building, the project also included upgrading its plant systems and introducing safety features to comply with current norms and standards.

A difficult, complex site that was able to count on the professionalism of Mapei Technical Services which is carrying out a series of technical surveys of the site, followed by an in-depth analysis of the current problems of the site.

After performing exhaustive testing and sampling, the most suitable Mapei products and systems have been proposed.

All work has only been carried out after receiving approval from the client, the designers and the contractors and included the structural strengthening of certain parts of the building, the removal of asbestos and the restoration of

the decorative vaulted ceilings.

The opera house is part of the "Cantiere evento (Site Event)" initiative, an innovative experiment created by the Gianfranco Dioguardi Foundation along with the company Garibaldi, Milan City Council and A.A.M. to publicise this restoration work.

The aim of the initiative is to help offset the negative implications a building site can bring, turning it into an opportunity for the people of Milan to learn more about the technical and artistic side of this historical building.

TECHNICAL DATA

Client: Milan City Council - Councillorship for Public Works and Homes - Technical and Cultural Department

Project Manager: Massimiliano Papetti

Executive design for architectural works and works direction: Pasquale Francesco, Roberto Conta

Milan City Council Architecture, Fine Arts and Environment Office

General contractor: Impresa Garibaldi - Fragasso

Mapei coordinator: Davide Bandera, Mapei SpA (Italy)



MAPEI AT FU



ORISALONE



The photo in the top left corner is by Mirko Cecchi, the others are by Luca Casonato

WINNING SOLUTIONS FOR THE HOSPITALITY AND CONTRACT INDUSTRY IN CONJUNCTION WITH THE FURNITURE TRADE FAIR IN MILAN

The last edition of Fuorisalone, Milan's showcase for creativity, innovation and quality in the design sector, was held from the 17th to the 22nd of April. This is a set of events distributed in different areas of Milan on the same days when the Salone Internazionale del Mobile takes place, which is staged in Rho Fiera fairground. The Fuorisalone started spontaneously early in the 1980's and it is nowadays expanding into many related sectors. Every year, in April, Salone and Fuorisalone define the Milan Design Week, one of the most important events in the world for design. Fuorisalone is also an event Mapei is involved in every year in its own special way, working with architects, designers and furniture magazines to inform both the general public and people working in the industry about all the benefits of using its extensive range of products.

Mapei, which has always been both Milanese and international, decided to get involved in "The Secret Colours of Milan" and "Hotel Regeneration" events at this year's Fuorisalone. These two important events were aimed at emphasising the various facets of living and hospitality in the beautiful city of Milan. Alongside its product systems aimed at the hospitality industry and the selection of colours in its line of coating materials, Mapei also decided to showcase all its innovative materials for the contract industry. Despite adopting a very discreet approach, Mapei certainly caught the eye. In perfect 'Milan Style'.



We are on Instagram! Look out for "mapei_italia". Take a look at the pictures of Fuorisalone and get some ideas for your next project!



Mapei SpA
Materiali da costruzione

Scopri di più



"THE SECRET COLORS OF MILAN" IN THE GALLERIA MANZONI

Mapei joined Marie Claire Maison and the Studio Marco Piva to take part in "The Secret Colors of Milan" event. The exhibition comprised a lounge area and 8 settings, each one characterised by its own distinctive colour: red, pearl, bronze, green, silver, translucent, pure white, gold and black. 9 different "windows" as a way of presenting items of

furniture, floor and wall coverings, finishes, works of art and lighting solutions. The aim of the exhibition was to present visitors and local residents with contemporary interior design solutions and the sophistication and elegance of the several settings inspired by the city of Milan. In the role of "Color Partner" for this event, Mapei supplied various products used in the creation of the settings, such as DURSILITE water-based paint with low dirt pick-up and excellent washability for internal walls, MAPELUX

LUCIDA double-curing, high-strength, shiny metallic wax to decorate and protect surfaces, MAPEGLITTER metallic coloured glitter based on polyester, aluminium and epoxy resin, SILANCOLOR TONACHINO water-repellent, transparent silicone resin based plaster with high filling properties for internal and external use, MAPECOAT ACT 021 semi-gloss paint for interior walls, ideal for use in the food and beverages sector, and ULTRATOP LOFT trowellable cementitious pastes to create decorative floors. Mapei also proposes an extensive range of materials for the contract sector: from installation systems for seamless resin floors to coloured and protective finishes and coating products for internal and external use, from solutions for installing resilient and textile materials to waterproofing materials for bathrooms, terraces and swimming pools, from systems for acoustic and thermal insulation to products for installing wooden flooring and from materials for bonding ceramic and natural stone to certified systems to create surroundings for the food sector.



Mapei joined *Marie Claire Maison*, a monthly magazine of the Hearst Magazines Italia Group, and Studio Marco Piva to take part in "The Secret Colors of Milan" exhibition in the Galleria Manzoni. Photo by Luca Casonato.

“HOTEL REGENERATION” IN LAMBRATE DESIGN DISTRICT

In collaboration with the Simone Micheli Architect studio, from the 17th to the 22nd of April Mapei took part in "Hotel Regeneration", an initiative to present the solutions available for redeveloping structures aimed at the hospitality sector over a display area of more than 4,000 m² in Officina Ventura 14, in the Lambrate design district of Milan. This was the biggest agorà-event so far realized for the Milanese kermesse in the contract sector. An event full of great content and expressive value that was configured as a substantial place of dialogue and meeting between well-known personalities related to the hospitality sector and the public, with the intention to investigate the practical aesthetic aspects and business progressions of a sector in continuous development. "Hotel Regeneration" presented itself as a large exhibition space with the purpose of promoting experimentation and research. It aimed at the interaction between the public and the space, focusing on the story about the upgrading process of the contemporary hotel structure and its future existence, with a focus on encouraging innovation and technological advancement. The exhibition presented to the visitor numerous parts of hotel room personally designed by Simone Micheli to be experienced as works of art: three-dimensional spatial areas to live, created with the goal of showing the current and future trends in the hospitality sector, realized by important Italian and international industrial groups.

Mapei took part in "Hotel Regeneration" to present its solutions for creating surroundings which are aesthetically pleasing and, at the same time, meet the requirements of the client. Each setting highlighted a Mapei installation system for wall and floor coverings. Besides, amongst the series of events that took place within this exhibition, on the 17th of April, Mapei held a presentation of its solutions and installation systems, with a special focus on the materials available for installing LVT (Luxury Vinyl Tiles) in surroundings used for hospitality purposes.



© Juergen Eheim



© Juergen Eheim

HOTELLERIE.MAPEI.IT

For designers and those working in the hotel industry, Mapei can offer free advice, a dedicated brochure (with an image of the typical tag for a handle used for hotel rooms), as well as a new website, which was launched on the 16th of April, featuring a handy tool which you can use to immediately identify the most appropriate solutions for the various areas of use.



The responsibility of creation

A CHAT WITH THE ARCHITECT
SIMONE MICHELI

Simone Micheli was born in 1964 and, after graduating from the University of Florence, in 1990 he founded an architectural studio under his name and then, in 2003, the design company "Simone Micheli Architectural Hero". His projects range from architecture to interior design and from visual design to integrated forms of communication and, over the years, he has shown particular interest for the contract sector, as can be seen from the numerous luxury modern hotels and spa, wellness, beauty and fitness centres he has worked on. Mapei collaborated with Micheli on the B4 Boscolo hotel, on the construction of Suite 10 for the TownHouse Duomo hotel by Seven Stars (see Realtà Mapei International no. 51) in Milan and in the Hotel Regeneration event, described in the previous article.

Over the years you have received important international awards in the design and interior design sectors. Which project do you think represents you more than any other, the one that shows the real you?

Every project represents a part of my creative thought process that has been turned into something concrete in harmony with the specific context. Which is why I am proud of all my work: they are a reminder of my past and the fruit of a challenge I have been able to accept and overcome. What is more, they also represent the understanding I manage to create with whoever commissioned me for a project. I have breathed life into numerous projects from when I started until now and, when I look back at what I have achieved, even after a number of years I can still remember the reasons that conducted me to their creation. I also like to see how they have taken the spatial context to generate something new and this makes me understand their real strong points. So,

as far as I am concerned, no project really comes to an end; they are transformations that constantly provide me with new food for thought.

The themes of sustainability and the environment have become increasingly broached in the building industry; they are a requirement of clients and much appreciated by end users. How often is it important to think about – and then put into practice – sustainable solutions?

It's indispensable. Long periods of neglect towards the environment have caused untold damage and today the consequences are there for everyone to see. Designers and architects must take it upon themselves to be responsible for the effects their projects and designs have and examine every possible aspect very thoroughly. At the end of an object's natural life cycle there will always be something that remains and this also needs to be taken into consideration, to find possible solutions so that even waste can be transformed into a resource.

Do you think sustainability is a genuine mutation of the way we interpret our internal spaces or is it just a passing trend?

If it is taken as seriously as it should be then we are talking about a real mutation in both the way we conceive spaces and in our lifestyle and, as a result, in the design of experiences and services that consider the end user to be the focal point. This is a change that we really do need and, even though the road is still very long, at least mankind is now taking its first steps. The problem is that we are often superficial in the way we talk about sustainability, as if we don't really comprehend all the concepts involved and the different perspectives from which it is possible to approach it and make it more explicit. Sustainability means formulating analyses based each time on the specific context, not simply dictating strict rules that need to be blindly followed.



© Alessandro Cinque



IN THESE PAGES

Some pictures of Hotel Regeneration, the biggest agora-event so far realized for Fuorisalone in the contract sector (Photos: Jürgen Eheim).

The hotel sector is your main point of reference. What characteristics are required when you are designing a hotel?

Again, it is not really possible to give a definitive answer. There are many different types of structure in the hospitality sector and their design is a consequence of a client's specific requirements and the opportunities offered by a particular spatial context. Contemporary man, and his mutating needs, must always be the focal point. The objective of the structure is to satisfy these needs. It must be able to adapt to the dynamics of the current period, to the functions that tend to intertwine, and come up with personalised answers. Smart projects we could say, interactive projects that are more like a nerve centre of the dense network of communications that underpins both our true and virtual reality. Places that are intelligent in the way they attract and seduce, with proposals that are unexpected and that offer respite to the daily grind.



**WE ARE OFTEN SUPERFICIAL
IN THE WAY WE TALK
ABOUT SUSTAINABILITY,
AS IF WE DON'T REALLY
COMPREHEND ALL
THE CONCEPTS INVOLVED**

You have often worked abroad. What are the advantages and what are the drawbacks in foreign hotel design compared with Italy?

We can't necessarily say that these two worlds are always so far apart. Working abroad often gives us the chance to have more space to manoeuvre and experiment because, in Italy, sometimes there is a lack of courage in pushing the boundaries and our respect for history risks becoming a passive imitation of the past. The main difference, however, is in the spirit of the client, whatever their nationality. My best work, in fact, was only made possible once a perfect combination had been created between me and the intentions of those commissioning the work.

Let's talk about materials and finishes used in the hospitality sector. Can you tell us which your favourites are? Does a designer manage to leave his own mark on a project or, in the end, is it a case of "the client is always right"?

I use different materials and finishes, depending on the type of project I intend giving life to. I believe that thorough research and choosing very carefully which materials to use are a fundamental aspect of all good work; they are indispensable in formulating the message users perceive when they come into contact with the structure and with the sensations the structure is able to generate. As I said previously, only a combination of the requirements of the client and the ideas of the designer can lead to the creation of a structure that can be considered both successful and unique.



Many hotels – whether they are aimed at the business or tourist sector – offer their clients wellness and spa centres. In your opinion, since you have designed so many, what are the distinguishing features of such spaces: materials, lines, interior design or perhaps something else?

Attention to overall quality and extra care when fitting them out. There aren't any magic recipes I can reveal to you. When dealing with spaces dedicated to people and their wellbeing, we need to create places that excel in welcoming the clients so that they feel a sense of freedom and involvement at the same time. Safe spaces but which, at the same time, give them the urge to push themselves into action. It is important to use forms, lights, colours and surfaces intelligently, to give the human spirit a feeling of positivity, guidelines that remain imprinted on their minds and help lead them towards rebuilding their lost and fragmented personal identity caused by our frenetic way of life. An in-depth analysis beforehand and then painstaking execution of the work are the keys to opening the door to structures dedicated to welcoming people the moment they choose to lower their defences and dedicate a little time to themselves.



STUDYING EARTHQUAKES



MAPEI SPONSORS A DEMONSTRATION TO ILLUSTRATE HOW THE EARTHQUAKES AFFECT BUILDINGS, FURNISHINGS AND INFRASTRUCTURES

Whenever an earthquake strikes, people repeat the same comment: "It's not the earthquake that kills people but the things built by man." Starting from this simple observation, the Eucentre Foundation (European Centre for Training and Research in Earthquake Engineering) studies the effects of earthquakes on buildings, furnishings, plant systems and infrastructures to reduce the amount of damage they cause and, if possible, eliminate it. The Foundation has a number of ongoing research projects and provides training and services for the earthquake engineering sector and for the safety engineering sector in general.

Eucentre was present at the Fuorisalone exhibition in the Fabbbrica Del Vapore exhibition centre with its Mobilab, a big "laboratory on wheels".

Each day, from the 18th to the 22nd of April, three simulations of seismic activity were carried out to raise the awareness of citizens and manufacturers of structural elements and furnishings of the measures to reduce risk. A seismic table measuring 5 m by 2.5 m supporting a fully furnished room was "shaken" for around 30 seconds. Visitors could directly observe the effects of an earthquake as it actually happened and understand how the amount of damage can be reduced by adopting just a few simple countermeasures. According to Eucentre, earthquakes cannot be prevented but we can, and

must, act in such a way that we are able to limit the amount of damage and number of victims.

A position that finds Mapei in full agreement: in fact, the company was the sponsor of this fascinating initiative. For a number of years Mapei has also been working to reduce the risk of seismic activity, proposing several retrofitting systems for existing structures like:

- **MAPEI FRP SYSTEM**, a complete range of composites made from high strength fibres and polymeric resins specifically formulated for the static and seismic upgrading of structures made from reinforced concrete, steel, masonry and wood.
- **MAPEI FRG SYSTEM**, a complete range of composites in which the polymer matrix is replaced by an inorganic, Pozzolan mortar that ensures excellent compatibility with masonry substrates.
- **MAPEI HPC SYSTEM**, a system made of HPFRC (High Performance Fibre Reinforced Concrete) mortar formulated for the column jacketing and the strengthening of the upper side of the existing slabs.
- **MAPEWRAP EQ SYSTEM**, an innovative protection system which acts like an "air-bag" for internal and external secondary partition walls (e.g. buffer walls), and stops walls collapsing or tipping over during seismic activity.

