





# 80 years of Mapei. The future begins



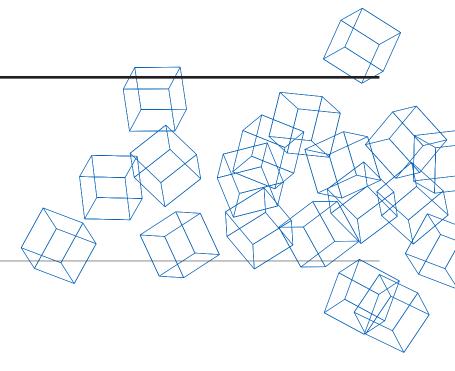
### Index

80 years of excellence. Introduction by Giorgio Squinzi.	4
Research & Development. Our driving force.	8
Production. Technology at the service of the market.	10
Products. A world of solutions.	12
Counseling and Technical Services Department. Our Group spirit.	14
Sustainability. Guaranteed environmental quality.	16
Training. Conveying knowledge.	18
Quality. Our corporate culture.	20
Marketing & Communication. Complete and correct.	22
Culture. Proud to play a leading role.	24
Sport. Soccer and cycling, our great passions.	26
Mapei figures.	28
Mapei around the world.	32
Mapei values.	36

Product lines:	40
Products for ceramics and stone material.	42
Products for resilient, LVT, textile materials and sports flooring.	44
Products for wooden flooring.	48
Products for cementitious and resin flooring.	50
Products for acoustic insulation.	52
Products for building.	54
Admixtures for concrete.	56
Products for structural strengthening.	60
Products for the repair of masonry.	62
Products for thermal insulation.	64
Wall protective and decorative coatings.	66
Products for waterproofing.	68
Products for underground constructions (UTT).	70
Elastic sealants and adhesives.	72
Products for the marine industry.	74
Cement additives (C-ADD).	76
Colophon.	80

"A formidable team" that thrives on challenges.







Maybe, after eighty years, it would be understandable if I were to look back with self-satisfaction and pride.

To look back over the history of the Company, remember the courage and determination of my father Rodolfo when, like a pioneer, he began his adventure in the outskirts of Milan in 1937, and then slowly leaf through the album of successes we have enjoyed in Italy and around the world, to become who we are today - Mapei, the recognised world leader of materials for the construction industry.

But those who know me, my family, the 10,000 people who work and collaborate with us, the formidable team that forms the heart and soul of Mapei, know the passion and tenacity I have inside me. It has always been a trademark of our entrepreneurial insight, pushing me to look ahead towards future horizons and goals which, together, we can continue to accomplish.

Family values woven into those of the Company courage, intuition, research, innovation and new ideas are the basis of our heritage. A heritage that, over the years, has led to the consolidation of Mapei in Italy and our expansion around the world: in the name of constant, transparent growth without taking shortcuts, combined with a winning internationalisation process - always focused on our most important resource: people