BETWEEN REALITY AND ILLUSION

MOSAICO+ SOLUTIONS FOR THE WELLNESS SECTOR

Somewhere between reality and illusion, a space to immerse yourself without actually getting wet. For Mosaico+, a company of the Mapei Group, the Inhabits space of the Milan Design Village at Fuorisalone 2018 provided an ideal opportunity to recreate a swimming pool entirely covered with mosaics, where visitors were enchanted by the illusion of remaining completely dry in spite of being inside a space fully immersed in water. This feeling was created by reproducing the reflection and movement of water on the walls of the pool with a clever system of projectors and light effects.

The sides and bottom of the pool were covered with an evocative composition of 15 x 15 mm mosaic tesserae from the Concerto and Perle collections by Mosaico+, tailor-made for this particular space. The bottom of the pool had a large carpet with Mosaico+ "Art Nouveau" décor surrounded by a bright row of 15 x 15 mm golden tesserae of real 24 karat gold wavy finishing, belonging to the Doro collection: a precious composition that gave the impression of walking in a fluid and naturally elegant dimension.

The mosaics were installed with high quality cementitious

adhesives, such as AS100 mixed with AS LATEX, and joints were grouted with COLOREPOXY DESIGN, a range of epoxy grouts. The adhesives and grouts were produced in collaboration with the Mapei Group, with which Mosaico+ shares its expertise and technical-organisational experience.

A COMPREHENSIVE RANGE OF SOLUTIONS FOR THE WELLNESS SECTOR

Versatile, precious, luminous: thanks to its special properties in terms of strength and non-absorption, glass mosaic is the ideal material to cover surfaces in contact with water, such as in bathrooms, spas and swimming pools. The colour of the tesserae remains stable over the years and, when submerged by the water, the luminosity and chromatic effects of mosaics are exalted and give rooms an added touch of preciousness and beauty. Mosaic may also easily cover curved surfaces, softening all the architectural elements that are usually present in swimming pools and wet environments. The range of decorative proposals from Mosaico+ is divided into modular and single compositions that may be combined with an extensive range of plain colours, mixes and shades. There is an almost limitless range of different compositions available for small and large spaces for both the public and private sectors: thanks to the pixel technique developed by the experience of the Projects Division of Mosaico+, it is possible to create bespoke solutions.

MOSAICS AT 360°

Mosaico+ has chosen to investigate every possible way of using mosaics as a form of expression through its Made in Italy production system that combines innovative methods, the culture of design and the tradition for mosaics, and investments in the quality of materials, technology and all its design, organisational and production processes.

Mosaico+ offers mosaics in a number of different formats and in thicknesses of 2, 4, 6 and 8 mm. Innovative forms and choices of materials, along with the variety and size of the range available, characterise its extensive and transversal offer.

All the collections guarantee maximum versatility of use and, in a large number of cases, they have been designed to dialogue with each other and to create bespoke designs aimed at residential and commercial spaces. Mosaics express a new form of creative energy that is achieved through a well-organised and modular freedom in composition, in line with the philosophy of Mosaico+: to offer single materials, colours and forms and use their experience to guide the process of creating a made-to-measure product.





A NEW SPECIFICATION CENTER in Milan

**MAPEI WORLD:
A NETWORK
OF SPECIFICATION
CENTRES
IN LONDON, MILAN,
AND SOON IN PARIS**

To be even closer to designers, to their ideas and to their needs, in order to increase their knowledge and enhance their creativity. And, at the same time, provide a constant and 360° consultancy service to all the key players involved in building work such as general contractors, building companies and manufacturers of building materials (from ceramic tiles to textile materials, from wooden to resilient flooring, etc.).

To turn this ambition into something more

concrete and enable the slogan "Mapei: your partner in design" to become an entirely tangible reality, the Specification Centre in Milan was officially presented to architects on the 24th of May at Mapei headquarters in Viale Jenner.

After the Mapei Specification Centre in London, which has been operational since the 2nd of June 2015, and the one currently being built in Paris, the "Mapei World" project also encloses the new Specification Centre in Milan, which has



more engineering and design studios than any other city in the country. The Centre's aim is to strengthen the company's already solid bond with architects and the world of design by forming that special one-to-one relationship that has proven to be the best way of tackling any problem on site with composure and in complete safety.

A profitable relationship and a precursor of even more initiatives that Mapei is constructing day after day, such as the one consolidated over the years with the magazine *Marie Claire Maison Italia*.

An inspiring experience, with its crowning moment during the special event held at the Mapei Specification Centre in Milan last May, in the presence of special guests such as Cinzia Felicetti, Editor of *Marie Claire Maison Italia*, who underlined how colours, in both design and architecture, "often have emotional or psychological implications: they nourish our sensations, bring back memories, enhance precise frames of mind".

The architect Marco Piva was also present at the event and he reiterated the



importance of the design phase and how each and every project should be tackled from a global point of view, "from the structure to the final finishes, as if they were one". Which is precisely why it is so important to have places specifically dedicated to the analysis and selection of the most functional materials for each individual building project, such as those that Mapei has already put into practice in several cities in Italy (Lecce, Sassuolo and Rome) and abroad, as well as the one just inaugurated in Milan.

FUNCTIONAL DESIGNS WITH A HIGHLY CREATIVE CONTENT

The Mapei Specification Centre in Milan has been set up along well defined architectural lines so that, in this case too, designers and professionals from the building trade are the focal point. For Marco Manzoni - Mapei Marketing Project Manager - who designed the centre and supervised its implementation personally, "The objective was to recreate a setting that was as similar as possible to that of a design studio".



THE NEW SPACE HAS BEEN CREATED FOR PROFESSIONALS FROM THE WORLD OF BUILDING

"It is a highly professional setting and the aim of the minimalist furnishings is to eliminate distractions and improve concentration to help focus on the design being discussed", commented Manzoni. This highly functional space was obviously prepared using various Mapei products. The floor, for example, and one of the walls have been finished with ULTRATOP LOFT, a system used to coat the floors and walls to form seamless, innovative surfaces with a pronounced textured effect and to create unique, minimalist and contemporary surroundings.

The other walls, on the other hand, have been finished off with SILEXCOLOR TONACHINO plaster, which provides adequate protection for walls without altering their permeability, as well as giving surfaces a pleasant, attractive finish.

THERE WHERE CREATION COMMENCES

The new structure promises to be a centre of excellence for Mapei, providing practical, informative support throughout the entire specification process. To achieve all the above, it is important to be on hand right from the very start,

Mapei: your partner in design

An event was organized at the Mapei Specification Centre in Milan on the 24th of May in collaboration with the magazine *Marie Claire Maison Italia*.





when a design idea has just come to mind and the materials to create that idea are being chosen. This is the phase when the specifications are written, technical documents normally attached to a tender offer that define the technical conditions of the work to be carried out. To be on hand when a building specification is written means helping the designer during a highly delicate phase; to generate a list of the work phases and materials required to carry out a certain intervention, with reference to the approved executive design.

In the Mapei Specification Centre in Milan, the company's most qualified personnel for each sector of the building trade assist the designer during this delicate phase to help choose the most appropriate materials, as well as to tackle potential problems beforehand during the design phase.

Each of the Mapei product lines can be viewed through a series of progress slabs, textured samples and prestigious reference projects, along with videos to



illustrate installation procedures and a host of technical documents and literature, thereby providing architects, contractors and designers full assistance to help with the Mapei products to be included in the specification as accurately as possible.

A complete consultancy service whose objective is also to provide concrete assistance to designers, even recommending teams of workers and installers "certified" by Mapei for special or particular work phases, such as the laying of resin and cementitious floorings.

From a building structure in its entirety

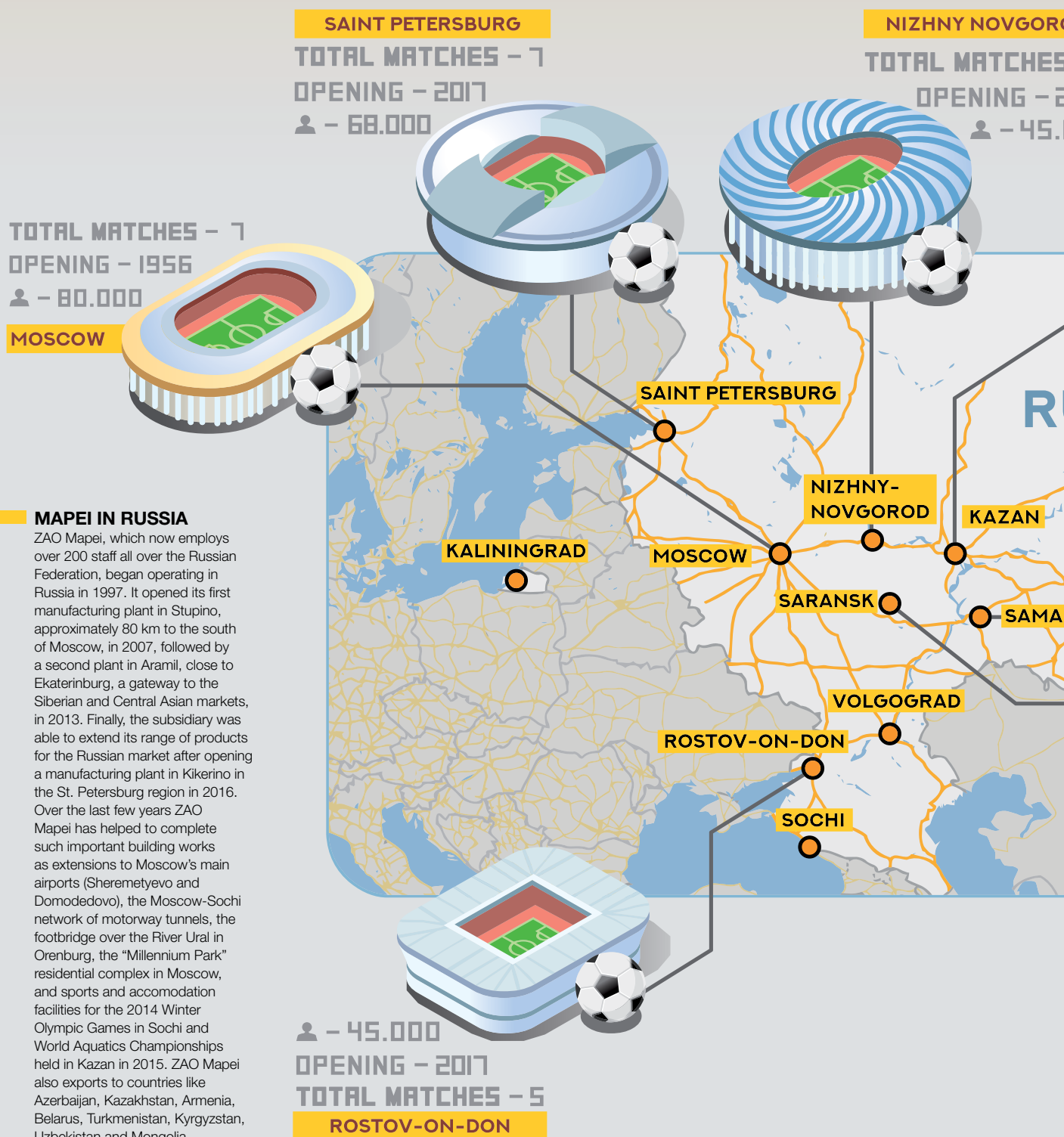
to interior design, many Mapei solutions remain visible, while many others are hidden from view once work has been completed. In the Mapei Specification Centre there is the possibility of revealing many "hidden secrets" so that every question or curiosity posed by designers may find an answer.

And also for an issue so important for Mapei, sustainability, this is just the right place for it to be developed to the full. In fact, it is the ideal context to explain correctly not only the specific characteristics of each product, but also their precise level of sustainability.

The Mapei Specification Centre provides practical, informative support throughout the entire specification process.



RUSSIA 2018: INNOVATION



ATION TAKES THE FIELD

MAPEI TECHNOLOGY
FOR 8 OF THE 12
STADIUMS HOSTING
THE MATCHES
OF THE 2018 FIFA
WORLD CUP



Wherever a sporting event offers so much excitement that it breaks down national borders and is shared on a global level, Mapei is there. And the Group is also there alongside the players, with research scientists from the Mapei Sport Centre, or as one of the main sponsors of the competition or as a supplier of products of excellence used to build the stadiums and arenas. And it is precisely in this latter role that Mapei is present at the 2018 FIFA World Cup held in Russia from the 14th of June until the 15th of July. 31 nations are taking part, as well as the host nation, the only team with an automatic qualification for the tournament. The matches are being played in 11 cities and 12 stadiums and the final is scheduled for the 15th of July at the Luzhniki Stadium in Moscow. The provisional list of candidate cities to host the 64 matches of the 2018 World Cup included 16 names, which had been whittled down to 11 once the final choice was made. The host cities are Moscow, St. Petersburg, Kaliningrad, Nizhny Novgorod, Kazan, Samara, Saransk, Volgograd, Rostov-on-Don, Sochi and Ekaterinburg. The matches in Moscow, the heart of the tournament, are played at two stadiums. The lowest capacity of the selected stadiums is 35,000 in Ekaterinburg, while the largest structure is the Luzhniki Stadium in Moscow. The average distance between the 12 stadiums hosting the matches is 600 km.

To organise the tournament, around 15 billion Euros have been invested (half of which from private investors) in work on the stadiums and infrastructures in and around the chosen cities. Some of the stadiums have been newly built while others have been completely renovated and modernised. In eight of the structures (Luzhniki Stadium, Samara Arena, Kazan Arena, the Mordovia Arena, Nizhny Novgorod Stadium, Rostov Arena, St. Petersburg Stadium and Ekaterinburg Arena) Mapei's high-performance products have been used with great success to help overcome delicate problems encountered on site and to speed up the work.

LUŽNIKI STADIUM

**TECHNICAL DATA****Period of construction:**

1956; rebuilt in 2014-2017

Year of the**intervention:** 2017**General contractor:**

FGUP Sport-Engineering

Design: Arena Design

Institute

Contractor: AO

Mosinzhproekt

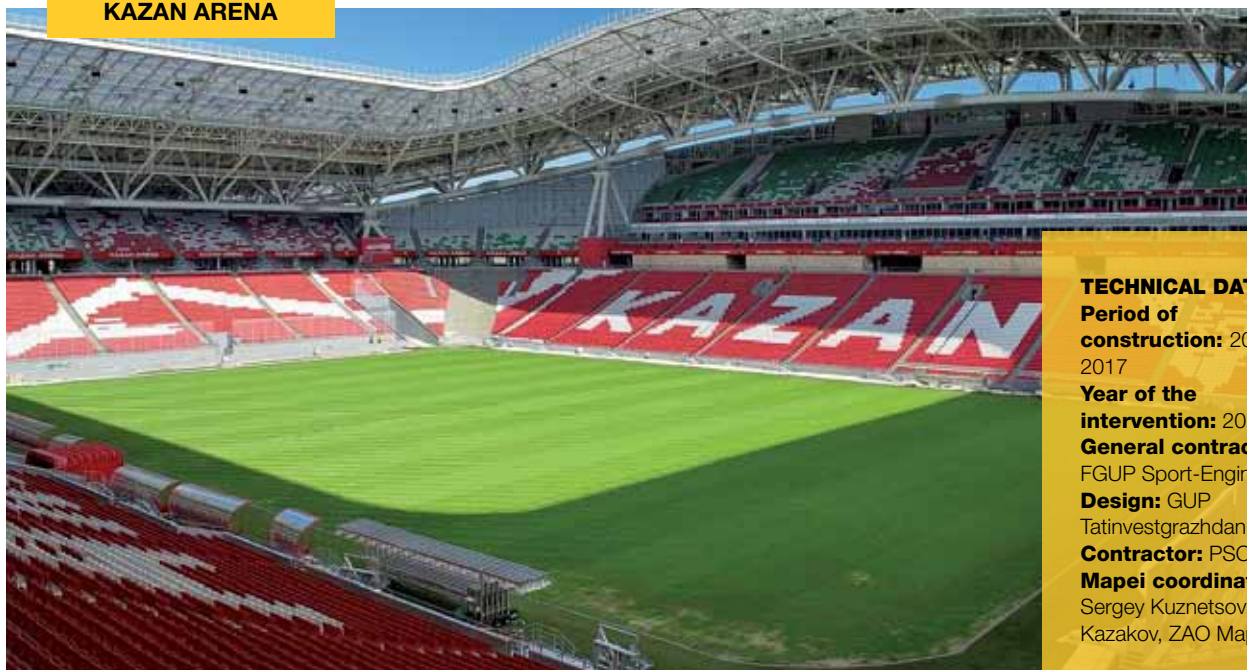
Mapei Coordinator:

Ulianov Ilya, ZAO Mapei

2017 saw completion of the Luzhnik National Stadium in Moscow, which was built for the first time in 1956 by the Soviet government. The original stadium was demolished in 2013 to leave space for the new Luzhnik Stadium, which was then given a complete makeover for the 2018 World Cup. Mapei supplied products to repair the concrete structures in the areas adjacent to the pitch, where safety moats to prevent fans reaching the playing field were built at the foot of the spectator stands. MAPEGROUT HI-FLOW mortar was used to repair the concrete in this area. ULTRAPLAN ECO 20

self-levelling, ultra quick-hardening smoothing compound (which is manufactured and distributed on the Russian market by ZAO Mapei) was used for the substrates in the pedestrian areas inside the stadium. KERACOLOR FF mortar was then used to grout the joints in the porcelain tile covering. ADESILEX P7 adhesive, which is distributed on the Russian market by ZAO Mapei, was used to bond ceramic tiles in several internal service areas (toilettes, showers, etc.). This stadium will host the opening and closing ceremonies of the World Cup, as well as the first match.

KAZAN ARENA

**TECHNICAL DATA****Period of****construction:** 2015-2017**Year of the****intervention:** 2015**General contractor:**

FGUP Sport-Engineering

Design: GUP

Tatinvestgrazhdan-proekt

Contractor: PSO Kazan**Mapei coordinators:**

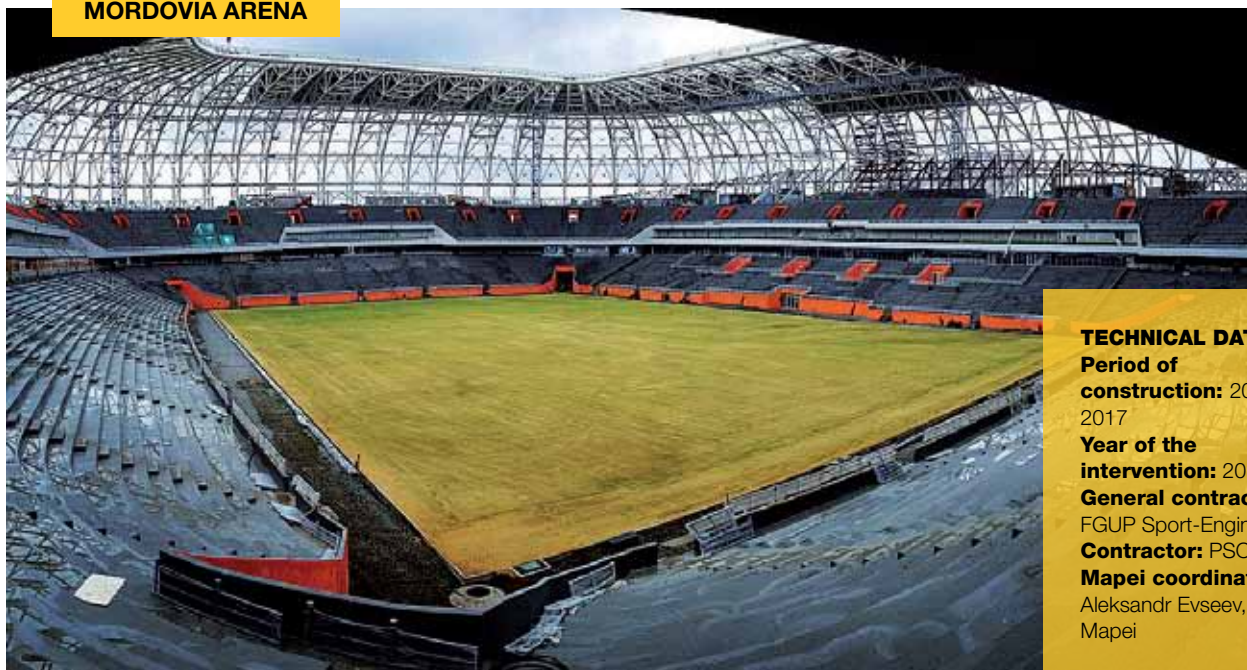
Sergey Kuznetsov, Igor

Kazakov, ZAO Mapei

The Kazan Arena was built in 2013, in the city of the same name in the Republic of Tatarstan, to host the home matches of Rubin Kazan's team and for the 2013 Universiade. The design of the stadium represents a water lily and blends in perfectly with the urban fabric of the city. The structure has a capacity of 45,000. The substrates were waterproofed and protected with MAPELASTIC two-component, flexible

cementitious mortar. To renovate the structure, the contractor used more than 5 tonnes of MAPEGROUT THIXOTROPIC fibre-reinforced, shrinkage-compensated mortar for repairing concrete, as well as MAPEGROUT HI-FLOW 10 ready-mixed mortar, which is manufactured and distributed on the Russian market by ZAO Mapei.

MORDOVIA ARENA



TECHNICAL DATA

Period of construction: 2010-2017
Year of the intervention: 2017
General contractor: FGUP Sport-Engineering
Contractor: PSO Kazan
Mapei coordinator: Aleksandr Evseev, ZAO Mapei

Construction work on the Mordovia Arena started in 2010 in Saransk and was completed in 2017, in time for the 2018 World Cup. Once the tournament is over, the Mordovia Arena will become the new home ground of the city's team, Mordovia, and its capacity will be reduced to 28,000 from its current 45,000, leaving space for other sports facilities. The stadium is shaped like a large bowl and is decorated in the city's colours (red, orange and white). The design includes many metal structures to

support high loads. This required the use of high-strength, shrinkage-compensated fluid mortars. To anchor the metal structures, the contractor used MAPEFILL and MAPEFILL 10 (the latter product is distributed on the Russian market by ZAO Mapei) mortars specifically designed for high precision anchoring of exposed structures, columns and joints in structures made from reinforced concrete. MAPEGROUT THIXOTROPIC fibre-reinforced, shrinkage-compensated mortar was also used in this complex.

NIZHNY NOVGOROD STADIUM



TECHNICAL DATA

Year of construction: 2018
Year of the intervention: 2017
General contractor and design: FGUP Sport-Engineering
Contractor: AO Stroy-transgaz
Mapei Coordinator: Aleksandr Evseev, ZAO Mapei

The Nizhny Novgorod Stadium underwent important renovation work which significantly changed its look and increased its capacity to 45,000. It will be one of the most used stadiums during the 2018 World Cup. The design and colours (white and blue) of its structure represent the two elements which are symbols of the Volga region: the water and the wind. Stringent specifications for the quality of the monolithic structures and a tight work schedule during the particularly rigid winter months required special

monitoring of the concrete production and the overall quality of the work. Rigorous testing was carried out to verify the resistance and strength of the concrete. Following these tests, the product chosen was MAPEGROUT THIXOTROPIC fibre-reinforced, compensated-shrinkage mortar, which was used to repair damaged concrete on both horizontal and vertical surfaces.

ROSTOV ARENA

**TECHNICAL DATA**

Period of construction: 2014-2018

Year of the intervention: 2017

Design: "INTEX"

General contractor: FGUP Sport-Engineering

Contractor: ZAO Krokus

Mapei coordinator: Sergey Zhukov, ZAO Mapei

The Arena in Rostov-on-Don, one of the main cities in southern Russia, has an oval structure with an undulating roof covering the spectator stands, leaving the pitch open. The overall stability of the structure is guaranteed by the combined action of vertical diaphragms, horizontal floor slabs and other flooring elements. Mapei's main contribution

in the construction of this structure was the supply of MAPEKLEY EXTRA adhesive, a product available on the Russian market. It was used to install ceramic tiles in specified areas of the structure and was chosen for its excellent adhesion and high resistance to water and freezing weather conditions, in order to comply with FIFA regulations.

SAMARA ARENA

**TECHNICAL DATA**

Period of construction: 2015-2017

Year of the intervention: 2015

Design: GUP SO

TerrNIIgrazhdanproekt

General Contractor: FGUP Sport-Engineering

Contractor: PSO Kazan

Mapei coordinator: Dmitry Shagin, Alexey Karinov, ZAO Mapei

Even though the Samara Arena is not the largest of the stadiums to host the 2018 World Cup, it is without a doubt one of the most original. The designers were inspired by the aerospace industry, which plays an important role in this city. The Samara Arena is a dome-shaped structure reaching a height of 60 m, with a hole in the centre which makes it look like a spaceship. Mapei supplied various products to repair concrete, such as MAPEGROUT THIXOTROPIC shrinkage-compensated, fibre-reinforced mortar

and MAPEGROUT FAST-SET R4, a class R4, rapid-hardening, fibre-reinforced, compensated-shrinkage mortar distributed on the Russian market by ZAO Mapei. Special attention was given to repair work on the cracks in the reinforced concrete structure, which was carried out using EPOJET epoxy resin. The substrates were waterproofed and protected with MAPELASTIC two-component, flexible cementitious mortar.

EKATERINBURG ARENA



TECHNICAL DATA

Year of construction:

1956

Period of renovation:

2015-2017

Year of the

intervention: 2017

General Contractor:

FGUP Sport-Engineering

Contractor: OAO

Sinara-Development

Mapei coordinator:

Alexey Divinsky, ZAO

Mapei

The Central Stadium, or Ekaterinburg Arena, is located in the city of Ekaterinburg. The renovation project included increasing its capacity from 27,000 to 45,000 and conserving the historic façade of the structure, which is an official Russian Cultural and Heritage Site as an example of a public sports facility in Soviet neoclassical style. Because of the conformation of the stadium, it was difficult to find a suitable solution to increase its capacity without demolishing and rebuilding the spectator stands or raising

the roof. It was decided, therefore, to construct external spectator stands behind the two goals, which will then be dismantled once the tournament is over. To strengthen the piles supporting the stadium's imposing roof, a particularly mechanically strong and resistant product was required. The ideal solution was MAPEGROUT THIXOTROPIC, a shrinkage-compensated mortar characterised by its high level of adhesion to concrete and its excellent resistance to water.

ST. PETERSBURG STADIUM



TECHNICAL DATA

Period of

construction: 2006-

2017

Period of the

intervention: 2014-

2016

General Contractor:

FGUP Sport-Engineering

Contractors:

Metrostroy, SC Mir

Mapei coordinator:

Denis Krutilin, ZAO Mapei

The St. Petersburg Stadium is the most avant-garde sports facility ever built in Russia and stands out for its complete lack of pillars inside the structure, which allows for a higher capacity and an excellent view of the pitch from every seat. MAPEGROUT 430 fine-grained, fibre-reinforced, normal-setting thixotropic mortar was used to repair the concrete structures, which were then smoothed over with MONOFINISH one-component, normal-setting cementitious mortar. Before installing the stone flooring in the toilettes

and shower cabins, the substrates were treated with PRIMER G synthetic resin primer in water dispersion. To form a perfectly flat surface, the substrates were then levelled with ULTRAPLAN and ULTRAPLAN ECO self-levelling compounds. Slabs of granite from the Urals were chosen for the floors and bonded with KERABOND T cementitious adhesive while joints were grouted with KERACOLOR FF and ULTRACOLOR PLUS mortars.

MAPEI KFT.

helping the building industry
in the present... and the future!



INFORMING YOUNG STUDENTS ABOUT SPECIALIST JOBS IN THE BUILDING INDUSTRY

Mapei has been operating in Hungary since 1st September 1991, when Mapei Kft., one of the Group's subsidiaries, was originally founded and devoted to manufacturing and distributing building materials on Hungarian soil. Thanks partly to its manufacturing plant in Sós-kút, over the years Mapei Kft. has expanded successfully into every realm: the number of staff employed has risen from 4 to 178; national sales exceeded 40 million Euros in 2017; its offices in Budaörs have been extended and the plant has also been enlarged to cover an area of approximately 7500 m², manufacturing over 62,000 tons of material-a-year (with further investment planned to double both the amount of area allocated for product storage and its production output by adding two production lines for dry-mix and liquid products); the subsidiary has won such prestigious awards as the 2015 "Master of Masters" for its success in the Hungarian building industry, "Best Workplace" in 2006 and 2015 for the high standard of its working environment, several Construma Product Awards for a range of innovative products, the 2016 Business Ethics Prize, and even a commendation for successful business awarded by the Hungarian Ministry of Economics in 2017. Further proof of Mapei Kft.'s success in Hungary are also the numerous projects for which it has supplied products and technical assistance, such as those for Aria Hotel, Palace Garden Bazaar, Moments Hotel and Symbol Café & Restaurant in Budapest, as well as Zala Springs Golf Resort



in Zalacsány, Hungaroring Motor Racing Circuit in Mogyoród and Abacus Wellness & Business Hotel in Herceghalom.

MAPEI KFT FOR SCHOOLS

The annual press conference was held on 27th March, when Mapei Kft. once again met with specialist press to inform them about its latest achievements and the various projects currently underway. This year the event took place in the prestigious setting of the Budapest Golf Academy and was attended by about thirty journalists and Luca Damia, Mapei Corporate Area Manager for Hungary, with attention focusing on a project to which the subsidiary is devoting plenty of time and effort: pro-

+27%

increase in turnover in 2016/2017

41 million euros

sales in 2017

178

staff

over 62,000

of products-a-year: manufacturing output
of the Sósút plant (including over 1100 tons
of liquid admixtures for concrete)

1,300

customers



PHOTOS 1 and 2. The Mapei Kft. manufacturing plant in Sósút in Northern Hungary.

PHOTO 3. On March the 27th, Bela Markovich, General Manager of Mapei Kft., and Luca Damia, Mapei Corporate Area Manager for Hungary, provided journalists with an overview of the Group's figures and Mapei Kft.'s results and described the latter's projects for schools.

PHOTO 4. The cover of the booklet published by Mapei Kft. to inform children at primary schools and kindergartens about professions in the building industry.

moting professions linked with the building industry in schools to attract more young people and solve the problem of the lack of specialist manpower in the building industry.

Mapei Kft. began by carrying out an informal survey among primary schools in the Sósút area in 2017, which showed that pupils at these institutes were not very familiar with trades connected with building. To compensate for this lack of knowledge, the Hungarian subsidiary published a small handbook on the subject and handed it out to pupils enrolled at Sósút primary school and a kindergarten in Érd, a small town near Sósút, last December. Then in October and November a number of representatives of Mapei Kft. gave presentations at

four schools in the area (in Budaörs, Sósút, Solymár and Zirc) outlining the potential and beauty of professions linked with the building industry to approximately 300 children.

The children's enthusiasm was contagious and even the adults got excited: various business partners of the subsidiary offered to help hand out the handbook; so, Mapei Kft. decided to get other schools and kindergartens involved in its project and there are already plans for a new publication in 2018, which will provide an overview of other professions linked with building. The press conference also provided the chance to mention all the relevant facts and figures to focus on the potential of employment in the building industry: Mapei Kft.'s turnover increased by 27% in 2017 with annual sales hitting almost 41 million Euros, reinforcing the positive trend over the previous years. The subsidiary puts this excellent result down to numerous factors: a steadily growing market, an intensive and well-coordinated marketing work and a business strategy focused on spreading knowledge and constantly helping professionals working in the industry. As part of this enterprise, Mapei Kft has set up a community of specialists/experts in the Hungarian building industry and has been providing support and professional training to 1000 members since 2016 to the present day.

HUNGARIAN PROJECTS

In Hungary Mapei is constantly working on the construction and renovation of all kinds of buildings ranging from museums, manufacturing plants, universities and hotels to restaurants, viaducts, stadiums, swimming pools, roads and housing facilities. Examples of works carried out using Mapei solutions over the last few years can be seen in these pages

SOLAR PANEL FACTORY CSORNA

5,000 m² of industrial resin floorings were laid right in the middle of the production line in a solar panels factory in Csorna, in North-Western Hungary. Mapei products were involved right from the preparation of the substrates: MAPEFIBRE ST 42 structural polymer fibres were used to improve the performance characteristics of the reinforced concrete surfaces.

The preparation of the substrate started by mechanically preparing the surfaces with a diamond grinding machine and subsequently burning-off the extremities with a scorching torch. Vacuum cleaning followed.

As the concrete surfaces had to be repaired prior to coating, MAPEFLOOR I 914 epoxy primer was mixed with ADDITIX PE thixotropising agent and the resulting paste was used for filling voids and discontinuities, until the surface reached a good planarity. The substrate was then treated with PRIMER SN mixed with quartz sand, and the same sand was also used for blinding the surface. The next day, after the hardening of the primer, the entire surface was sanded with a 40-cm sandpaper grinding wheel. After the vacuum cleaning treatment, the surface was finished with MAPEFLOOR I 300 SL mixed with MAPECOLOR PASTE coloring paste.

Ceramic tiles were also installed in this industrial building on 1000 m². PRIMER G and ULTRAPLAN ECO 20 were used for the substrate preparation, ADESILEX P9 for bonding tiles, KERACOLOF FF FLEX for grouting joints and MAPESIL AC for sealing expansion joints. ULTRAPLAN ECO 20 and KERACOLOR FF FLEX are manufactured and distributed in Hungary by Mapei Kft.

When installing textile floorings in the offices, the substrates were primed with PRIMER G and levelled with ULTRAPLAN ECO 20, before bonding the covering with ULTRABOND 333 solvent-free adhesive for vinyl and textile floors.

TECHNICAL DATA

Period of construction:

2015–2016

Period of the Mapei

Intervention: 2017

Contractor for resilient

floorings: Timkett LLC

Contractor for resin

flooring: Vasi Épker LLC

Mapei distributors: Vasi

Épker LLC, Ragtech Co.

Mapei coordinators: Gábor

Kékesi, László Hebling, Júlia

Fleisz, Mapei Kft. (Hungary)





CENTRAL EUROPEAN UNIVERSITY - BUDAPEST

The Central European University (CEU) occupied several buildings widely scattered throughout Budapest before a new campus was set up around the central compound in Nádor Street. The purpose of the investment was to create new facilities as well as to renovate the existing ones.

When installing wooden floorings in lecture halls and community rooms, the substrates were either treated with PRIMER MF or covered with oriented strand boards before bonding the coverings with ULTRABOND ECO S955 1K. In the offices, substrates were treated with TRIBLOCK P and levelled with ULTRAPLAN ECO 20, which is manufactured and distributed on the Hungarian market by Mapei Kft. ULTRABOND 333 was used for bonding the textile floors.

In the corridors surfaces were primed with TRIBLOCK P or ECO PRIM PU 1K TURBO to avoid problems due to high residual humidity. Levelling was carried out with ULTRAPLAN ECO 20. Linoleum was bonded with ULTRABOND ECO 520.

Ceramic tiles were installed in bathrooms, corridors, staircases and service rooms. In the lavatories and washrooms, wall and floor substrates were first primed with PRIMER G and levelled with ULTRAPLAN ECO 20. Waterproofing operations required the use of MAPELASTIC AQUADEFENSE and MAPELASTIC membranes (the latter was reinforced with MAPENET 150 mesh) and MAPEBAND and MAPEBAND PE 120 tapes. The small-sized ceramic tiles were bonded with ADESILEX P9 and joints were grouted with KERACOLOR FF FLEX, which is manufactured and distributed on the Hungarian market by Mapei Kft. MAPESIL AC was used for sealing expansion joints.

On escape staircases, corridors, and service rooms, the same products were used as in the bathrooms for installing 30x30 cm ceramic tiles on walls and floors. Besides, PLANITOP 400 was used for repairing and levelling the substrates on stairs.



TECHNICAL DATA

Period of construction: 2015–2016

Client: CEU

Design: M-Teampannon Architects and Engineer Office

Main contractor: Market-Strabag LLC

Contractor for ceramic installation: Ratskó-Bau LLC

Contractor for resilient floorings: Dósa Padló LLC

Mapei distributors: Ratskó-Bau LLC, Dósa Padló LLC

Mapei coordinator: Gergely Garay, Mapei Kft. (Hungary)

DUNA ARENA BUDAPEST

The Duna Arena aquatics complex in Budapest, that hosted the 2017 World Aquatics Championships, encloses a 50 m swimming pool, a diving pool, a short-course training pool, a warm-up pool and a spectacular Jacuzzi pool with surfaces covered with 1×1 cm mosaics.

When installing ceramic tiles in the swimming pools, the substrates were first smoothed with PLANITOP FAST 330. Whenever needed, LATEX PLUS was added to PLANITOP FAST 330 to improve its bonding strength. The bottom surface of the competition pool was levelled with ADESILEX P4 and primed with PRIMER 3296. Waterproofing operations were carried out with MAPELASTIC and MAPELASTIC AQUADEFENSE membranes reinforced with MAPENET 150 glass fibre mesh and MAPEBAND tape for the joints. Ceramic coverings were bonded with KERAFLEX S1, which is manufactured and distributed on the Hungarian market by Mapei Kft., and grouted with KERAPOXY CQ epoxy grout.

The impressive mosaics coverings of the Jacuzzi pool were designed and completed based on the original plans made by three students of the Moholy-Nagy University of Art and Design in Budapest.

Mosaic elements were custom-made, sorted and mounted on foil according to the design pattern, before being forwarded to the place of installation. Four installers worked full-time on their installation for three months. The Mapei materials used in the process were PRIMER 3296, PLANITOP FAST 330, EPORIP, TOPCEM PRONTO, and MAPEGROUT 430 for the substrates; MAPELASTIC and MAPEBAND for waterproofing; ADESILEX P10 + ISOLASTIC for bonding the covering.

As for the diving platform, the black 1×1 cm mosaic tiles were installed with KERAFLEX and joints were grouted with ULTRACOLOR PLUS.

TECHNICAL DATA

Period of construction: 2015-2017

Period of the Mapei intervention: 2017

Client: Hungarian Government

Main contractor: Market Building LLC

Contractors for ceramic installation: Ratskó-Bau LLC, Dominó LLC, Stukkó LLC

Mapei distributor: Ratskó-Bau LLC

Mapei coordinator: Gergely Garay, Mapei Kft. (Hungary)





INTERACTIVE AVIATION MUSEUM - SZOLNOK

RepTár: this is the name of a new aviation museum opened in 2016 in Szolnok, Central Hungary. A truly interactive facility, it houses plenty of objects to be touched and experienced by visitors and makes available tablets and a smartphone app showing the history of aeronautics. In addition to displays, an adventure park, a 3D cinema and several flight simulators make every visit an unforgettable event.

The museum is hosted in four buildings, three of which are historical structures and were lately restored by using Mapei products.

Works involved the little building standing in the courtyard of the museum which is a wonderful example of 19th century Hungarian railway station architecture. The old plaster was removed from both the outside and inside walls of the building before MAPESTOP silane and siloxane-based silicone micro-emulsion was injected at floor level to form a chemical barrier against capillary rising damp in the masonry.

After the application of a dehumidifying plaster, exterior walls were primed with SILANCOLOR PRIMER and painted with SILANCOLOR PAINT.

The 100 m long building that hosted the old Szolnok train depot is now used as warehouse. Structures at the basement level in the warehouse needed to be protected against both positive and negative hydrostatic pressure. The larger gaps in the old walls were first filled with MAPE-ANTIQUE ALLETTAMENTO salt-resistant masonry mortar. All surfaces were then strengthened with PLANITOP HDM MAXI high ductility, fibre-reinforced mortar. The walls were subsequently primed with PRIMER 3296 before applying MAPELASTIC FOUNDATION flexible cementitious waterproofing mortar, reinforced with MAPENET 150 glass fibre mesh.



TECHNICAL DATA

Client: Szolnok City Council

Period of construction: 2015–2016

Year of the Mapei intervention: 2016

Design: Niké 26 LLC

Main contractor: Bau Komplex LLC

Contractors for waterproofing: Túri és Társa LLC, Böjtös Bau LLC

Contractor for wall coatings: Böjtös Bau LLC

Mapei distributors: Bathó LLC, Újház LLC, Raab Karcher

Mapei coordinator: Róbert Nagy, Mapei Kft. (Hungary)



The 2018-2019 season at Accademia Nazionale di Santa Cecilia in Rome

NEXT SEASON'S SCHEDULE OF THE ACADEMY, WHICH MAPEI WILL CONTINUE TO SUPPORT AS A FOUNDING MEMBER, HAS BEEN OFFICIALLY PRESENTED



A Founding Member since 2016, Mapei will again be supporting the Accademia Nazionale di Santa Cecilia (Santa Cecilia National Academy) for the 2018-2019 music season.

Art and music of the highest calibre have always been part of Mapei's DNA with its close ties to the world of culture, partly due to numerous projects for modernising and renovating locations hosting top-quality music and art. They include La Scala Theatre in Milan, Petruzzelli Theatre in Bari, San Carlo Theatre in Naples, and the Auditorium Parco della Musica in Rome, home of Accademia Nazionale di Santa Cecilia, one of the world's oldest musical institutions.

Officially founded in 1585, down the centuries it has gradually



MAPEI IS ONCE AGAIN SUPPORTING ACCADEMIA DI SANTA CECILIA

Mapei is a **Founding Member** of **Accademia Nazionale di Santa Cecilia**. It has always been part of Mapei's corporate culture and philosophy to focus attention on art. This credo is rooted way back in the past and comes from the firm belief that "work cannot be separated from art and passion".

mapei.com



LEFT. The press conference was attended by the Mayor of Rome, Virginia Raggi, Antonio Pappano, the President of the Lazio Region, Nicola Zingaretti, and Michele dall'Ongaro.

transformed from being an organization of "local" musicians into an internationally famous Symphonic Concert organization and modern Academy. Its 100 academic members are some of the leading exponents in the realms of music and culture and its symphony Chorus and Orchestra are amongst the most highly rated on the international scene. It also provides musical education of the high standard and has a rich historical heritage reflecting its history stretching back over the centuries.

TIES THAT HAVE GROWN CLOSER YEAR BY YEAR

Mapei's working partnership with the Academy began back in 2009 when it supported the *Lord of the Rings* project in Rome and a concert held in Turin as part of the MITO Festival. These bonds have gradually been strengthened down the years through the company's backing for the concert featuring Claudio Abbado and Martha Argerich in 2011, the concert to celebrate the 60th anniversary of Daniel Barenboim's debut held in 2012, Santa Cecilia Festival in December 2014 and, lastly, its involvement as a partner in the special *Aida* Concert conducted by Antonio Pappano in 2015.

In 2017 Mapei helped the Academy organise concerts conducted by Daniele Gatti and Antonio Pappano as part of

» THE MAESTRO, MR PAPPANO: "THE NEW SEASON IS EXTREMELY VARIED AND COLOURFUL"



ONCE AGAIN THIS YEAR, MAPEI SUPPORTED THE CONCERT CONDUCTED BY DANIELE GATTI ON 1ST FEBRUARY



Mapei's 80th anniversary celebrations.

This year Mapei was the Sole Partner for a concert conducted by Daniele Gatti on 1st February and provided further backing in partnership with a Mapei Group's subsidiary, Vinavil, which is also one of the Academy's Patrons. On 10th May last year Mapei organised an event in conjunction with a concert conducted by Antonio Pappano, which included a performance of Mahler's 9th *Symphony*. It provided the chance for company customers and friends to meet together and chat with the artists and Maestro Pappano during a special gala dinner held after the concert in the Auditorium's Risonanze space.

THE NEXT MUSICAL SEASON

Accademia Nazionale di Santa Cecilia's 2018-2019 season was officially presented the day before this concert. "For the thirteenth time in a row and the fourth under my presidency, the Academy has managed to balance its books and even made a small profit we used to pay for the buffet", so Michele dall'Ongaro joked, the Academy's President-Superintendent, who presented the full schedule of events at a press

conference attended by the President of the Lazio Region, Nicola Zingaretti, and the Mayor of Rome, Virginia Raggi.

The forthcoming season will be extremely long and include lots of symphony and chamber music concerts to be held at the Parco della Musica, now a key location for hosting events in Rome, as well as a number of projects for young people organised in conjunction with various institutions.

An extensive schedule that will begin on 12th October with Antonio Pappano taking the stage to direct the Santa Cecilia Orchestra and Chorus in a performance of Leonard Bernstein's *West Side Story*.

There is plenty of modern music, in addition to Bernstein and George Gershwin, a new composition by Ivan Fedele, a tribute to Goffredo Petrassi entitled *Noche Oscura*.

Dall'Ongaro went on to explain that: "John Adams will be conducting at Santa Cecilia his own great *The Gospel According to the Other Mary* for the first time in his life; an absolute first for this highly acclaimed composer, who will be coming to perform this little gem for us, a coproduction with the Romaeuropa Festival that will certainly attract plenty of





Mapei invited lots of VIP guests to attend an exclusive event held in conjunction with the concert conducted by Daniele Gatti on 1st February.



interest”.

The symphony season will also see John Eliot Gardiner taking the Santa Cecilia stage for the first time, as well as the return of Kirill Petrenko, the conductor chosen to lead the Berlin Philharmonic Orchestra in a performance of Beethoven's 9th *Symphony*; Gustavo Dudamel will close the season.

“It is too long for us to present the entire schedule; let's just say it is an extremely extensive and colourful project...”, so Antonio Pappano commented in relation to the forthcoming season. Finally, as a special surprise, dall'Ongaro presented Antonio Pappano with a Harry Potter wand as a good luck gift. “It is the baddie's white-coloured wand, but it is still magical - so the President noted - and you can use it to conduct Berlioz's *Grande Messe des Morts*, which will open the 2019-2020 season (celebrating the 150th anniversary of the great

French composer's death). A gigantic musical composition played by a vast array of musicians including as many as 12 kettledrums. It really will take a magician to conduct it, dear Tony”.

The musical director concluded by noting that the great Symphony Orchestra will be making a lengthy tour of Asia, stopping off in Hong Kong, Shanghai, and Taipei before completing its tour in Russia: “This will really help the Orchestra develop, they will get the chance to perfect a repertoire they will be playing numerous times throughout the season, also getting the chance to perform live on stage: they will be forced to be good. It will be a learning process and also a real challenge”.

These are the types of challenges Mapei really enjoys: those in which professionalism mixes with passion and a love of art.



These photos show pictures taken during the gala evening organised on 10th May by Mapei in conjunction with the concert conducted by Antonio Pappano.



Europe and Africa: the future is closely entwined

ECONOMIC AND CIVIL SOLIDARITY TO TACKLE THE AFRICAN DEVELOPMENT WITH AN EYE OUT FOR CHINA



Alberto Quadrio Curzio, Emeritus Professor of Political Economics at the Cattolica University of Milan and President of the Accademia Nazionale dei Lincei.

Is the European Union interested in Africa development? There are lots of answers to this question, some of them reasonable and others not. The EU should be interested in Africa for (at least) four reasons: solidarity-humanitarianism; the need to control migration; economic rationality; political necessity. These reasons are not mutually conflicting as I have often pointed out in the articles I have written for the Italian economics newspaper *Il Sole 24 Ore* over the years. A good place to start is demographic growth in Africa, which, although slowing down, will see the population rise from 1.25 billion at the present time to 2.5 billion by 2050 or, in other words, five times the (ageing) population of Europe.

At the same time Europe's appeal is increasing, attracting 500,000 immigrants annually. Not an enormous figure, bearing in mind it is only 0.1% of the EU's population; but big enough to create lots of political-institutional and socio-economic problems.

It is obvious that if the aforementioned state of affairs continues, it will only increase Africa's misery, destabilising it even more in the form of many different types of conflicts and even higher migratory rates resulting in a xenophobic backlash in Europe. This really is a dangerous situation.

So, it is time to ask questions and attempt to come up with solutions.

DOES EUROPE (THE EUROPEAN UNION AND ITS MEMBER STATES) SHOW SOLIDARITY?

The answer is yes, since in 2016 UE was the world's biggest providers of aid for developing countries, contributing 70.5 billion Euros equal to 60% of all aid. This is indeed a huge figure, but it is only small per capita, since it corresponds to just 56 Euro-a-year per person, if all the aid had gone to people in Africa which did not happen. So, the aids should be focused on Africa with careful attentions to the fields of investments. The overall figure is, of course, reduced due to the fact that aid is shared among all developing nations. For us, "exporting solidarity" ought to work along two lines: economic aid for the purposes of building infrastructure, boosting industrialisation and promoting business enterprises; civil aid in support of education, health, demographics rationality, gender parity and security. These processes of economic and civil solidarity should bring in the long run democracy to countries that have never experienced it.

DOES EUROPE REALISE THAT AFRICA SHOULD BE ONE OF ITS PRIORITIES?

In his 2017 report on the state of the European Union, Mr Juncker emphasised the role of the EU-Africa Trust Fund, which has funds of 2.7 billion Euros. This is a weak perspective. Germany seems to have realised this is the case and has been promoting the "Compact with Africa" (which was on the agenda of the G-20 summit held in Hamburg in 2017), a platform which is substantially the same as the European External Investment Plan, only the "Compact with

>> In 2016 UE was the world's biggest provider of aid for developing nations, with 70.5 billion Euros (60% of all aid)



➤ **A good place to start is democratic growth in Africa, which, although slowing down, will see the population rise from 1.25 billion at the present time to 2.5 billion by 2050**

Africa” seems to focus more on German economic interests, in the same way that France seems to protect certain (in some respects exclusive) control over the 14 African countries using the CFA franc. The Europe-Africa issue seems to be fragmented among European nations, weakening the unified solidarity

WHAT KIND OF PLAN NEEDS TO BE IMPLEMENTED?

There are lots of proposals and we feel it is worth mentioning the “Migrations Compact” that the Italian government put forward in spring 2016. Italy proposed an agreement with the African nations from which most migrants come. The Compact is based on an “exchange”, which would provide major support for social, productive and infrastructural investment projects to be identified in cooperation with the home nations of immigrants, which, in turn, would pledge to control the flows of potential migrants.

The proposal is to issue EU-Africa bonds in partnership with the European Investment Bank and other international financial institutes to finance these projects and manage the flow of immigrants,

also redirecting action taken outside of the EU. The idea was for Europe to provide extra financial and practical aid in exchange for definite pledges on the part of migrant nations, such as more effective border control, the reduction of migrant flows, cooperation in repatriation/readmission operations, action against human trafficking, legal/logistical/financial/infrastructural aid (also on their home soil) to help manage flows, carefully distinguishing between asylum seekers and economic migrants.

DEVELOPMENT BANKS

All this will inevitably be sneered at as utopian dreaming. We do not think this is the case since there have already been instances of accelerated growth (although rather chaotic in several cases) in densely populated Asian nations. International forums (including G20s) have identified infrastructural investment as a crucial issue. For example, there was a “2016 Global Infrastructural Forum” promoted by the World Bank and multilateral development banks as part of the IMF and World Bank’s “Spring meeting”, whose main aims included

reducing both tangible and intangible infrastructural deficiencies in developing nations. And even before then the Addis Ababa agenda was drawn up with 193 nations agreeing to implement multilateral cooperation measures for infrastructural investment getting the private sector heavily involved. The IMF-World Bank Forum was attended by all the most important multilateral development banks: African Development Bank; Asian Development Bank; Asian Infrastructure Investment Bank; European Bank for Reconstruction and Development; European Investment Bank; Inter-American Development Bank; Islamic Development Bank; New Development Bank; World Bank Group. This does not appear to have been followed up by the devising of a financial-infrastructural strategy for Africa.

CONCLUDING THOUGHTS ON EUROPE-CHINA-AFRICA.

It will be claimed that Europe could not develop any such strategy since it struggles to even manage its own internal investments. That is indeed true, and it is also the reason why Europe is such a cause for concern and why we must all work together to strengthen it, perhaps by examining the strategy adopted by China, which is the leading institutional investor in Africa, and not for keeping down immigration. More specifically, it is hard to forget that in 2015 Xi Jinping, the President of People’s Republic of China, announced at the Forum on China-Africa Cooperation that 60 billion dollars would be invested in 10 projects to boost growth in Africa. These projects are going ahead and are not China’s only major enterprises in Africa.

Business culture for Africa

LETIZIA MORATTI, THE FOUNDER AND PRESIDENT OF THE E4IMPACT FOUNDATION, EXPLAINS THE PROJECT'S AIMS AND GOALS



A businesswoman in finance and telecommunications, Letizia Brichetto Arnaboldi Moratti was the first woman to be the head of RAI Italian State Broadcasting Company (1994-1996). She was the Italian Minister of Education, University and Scientific Research from 2001 to 2006. In May 2006 she was elected Mayor of Milan and it was during her term in office that the city was selected to host Expo 2015. The Italian government appointed her to be its Special Commissioner for this historic event. Since 2012 she has been President of the Ethics Committee of the Guarantors, Microfinance National Institution and San Patrignano Foundation ONLUS projects. She is member of the Italian Advisory Board – Social Impact Investment Taskforce established by the G8. She is member of the International Board of the Movement for the Positive Economy of Jacques Attali and is in charge of the Movement for Italy. She has been President of the E4Impact Foundation since she set it up in 2015.

When and how did you get the idea for E4Impact?

The E4Impact project was set up in 2010 by Altis (Graduate School of Business and Society of Università Cattolica di Milano) to support business projects aimed at helping Africa develop through a major working partnership with African universities focused on educating a new generation of socially-driven business people. I first heard about this project in spring 2015 and with the backing of a number of businesses we created the E4Impact Foundation, which, in addition to the Università Cattolica, now involves a number of leading Italian businesses, including Mapei, Salini-Impregilo, Bracco, ENI and Intesa Sanpaolo.

E4Impact has grown considerably thanks to the experience gained out in the field. The project currently involves 7 African countries but is planned to be expanded to a total of 15 by 2020, ultimately aiming to train over 500 new business people every year, who will, in turn, create thousands of jobs.



**WE AIM TO TRAIN
OVER 500 NEW
BUSINESS PEOPLE
EVERY YEAR TO
CREATE THOUSANDS
OF JOBS**

Africa is a big continent with a youthful population and lots of raw materials, but it is “poor” in expertise. What projects is the Foundation working on and which African nations does it work in?

As I have said, the Foundation's purpose is to try and sow the seeds of “business” in as many African nations as possible to enable these communities to grow and develop.

So far E4Impact has trained over 650 young business people on courses it holds in Kenya, Uganda, Ivory Coast, Sierra Leone, Ghana, Senegal and Ethiopia. 33% of these people - i.e. one third of the total number - already had their own business, while the remaining 67% were keen to set one up.

73% of the people who took part now have their own business and it is interesting to note that 100% of those who were already running a company have seen their turnover and income increase.

60% of the others have now set up their own new business venture, while almost all the remaining 40% have made progress in their careers in the places where they work. 3500 jobs have been created by business people trained by E4Impact.

E4Impact has recently set up a business accelerator in Nairobi in partnership with the Italian Agency for Development Cooperation,

which will further boost development and growth in partnerships with Italian companies interested in promoting positive social impact.

Expo was a great chance for the city of Milan to develop. Are you happy with the way it turned out or do you think the event could have been organised differently? What kind of legacy has it left for the city now that it is over?

Personally speaking, Expo 2015 was my flagship project when I was in charge of the city of Milan and I am particularly proud of it, because when Milan won the bid to host the event back in

» **EXPO 2015 WAS MY FLAGSHIP PROJECT WHEN I WAS IN CHARGE OF THE CITY OF MILAN**

2008, it was already clear that when everybody in Italy pulls together as a nation it can do wonderful things.

Universities, Research Centres, Banks and Trade Unions all worked together on the project in close partnership with national and local institutions, showing the kind of ability to dialogue and interact that should be replicated in all projects, not just those of this scale.

Moreover, I think that the Expo was a dream that has resulted in the entire city showing a real desire to excel and boost its image and reputation, thanks also to the help of a number of enlightened business people, like Giorgio Squinzi, who backed the project through the Fondazione Amici di Expo organisation. Perhaps my only regret is not having seen all the international cooperation projects initially envisaged actually carried out.

Did the Expo also provide the opportunity to draw attention to faraway countries that are often forgotten, such as certain African nations?

Yes, it certainly did, particularly through the cooperation projects. It provided the chance to help hit those Millennium Development Goals, which have later been transformed into Sustainable Development Goals.

Africa was a long way off from hitting these targets, particularly in the fields of education and health, so we set up various projects to help African nations develop the skills and expertise required to achieve these goals.

Milan has a new skyline and renewed determination to succeed, and that is partly thanks to your work as the city Mayor. Nevertheless, big cities will inevitably face some tough challenges in the future. Can these future challenges be taken on without anybody losing out?

I think that has to be the case. Milan has huge potential and accounts for 10% of the Italian GDP and has twice the innovation rate compared to the national average. Milan's welfare system is also at the cutting edge and the very first social bank and bank for immigrants were set up in this city. Milan is a city of social inclusion, culture and innovation, and it must set the benchmark for the rest of the country, a striking example of economic development and growth that leaves nobody behind.

In your book "Milano tra storia, realtà e sogno" (Milan: its history, reality and dreams) you talk about a great dream that all cities ought to have. What is Milan's dream at the moment?

I would like our city to become a sort of Silicon Valley focused on issues connected with quality of life and sustainability. I am thinking about a contemporary art museum that will allow Milan to project itself into the future, as befits a city with this kind of potential. And I would also like Milan to have its own Central Park, a place where local people can congregate that is also a major tourist attraction for the city.





Winning projects for Africa's future

E4IMPACT, A FOUNDATION SET UP TO HELP AFRICA DEVELOP IN A SUSTAINABLE WAY, IS CONTINUING ITS WORK WITH MAPEI'S SUPPORT

Launched in 2010 by ALTIS (Graduate School of Business and Society of the Università Cattolica del Sacro Cuore in Milan), E4Impact is an association supporting the sustainable growth of emerging economies by providing training for business people that are attentive to the social and environmental impact.

After becoming a Foundation in 2015, thanks to the backing of Securfin, Mapei, Salini-Impregilo, Università Cattolica and Always Africa Association, the Foundation offers a Global MBA In Impact Entrepreneurship working in partnership with Università Cattolica and a local university from the host country. This is a 12-16-month executive program providing guidance for business people and aspiring entrepreneurs to help them launch and develop their own business.

The first MBA was set under way in Kenya in 2010. Since then E4Impact has extended its programme to include Ghana, Sierra Leone, Uganda, Ivory Coast, Senegal and Ethiopia. The programme will also become available in Rwanda in 2018 making a total of eight African Nations.

PROJECTS LATELY SET UNDER WAY

E4Impact is gradually extending its product portfolio, so it is worth mentioning the following projects set under way in 2017:

- The first edition of the "Food, Fashion and Design: Creative Businesses in Italy and Africa" summer school was launched in Italy in 2017 in partnership with ALTIS and the Centre for the Study of Fashion and Cultural Production (Modacult). The project was organised to help people affected by the African diaspora to set up companies (both in Italy and in their home nations), creating a bridge for products, ideas and knowledge spanning between two different worlds. The second edition is scheduled for 2018.
- With the financial backing of the Italian Agency for Development Cooperation and the Italian multinational oil and gas

company ENI, a business accelerator was set up in 2018 in Nairobi with a very original profile: to focus on sectors in which Italy excels (farm-food, fashion, design, and green industry).

- A series of events and "Executive Forums" involving members of the government, ambassadors and representatives from the business world in various African nations were set under way in 2018 to facilitate relations with Italian businesses. So far this has involved both Sudan (whose delegation was headed by the Minister of Foreign Affairs, the Right Honourable Ghandour Ibrahim Ahmed) and Zimbabwe (whose most important guests were the President of the Confederation of Zimbabwe Industry, Sifelani Jabangwe, and the former Vice-President of the African Development Bank and CEO of Infrastructure Development Bank of Zimbabwe, Thomas Zondo Sakala).

MORE PROJECTS AND MORE EXPERTISE

The Foundation has the following operations planned for the near future:

- It will be launching the first edition of the "Business Networking Week in Italy" during the latter half of 2018 to support business people with great potential. Some of the best African business people who were involved in the Global MBA in Impact Entrepreneurship will take part in this special week of events in Italy. They will get the chance to meet possible partners, potential clients and important Italian investors.
- The MBA, which until now has been organised in one city in each country (usually the capital), is planned to be extended on a regional basis. Starting with Kenya, the idea is to encompass other important cities, thereby increasing its impact on the nation's economy.
- the Master's course, which will last for a year or longer, will

662

business people
have already
received proper
training

33%

the percentage of
businesswomen

3,500

jobs created
in the region

40

African teachers
have already
received proper
training

20

African university
managers have
received proper
training

be backed up by a shorter “Certificate” program aimed at those new African business people, who do not have the qualifications, time and/or resources to attend the MBA courses.

SUPPORT FOR DEVELOPING ITALIAN BUSINESSES IN AFRICA

As well as its main mission (to develop a new generation of African business people working with local Universities), the Foundation has set a new goal: to support the development of Italian businesses in Africa.

The Foundation has devised a range of customised services to meet the needs of Italian companies, both small and medium-size businesses (which do not have the financial resources, people and knowledge of markets to work independently in Africa) and big companies.

“First-step Africa”, a low-cost and low-risk means of exploring new African markets and the opportunities they offer, is a perfect example of this project. The idea is to set up a partnership between an Italian company and a local business person/professional, who, while studying on E4Impact’s MBA course, will develop a business project chosen by the said company and might also set up their own business in the region in question. Perfectly in tune with Mapei’s business philosophy, E4Impact’s project is clearly based on the theory that business is a fundamental factor in economic and social development, provided it is carried out along the lines of sustainability. That is why the Foundation aims to create and is committed to developing a win-win project straddling two separate continents: a project that is a winning deal for Africa, creating jobs, innovating and introducing new technology, and also for Italy, because it opens up new and vast realms of operating for the itsù own businesses.

➤ **E4IMPACT’S
MISSION:
TO DEVELOP
A NEW
GENERATION
OF AFRICAN
BUSINESS
PEOPLE BY
WORKING
WITH LOCAL
UNIVERSITIES**

TRAINING AND PERFORMANCE: an international perspective

8TH MAPEI SPORT RESEARCH CENTRE CONFERENCE



The 8th Mapei Sport Research Centre conference was held on 26th May at the Malpensa Fiere Conference Centre in Busto Arsizio (Northern Italy). The event was extremely well attended and featured high-level scientific talks and guests of international standing. After the Director of Mapei Sport Research Centre, Claudio Pecci, Mapei Group's Operational Marketing and Communication Director, Adriana Spazzoli, and the President of the Varese Chamber of Commerce, Fabio Lunghi, officially welcomed everybody to the conference, leading coaches, doctors and athletes from the world of top-flight sport discussed the subject of "Training and performance: an international perspective".

As well as over 300 students and sports technicians, the event was also attended by politicians, such as the member of the European Parliament Lara Comi, business people of the calibre like Ernesto Colnago, and athletes who have worn

Mapei's glorious team colours, such as Daniele Nardello and Dario Nicoletti.

The large audience got the chance to listen to the views of several sports experts on a range of subjects. Alan McCall from Scotland, a consultant to Arsenal Football Club in London, talked about injury prevention in football; Andrea Azzalin, Head of sport science and strength conditioning at Nantes Football Club, who for years was a member of the technical staff of Claudio Ranieri, discussed planning and monitoring training in various European leagues; Matteo Azzolini, a sports technician at Mapei Sports Research Centre, looked at the relationships between pedal asymmetries in cycling and strength asymmetry; the Australian Nathan Townsend from Aspetar Orthopaedic and Sports Medicine Hospital in Doha (Qatar) analysed the application of "work-balance modelling" for monitoring and training loads prescription in cycling.





© Fabio Castellanza - Ritrattista di Istanti

THE 7TH “ALDO SASSI” RESEARCH FELLOWSHIP FOR GRADUATES IN SPORT SCIENCES

After a speech by the member of the European Parliament Lara Comi, who, after announcing that the European Union is allocating 80 billion Euros for research and innovation, pointed out that “a centre of excellence in the field of scientific research applied to sport like Mapei Sport has all the necessary requisites for being awarded European funds”, the audience was told all the details about the “Aldo Sassi” research fellowships by Amilcare Collina from Mapei and Paola Vago from Università Cattolica del Sacro Cuore in Milan.

Launched by Mapei - in the field of “exercise physiology/sport sciences”- in partnership with the Varese Chamber of Commerce, the research project focuses on “Relationship between training loads and physical performance in football”. The methodological guidelines

» **THE EVENT WAS ATTENDED BY OVER 300 STUDENTS, AMATEURS SPORTS PEOPLE, TECHNICIANS, BUSINESS PEOPLE, AND POLITICIANS**

underscoring it were carefully outlined by Andrea Bosio, Head of Mapei Sport's scientific research department. The grant worth 10,000 Euros, named after the professor who led the Mapei Sport centre from 1996-2010, will be awarded to a recent graduate in sport sciences, whose curriculum and interview are judged to be the most suitable for carrying out the research project in accordance with the guidelines set in the competition announcement available at

www.mapeisport.it.

The high standard of winners of this grant was illustrated by the talk given by Luca Cattaneo, winner of the sixth “Aldo Sassi” research fellowship organised last year by Mapei in partnership with Giuseppina Mai Foundation. His research work into the “Acute effect of training with blood flow restriction in football and cycling” captivated the audience. For the time being this training method is only used for specifically increasing strength, i.e. for weightlifting sessions in a gym or rehabilitation after an injury. The study has attempted to assess the possibility of reducing training loads with less risk of overload. The research is certainly a step forward towards assessing how this approach can be safely used by cyclists. In the case of cycling, it is vital to understand whether the method could be incorporated with other methods in a carefully-structured training plan.

TRAINING METHODS, TRADITIONS AND CULTURES

The conference drew to a close with a roundtable on the subject of "Training methods, traditions and cultures are different in every country: which is the winning model?" that was also attended by the CEO of the Mapei Group, Giorgio Squinzi, together with leading sportpeople who make use of Mapei Sport's services.

They included the great cycling champion, Alberto Contador, one of only six riders in history to win all three grand cycling tours, the Giro d'Italia, Tour of France and Vuelta a España (the number rose to 7 the day after the conference following Chris Froome's victory in the Giro d'Italia); Ivan Basso, who won the Giro d'Italia in 2006 and 2010; the captain of Sassuolo, Francesco Magnanelli, who led the team in its incredible rise from the Italian C2 to the Serie A, even qualifying for the Europa League in 2016; the head coach of Palacanestro Reggiana basketball team for the last eight years, Massimiliano Menetti, who, after some wonderful achievements with his team on a national level, managed to reach the prestigious semi-final of the EuroCup this season; the promising young cyclist, Matteo Moschetti, one of the season's most successful riders representing Polartec Kometa who will be competing at the very highest level next season wearing Trek Segafredo's colours and the Head of the human performance lab at Mapei Sport, Ermanno Rampinini, who is consultant for high-level Italian and European football

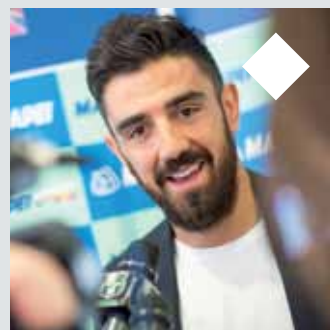
GIORGIO SQUINZI: "ITALIAN SPORT IS AT THE VERY CUTTING EDGE"

teams, basketball teams and national alpine skiing teams.

Everybody taking part in the roundtable agreed on one thing: that you have to work hard using cutting-edge scientific training methods to achieve the very best results. Methods like those studied on a day-to-day basis and successfully implemented by the Mapei Sport Research Centre. But all that is not enough unless you also have those underlying human qualities that allow an athlete to keep on wanting to improve in their own sport and every other aspect of life.

When questioned by the sports journalist Marina Presello, who chaired the roundtable, Giorgio Squinzi stated that "Italian sport is at the very cutting edge." He was referring to both football and cycling: "Italian football managers have won everything all over Europe and in cycling, too, they have developed a school of thought that began here in Italy".

"And - so Giorgio Squinzi went on to say - there are athletes like, for example, Contador and Basso, who had unbelievable qualities and were able to achieve even greater results drawing on all this expertise". "This 'Italian' perspective is vitally important and has set the benchmark for so many sports: we need to make this very clear", so Mapei's CEO concluded to a loud round of applause.



ABOVE. The roundtable was attended by Giorgio Squinzi, Ivan Basso, Alberto Contador, Francesco Magnanelli and Massimiliano Menetti.



GIORGIO SQUINZI

is awarded a Diploma for Sporting Merit by the Master's degree SBS

MAPEI IS REWARDED FOR ITS COMMITMENT TO THE WORLD OF SPORT

The 13th edition of the Master's degree in Sport Business Strategies (SBS), first established in 2005 through a joint venture between Verde Sport, Università Ca' Foscari Venezia and Ca' Foscari Challenge School, was hosted in the striking setting of the Italian National Olympic Committee's (CONI) Chamber of Ceremonies on 6th June: 38 students graduated and are now ready to enter the Italian and international sports industry.

They did so by giving an emotional welcome to Giorgio Squinzi, the guest of honour, who - together with the Olympic ski champion Sofia Goggia - was awarded a Diploma for Sporting Merit by SBS for their contribution and success in the world of sport.

The reasons why this prize was awarded lie way back in the past, because Mapei has always been committed to the world of sport and sports facilities: a passion that began with cycling - handed down by the company's original founder, Rodolfo Squinzi - and went on to embrace football and other sports (basketball, volleyball, golf, and many others).

"I am truly honoured to receive this Diploma - so Mapei's CEO announced - I got my passion for sport from my father, the founder of our Group and a cyclist as a young man, and it was only natural that sport should be lived and bre-

thed in our home. And it was equally natural for me to translate this passion into something that has significant social repercussions: I am, of course, talking about Sassuolo Calcio, a way of giving something back to an area that has given so much to Mapei over the decades".

SPORT IN HIS HEART

The prize awarded to Giorgio Squinzi provides the chance to point out just how much sport really is part of Mapei's DNA.

The Mapei Group owned a world-class professional cycling team from 1993 to the end of the 2002 season, which won a total of 654 races, including 4 Road World Cycling Championships, 4 individual World Cups, 1 Giro d'Italia and 1 Vuelta a España, 5 Team World Cups, and lots of great international classics.

Subsequently, Mapei has supported youth teams and has been the UCI Main Event Sponsor for the Road World Cycling Championships for over 10 years.

After an initial period of sponsorship from 1988 to 1991, Mapei began sponsoring Sassuolo football team again in 2002 and in just 10 years Sassuolo managed to rise up from the Italian Serie C to qualify for the Europa League. As well as the football team, there is also Mapei Stadium in Reggio Emilia (Central Italy). After



From left on: Giovanni Malagò, President of CONI, Giorgio Squinzi and Christian Benetton, Vice President of Verde Sport.

undergoing redevelopment work and improvements to reach the standards requested by the Serie A League and UEFA, it now hosts some of the most important international football competitions.

Mapei also promotes proper sporting culture and ethics through the Mapei Sports Research Centre for research that offers highly qualified support for achieving top-class sporting performance and for helping anybody interested to improve their physical efficiency. It was Giorgio Squinzi who first commissioned the centre in 1996 in perfect sporting-ethical harmony with its co-founder Aldo Sassi, to promote the right ethical approach for Mapei Professional Cycling Team, and over the years Mapei Sport has gradually widened its horizons to embrace other sports as well cycling.

Last but not least, Mapei is also involved in the realm of sports facilities and is now considered to be the main technical partner for coming up with the best solutions for installing any kind of sports surface: from the preparation of substrates to the application of playing surfaces, always paying special attention to comfort, durability, appearance and safety. Intense and authentic passions underscoring a desire to keep on achieving new goals. Widely acknowledged (and often award-winning) passions that pulsate through the veins of both Giorgio Squinzi and the whole of Mapei.



Group photo at the awarding of the Master's degree in Sports Business Strategies (SBS).



SASSUOLO

A GRANDSTAND FINISH TO THE SEASON

ELEVENTH PLACE IN THE LEAGUE CHAMPIONSHIP IS A COMMENDABLE RESULT

Everybody was on their feet to applaud Sassuolo. The team sponsored by Mapei finished eleventh in its fifth season in the Italian Serie A. Leaving aside the exceptional 2015-16 season when the team finished sixth and qualified for the Europa League, coming eleventh in 2017-18 is Sassuolo's best position in the top league. It is worth noting that Sassuolo was next to the relegation zone after the first eleven games; the club then brought in Giuseppe Iachini to take over from Cristian Bucchi as team manager and the fightback began. Sassuolo was actually top of the bottom half of the table during the second half of the season. But even under new manager, the team went through some tricky moments due to injuries and a number of missed penalties, nevertheless it finished the season in

great shape. The outstanding Sassuolo player was Politano, who scored 10 goals (his personal record) and was the team's leading marksman. Along with some other young Sassuolo players, he also got selected for the Italian national team. Dell'Orco, Rogério, Cassata and other youngsters also deserve praise for their performances this season.

After the draw at home against Spal (the away team took the lead through Antenucci before Babacar equalised), it was the away game against Udinese (29th match of the season) that really gave the team a boost after winning 2-1. "Sasol" (as the team is called) took the lead through an own goal by Ali Adnan in the 41st minute before Fofana equalised for Udinese in the 44th minute. The youngster Sensi then scored the winning goal in the 29th minute of the second half.

The following week Iachini's boys took on Napoli at Mapei stadium with plenty of momentum: the match ended 1-1 with Politano scoring for the home team and Callejón equalising for Napoli, almost at the end of regular time.

The good run continued against A.C. Milan at San Siro stadium with Sassuolo playing with two strikers. A.C. Milan forced the black-and-greens to "park the bus" in defence for long periods of the match. "We had to make a number of changes to our team – so Iachini noted - because of injuries and for other reasons, which is partly why we decided to play defensively". Nevertheless, it was Sassuolo that eventually took the lead on the break with Politano scoring in the 75th minute. Mapei's team was on the verge of winning at San Siro, but then Kalinic scored an outstanding goal just four minutes before the final whistle. "At the end of the match we only had eight players who could run – so Iachini pointed out - because three of them were carrying minor injuries, but we almost won anyway".

This result gave the team plenty of confidence and despite a 2-2 draw against Benevento at Mapei Stadium, the team spirit was still good.

Playing away at Bentegodi Stadium on the 23rd day of the season, Sassuolo got its sporting revenge against Verona,

THE LEAGUE TABLE FOR THE 2017/2018 SEASON

Juve	95	Sassuolo	43
Napoli	91	Genoa	41
Roma	77	Chievo	40
Inter Milan	72	Udinese	40
Lazio	72	Bologna	39
A.C. Milan	64	Cagliari	39
Atalanta	60	Spal	38
Fiorentina	57	Crotone	35
Torino	54	Verona	25
Sampdoria	54	Benevento	21



ABOVE. Sassuolo's Rogério Oliveira da Silva dribbles around the Roma striker Edin Džeko.

OPPOSITE PAGE. Politano in action against A.C. Milan.

winning one-nil thanks to a goal by Lemos. The team then went on to beat Fiorentina by the same score at Mapei Stadium with Politano again scoring the winning goal.

Crotone's fighting spirit interrupted Sassuolo's winning streak: the home team won 4-1 at Scida Stadium. But then a 1-0 win against Sampdoria (with Politano scoring again in the 23rd minute) in Reggio Emilia on 6th May meant that Sassuolo was mathematically safe from relegation.

SAN SIRO MASTERSTROKE

Was there a danger of the team relaxing? No. Sassuolo's second to last game of the season was against a highly motivated Inter Milan at San Siro stadium: the home team was on course to qualify for the Champions League. Driven on by almost 70,000 fans, Inter

Milan attacked hard but Sassuolo certainly was not going to give up without a fight. Politano scored from a freekick in the 25th minute with the ball sneaking beneath Inter's defensive wall. Then a counter-attack in the 27th minute of the second half saw the ball come to Berardi, who scored a world-class goal. The team managed by Spalletti did not give up and Rafinha pulled a goal back in the 35th minute. After that Acerbi and the rest of the defence managed to hold off Inter as it desperately tried to get an equaliser. Sassuolo had won for the third year running against Inter Milan at San Siro stadium. Sassuolo then played a steady game against Roma in Reggio Emilia in the last game of the season but ended up losing one-nil.

Nevertheless, the team got a standing ovation from its fans at the end of the season.



CROWDS: SASSUOLO HAS RECORD GATES AGAINST INTER AND JUVE

66,876 fans watched Sassuolo's historic win against Inter Milan at Meazza Stadium (also called "San Siro stadium") in Milan on Saturday, 12th May 2018. This was the biggest crowd ever to watch Sassuolo play since the team owned by Mapei began playing in Serie A. The biggest crowd for a Sassuolo home game during the 2017-18 season was against Juventus on 17th September (fourth day of the season). Mapei Stadium was sold out that day with 21,584 fans watching the match. The second biggest gate at Reggio Emilia was for the game against Inter Milan (23rd December, eighteenth game of the season) with 18,767 fans crowding into the ground. The third biggest gate was for the game against Napoli (31st March, 30th game of the season) with 16,904 fans filling Mapei stadium; the next highest gates were for Sassuolo-A.C. Milan (12th day of the season, 5th November) with 12,683 fans and Sassuolo-Roma with a crowd of 12,589 for the 38th and final game of the season (20th May). Mapei Stadium had only been completely sold out (21,584 fans) for three Sassuolo matches in previous seasons in Serie A: against Inter Milan in 2013-14 and against Juventus in both the 2014-15 and 2016-17 seasons.

LEFT Domenico Berardi getting to grips with D'Ambrosio and Skriniar from Inter Milan.

CARNEVALI: “Sassuolo ready for a fresh start”

BEGINNING THE NEW SEASON WITH AN
ATTACKING MENTALITY, SOME HIGHLY MOTIVATED
NEW PLAYERS AND A NEW TEAM MANAGER



Giovanni Carnevali, Sassuolo's President and Managing Director.

Sassuolo will begin the 2018-19 season without Giuseppe Iachini: he is no longer the team's manager. “After talks between Sassuolo Calcio's management staff and the team manager, Giuseppe Iachini – so Giovanni Carnevali, Sassuolo's President and Managing Director, told us - we realised that it was time for us to part ways. Our club would like to express its most sincere thanks to Mr Iachini, who joined us at a very tricky time. Beppe did a wonderful job and gave the players the self-belief they needed to achieve some great results. We wish Mr Iachini lots of success in the rest of his career”.

It will not be easy to get Sassuolo up into the top half of the Italian Serie A. “We realise - so Carnevali went on to say - that changing our team manager for somebody who is more offensive-minded, open-minded and willing to work with young players could be risky: the 2018-

19 season will be a fresh start for Sassuolo”. The Managing Director turned his thoughts back to the season that has just ended. “Our most thrilling matches - so Giovanni noted - were the games we won against Inter Milan”. Many people believe that Sassuolo always gives 110% when it takes on Inter Milan but that its players seem to be less motivated against other teams. Carnevali does not agree: “As a matter of principle and respect for everybody, Sassuolo always tries to give 100% against every team it faces. Sometimes it just is not possible to give absolutely everything in certain matches due to the team's general fitness at that time or injuries, etc.”.

Sassuolo had a full house for its home matches at the Mapei Stadium against Juventus and Inter Milan. “We have a wonderful stadium that has received plenty of praise from UEFA and, despite

going through some tricky periods, our team performed admirably during the second part of the season. We always try to do our best and are always looking for new ways of drawing in bigger crowds. Nevertheless, in certain matches last season, when things were not going very well, our gates were sometimes lower than expected: the city of Sassuolo and surrounding area need to follow us and support us more.

I realise that Sassuolo is not a big city, but I also think lots of people have not yet realised that we are in the Italian Serie A, that we sometimes manage to beat great teams and that some of our players have even played for the Italian national team”.

TRANSFER NEWS

The transfer market is already in full swing and will continue until 19th August. “These are two hectic months for us and we are really busy every day. We need to decide whether to take back Scamacca, Trotta, Ricci and other good young players we loaned out to other clubs or whether it would be more advisable to let them gain experience playing for other teams. We have decided to keep on both our goalkeepers, Consigli and Pegolo”.

Of course, lots of the big teams would like to get their hands on Sassuolo's best players, those who have already played for Italy. “We always negotiate very carefully. - so Mr Carnevali guaranteed us - As regards buying players, we are not interested in signing players who are not committed to our club or who are just looking to showcase themselves. The players who come here must be ready to give their heart and soul to make an impact with our team. We want to be back at the top of the league”.



Alfred Duncan during Sassuolo's 2-1 win against Inter Milan on 12th May.



DE ZERBI: “Entusiasm, balance and consistency”

SASSUOLO'S NEW MANAGER HAS BEEN
COACHING IN THE ITALIAN SERIE A SINCE 2016



Roberto De Zerbi, Sassuolo's new team manager, Giorgio Squinzi, CEO of the Mapei Group, and Giovanni Carnevali, President and Managing Director of Sassuolo.

Sassuolo has opted for Roberto De Zerbi, aged 39: he has been appointed the new team manager. He was the manager of Benevento in the Italian Serie A from October 2017 until May this year, and he helped the team climb up the league table. When he took over the team, Benevento had no points and got relegated into the Italian second division. But then from December onwards Benevento had a wonderful run of performances. Roberto began his playing career with A.C. Milan's youth team and stayed at the club for six years. But A.C. Milan never gave him the chance to play in the top flight. De Zerbi certainly got his sporting 'revenge' when Benevento beat A.C. Milan 1-0 at Meazza Stadium on 21st April. "That was Benevento's most important win in its first season in the Italian Serie A" – so he noted. "It was a very special evening bearing in mind the time I spent

6-6-1979

Roberto De Zerbi's date of birth. Of all the team managers in the Italian Serie A in the 2018-19 season, only Velazquez (Udinese), who was born in 1981, is younger than De Zerbi.

4

The number of team managers in charge of Sassuolo in the Italian Serie A before De Zerbi: Eusebio Di Francesco, Alberto Malesani, Cristian Bucchi, Beppe Iachini.

26-8-2007

The date when De Zerbi made his debut in the Italian Serie A playing for Napoli. The team from the Campania region lost 2-0 at home to Cagliari.

at A.C. Milan. Milan's home games. Before the start of the A.C. Milan-Benevento match, I stood inside Meazza Stadium and thought back to when my father used to take me there to be a ball boy. And then I ended up winning the match and being applauded by everybody. It was an indescribable moment". As a professional footballer, he played for lots of teams, including Napoli (where he made his debut in the Serie A), Brescia and CFR Cluj.

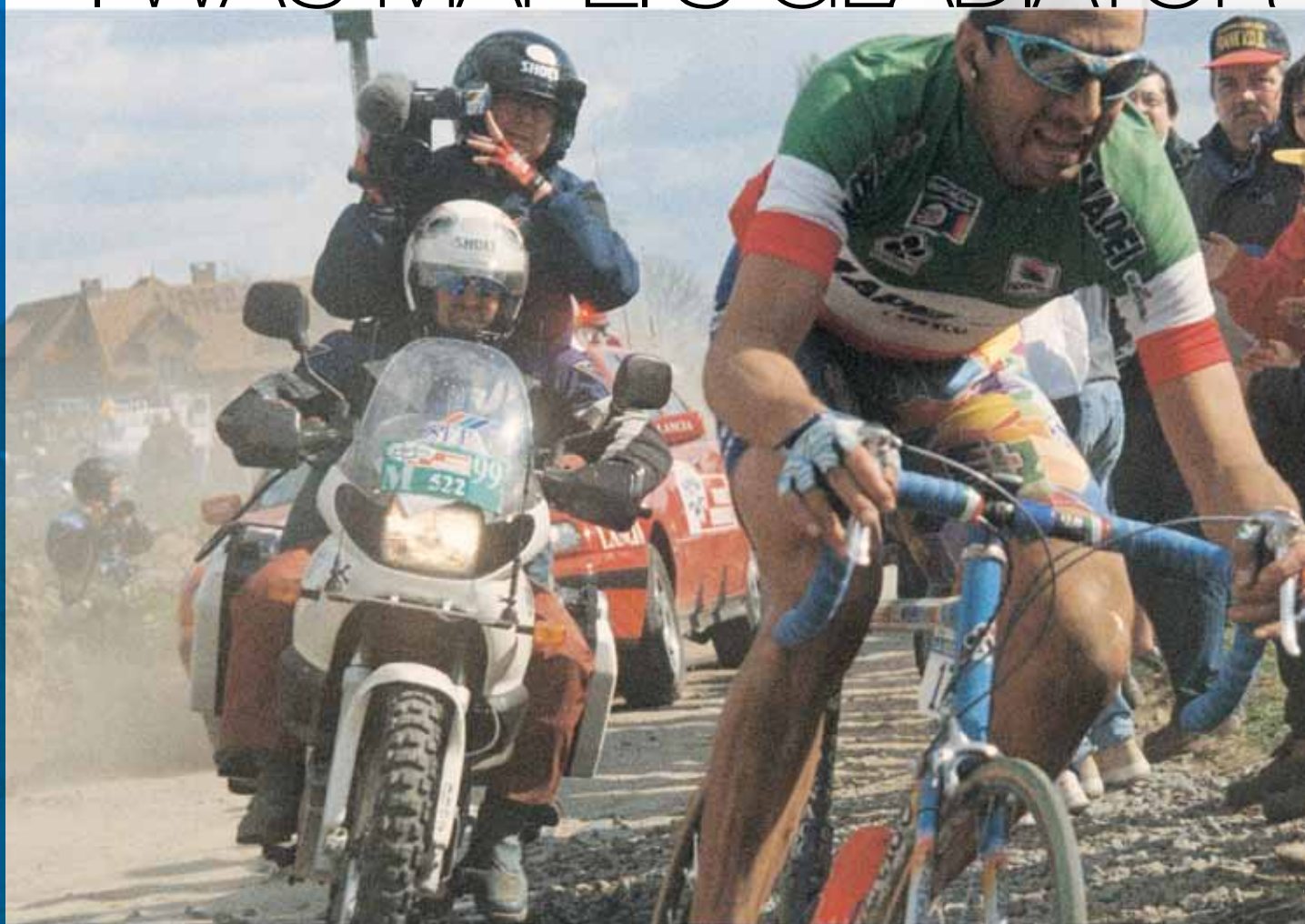
"One of my first team managers was Pasquale Marino, who coached me for four years and taught me to be offensive-minded. Nobody else has really influenced me, but I always try to get my teams play the kind of football I believe in". Lots of people have labelled De Zerbi as "attacking-minded". "To tell the truth - so he told us - I like my teams to play balanced football. I don't want my front line to be more important than the defence". Back in 2016 Roberto coached Palermo in the Serie A Championship: he was the youngest manager in the top division. "I was really proud of that and even now, although Udinese's team manager is two years younger than me, I am delighted to be one of the 28 managers in the Italian Serie A in a country with a population of 60 million".

Since Sassuolo finished eleventh last season, the new manager has plenty to live up to: "My approach to the job - so Roberto is keen to point out - will be to give my very best, to behave properly and respect everybody. I want my players to share my ideas and convey positive values. That is why I do not feel under pressure or forced to live up to certain expectations due to what has happened in the past, etc".

De Zerbi does not have any specific tactics: "My primary concern is to pick the best 11 players from the squad and make sure every player is able to perform to the best of their ability. My second concern is to make sure all my players enjoy playing with the ball at their feet. I have no magic formula. My method for making sure the team performs consistently is to be enthusiastic and make sure everybody enjoys training all year round, because playing football is a wonderful job".

ANDREA TAFI:

"I WAS MAPEI'S GLADIATOR"



HE IS THE LAST ITALIAN TO HAVE WON THE PARIS-ROUBAIX.
MAPEI WON THE RACE 5 TIMES



1995: Franco Ballerini



1996: Johan Museeuw



1998: Franco Ballerini

ON THE COBBLES"



Paris-Roubaix is synonymous with Mapei. Mapei Professional Cycling Team won the most prestigious one-day race five times in six years during its heyday. Referred to as "The hell of the North", "Hell on the cobbles", "The cobbles of glory", "Roubaix, hell and heaven", "Riders like angels with dirty faces", it is also the one-day monument bike race that has had most written about it in the history of cycling. Mapei was more than just a professional cycling team for Andrea Tafi, born in 1966. Tafi cycled victoriously into Roubaix in 1999 and is the last Italian to have won the race. "I raced for Mapei for nine years and I consider myself to have been very lucky: Giorgio Squinzi and Adriana Spazzoli created a team in their image and likeness. We were one big family thanks to Mapei. The same style and spirit characterising their prestigious companies was passed on to the team, helping us achieve incredible results and performances that are now part of the history of cycling. The Mapei team was a perfect machine for taking on the Paris-Roubaix race and we cycled in perfect symbiosis: all for one and one for all".

Other than teamwork, what was it that made Squinzi's riders stand out from their rivals along the cobbled paths of the Paris-Roubaix?

"Mapei cyclists were totally focused on the Roubaix race, body and soul. You need to have the right kind of natural talent and physical traits to do well in this kind of race: a rider cannot afford to be afraid of the cobbles, indeed it is the cobbles that should fear the rider. You need to have great speed and power, otherwise you will get left behind. The cobbled paths need to be taken on at full speed. If you can generate power, anger and force at the same time, then you can really make an impact; unless you can combine these three different characteristics together they are use-



1999:
Andrea Tafi



2000: Johan Museeuw

Tafi's race number when he won the 1999 Paris-Roubaix. So much for 17 being an unlucky number.

less". Andrea watched Francesco Moser on TV winning the 1978 Roubaix after breaking away from all the other riders and he was star-struck. "I was a member of a boys' team – so Tafi told us – and watching my idol break away all on his own on those cobbles, cheered on by huge crowds, made me want to try and do the same".

However, Franco Ballerini was the first to win the Paris-Roubaix for Mapei in 1995. He soloed to victory and Johann Museeuw came home third to make it a triumphant day for Squinzi's team. Ballerini had come very close to winning this classic in 1994, when he finished third. Andrea was really crucial in the 1996 race, the year when Mapei riders finished first, second and third. Three cyclists, who had broken away from the pack, cycled into Roubaix Velodrome together all wearing those distinctive cube-patterned cycling jerseys: Museeuw came first, Gianluca Bortolami second and Tafi third. And Ballerini ended up finishing fifth. "That was the best ever Paris-Roubaix for the team – so Tafi claimed – even though I was initially rather disappointed at taking the lowest position on the podium: you always want to win."

You made the key move in the 1996 race?

"Yes, I did. I felt really good 30 km from the finish, so I accelerated and went into the lead. When I was up front all on my own, our sport director, Patrick Lefevere, came up alongside me in the car and told me to relax and wait for Museeuw and Bortolami, who were not far behind. I did what I was told and let them catch up and we turned the race into a fantastic team time trial. We took turns to set the pace and were flying along, but each of us was hoping to win. As we pushed hard on the pedals, we talked to each other".

Do you think World Cup tactics influenced the outcome of that year's much talked about Paris-Roubaix?

"Museeuw has won the 1995 World Cup and at the time he was the best placed Mapei rider in the 1996 standings. Gianluca and I were initially reluctant to favour him, but we decided it was the right thing to do. Johan ended up winning the 1996 World Cup, bringing even greater prestige to the Mapei company". Museeuw then finished third in the 1997 Roubaix, the best placed finisher in the Mapei team. And that takes us to the triumphant 1998 race for Giorgio Squinzi's team: Ballerini won out on his own well ahead of the rest, Tafi came second and the excellent Wilfried Peeters finished third. This was his second individual victory, the team's second one-two-three and the third Paris-Roubaix for the Mapei team. "That year – so Tafi assured us – I could have done better. I felt in great shape before the race, at least as strong as Franco, but he managed to give 110% that day. Ballerini attacked, so me, Peeters and the rest of the team just kept an eye on the other riders. Wilfried and I then accelerated at the end to make sure we got the other two places on the podium. Zanini and the others all rode strongly for Mapei at that year's Paris-Roubaix. Unfortunately, Museeuw fell on the cobbles in Arenberg Forest and fractured his left knee".

Andrea, when you think of the Paris-Roubaix you inevitably think of the cobbles, but you broke away on a stretch of ordinary road when you won the 1999 race.



5

Andrea's World Cup wins: Tour of Lombardy 1996, Rochester International 1997, Paris-Roubaix 1999, Paris-Tours 2000, Tour of Flanders 2002.

26

The number of global victories by the Tuscan "Gladiator" while racing for the Mapei team from 1994 to 2002.

1997

The year when Andrea got his nickname the "Gladiator" after winning the Coppa Sabatini one-day race in Tuscany.

That's right. It was 43 km to the finish and I gradually gained a lead of 10, 20, and then 30 m on the flat roads, eventually extending that lead to over a minute. Those 43 kilometres were an experience I will never forget, a mixture of intense emotions with so many people cheering me on and also constant stress and anxiety, because in a race like Paris-Roubaix any kind of accident or mechanical issue can change everything: from being a prince in a dream you suddenly find yourself have to chase the other riders".

Did you curse the bad luck that threatened to ruin your celebrations?

"I even managed to overcome my bad luck. I was flying along the asphalt roads and across the cobbles, but then I could suddenly hear my rear wheel slowly deflating. I checked to see if the Mapei team car was behind me, but it had not caught up after getting stuck among other groups of riders along the narrow, winding paths. But I did not panic: I stopped and caught sight of a fan wearing cube-patterned Mapei cap, who passed me a rear wheel. Thanks to this "good Samaritan" I managed to change the wheel quickly, get back on my bike and put all my anger and energy into pedalling as hard as I could. The puncture reduced my lead to 40 seconds. Taking advantage of the cobbled sections I managed to increase that lead thanks to my anger and desperate desire to make my dream come true, and it soon extended to two minutes. I turned the Carrefour de l'Arbre section into my pathway to glory.

That is right, because you had another 'Gloria' waiting for you at the finish: your wife.

"I could not wait to get into Roubaix Velodrome. More than think about my lap of honour around the track with my arms raised in triumph, I just wanted to

hug my wife Gloria and our son Tommaso, who had come to the Velodrome with some friends. Instinct and will power were the real keys to my victory". And that was also yet another Mapei "one-two-three": Wilfried Peeters pulled away from the main chasing pack, after being given free reign by Lefevere, and finished second, while Tom Steels, the team's sprinter, snatched third place in the bunch sprint. The colourful Mapei cubes gleamed up on the podium.

Third in '96, second in the '98 Paris-Roubaix, and first in '99. Andrea, you were the only man on the podium for all three Mapei "one-two-threes". Are you proud of that?

"Yes. It is another reason that makes me feel as if I was the rider who really embodied the team and company spirit. The Roubaix is the race in which Mapei's moral and strategic principles really came to the fore".

Is it true that Paolo Fornaciari was the rider who helped you most in the '99 Roubaix?

"It was a great win for the domestiques too, particularly Fornaciari. I will tell you something curious that happened behind the scenes. Fornaciari was my roommate in Paris and we went to bed early the evening before the race. I woke up with a start about half an hour later, probably because I was so focused and nervous. Anyway, I woke Paolo up, too, and asked him to ride with me during the race, assuring him that I would pay him back by doing something really special. Fornaciari, who was a very strong rider, listened to my request and rode perfectly that day, as he did in lots of other races".

In 2000 Mapei won the Paris-Roubaix for the fifth time thanks

TO MUSEEUW, but you were not at your best that day. Why was that?

▶ TAKING ADVANTAGE OF THE COBBLED SECTIONS I MANAGED TO INCREASE THE LEAD. INSTINCT AND WILL WERE THE REAL KEYS TO MY VICTORY

to Museeuw, but you were not at your best that day. Why was that?

"As the previous year's winner, I was given the number 1 and was really in the spotlight, but I was not as focused as the year before. I rode well up to a certain point but then I lost my way. That was a strange Roubaix for me. I am really pleased Johan won the race: he rode into the Velodrome on his own, and instead of raising his arms in victory he crossed the line with his left leg raised

to let everybody know that his really bad crash in the Paris-Roubaix two years earlier had not ruined his career, even though it had been really hard work getting his leg back in top shape. Museeuw was right to celebrate the way he did after all his hard work". The

2001 race was the last in Ballerini's career and at the end of the day he did a lap of honour with the words "merci Roubaix" on his racing jersey. "A lap of honour – so Tafi added – that Franco really deserved. Personally speaking, I would also like to say merci Roubaix".

You Mapei cyclists were meticulous over your choice of materials. Is it true that you asked Ernesto Colnago to design special forks for Paris-Roubaix?

"One year me and the rest of the riders asked Ernesto to prepare bikes for us especially for the Paris-Roubaix with the same kind of suspension forks as mountain bikes. But he explained to us that the straight carbon fibre forks on his frames were even better at handling vibrations than suspended forks. Colnago had experimented with, studied and tested out the product to perfection. I would also like to thank my dear friend Aldo Sassi and Mapei Sport, where we used to do our tests, Shimano and the rest of our technical suppliers".

PAINTS & VARNISHES

Dispelling the myths

Paints and varnishes, just like many other chemical products in general, are often the subject of alarmist messages claiming they are the cause of environmental pollution and illnesses, leading us to fear for our own health and safety and of those living alongside us.

But is it correct to think this way? The chemical industry is one of the most tightly regulated sectors, especially in Europe. The roots of the preconception about chemicals go back a long way and refer to production methods and conditions that have now been completely surpassed.

As far as environmental, social and economic sustainability are concerned, the chemical industry is a virtuous sector and its products are tightly controlled and safe. And paints and varnishes are certainly no exception!

With this article, published with the kind permission of AVISA (the Italian Association representing manufacturers

of adhesives and sealants, printing and silk-screen inks, paints and varnishes) and prepared in collaboration with experts from the Paints and Varnishes Department of SSOG1 – Stazioni Sperimentali per l'industria (Experimental Stations for industry), we would like to help dispel some of the most common myths and provide more correct information.



It is so easy to be influenced by all the alarmist messages we seem to be bombarded with every day about the things we use on a routine basis. But be careful about the credibility of all this news; all too often it is not based on scientific evidence.

European legislation, similarly to legislation in all heavily industrialised nations, tightly regulates all products put on the market so that they are as safe as possible for mankind and the environment. And by the same token, chemical companies are committed on a daily basis to the development of increasingly sustainable products. To find out more about paints and varnishes and their production processes go to the website: <http://avisa.federchimica.it/>.

PAINTS FOR THE WALLS OF OUR HOMES ARE CARCINOGENIC

FALSE

There really is absolutely no cause for alarm! In fact, European legislation (EC Regulation No. 1907/2006 – “REACH”) prohibits the production and sale of carcinogenic chemical products for public use. All paints and varnishes applied in our homes, therefore, can in no way be carcinogenic.

For further information: <https://chemicalsinourlife.echa.europa.eu/how-are-chemicals-controlled>



FALSE

PAINTS AND VARNISHES CAN MAKE US ILL

The Volatile Organic Compounds (VOC) released also, but not only, from paints and varnishes applied in our homes account for only 1.3% of the potentially harmful agents found in the air. In fact, the types of pathology connected to the quality of the air we breathe in buildings are mainly due to exposure to fine dust particles, carbon monoxide and damp present.

Source: “Promoting Actions for Healthy Indoor Air (IAIAQ)” – DG Health & Consumer, European Commission, 2011 (page 10)



FALSE

PAINTS AND VARNISHES ARE JUST AS HARMFUL AS CIGARETTES

Unlike cigarettes, paints and varnishes for public use are not carcinogenic for users (EC Regulation No. 1907/2006 – “REACH”). Paints and varnishes do release certain chemical substances (e.g. VOC), but only for a very limited period of time compared with their overall duration.

For further information: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3084482/>





THE AIR WE BREATHE IS HEAVILY POLLUTED BY PAINTS AND VARNISHES

European Union legislation (Directive 2004/42/UE, which in Italy has been transformed into Decree 161/2006) sets maximum limits for volatile substances to minimise the environmental impact of products aimed at the decorative and car refinishing sector.

For further information: <http://ec.europa.eu/environment/archives/air/stationary/solvents/legislation.htm>



PAINTS AIMED AT THE DIY SECTOR ARE FULL OF HEAVY METALS

Paints available on the open market may contain a maximum of 1% of heavy metals (mercury, lead, silver, etc.), limits imposed by REACH Regulations through specific "restrictions".

For further information: <https://echa.europa.eu/substances-restricted-under-reach>



"NATURAL" PAINTS AND VARNISHES ARE SAFER THAN THEIR TRADITIONAL EQUIVALENTS

Raw materials used in the manufacture of traditional paints and varnishes guarantee the same level of safety as those formulated with non-industrial products.

Raw materials used to manufacture traditional paints and varnishes are from a controlled origin and have a constant level of quality.

For further information: <http://www.iso.org/ics/87.040/x/>

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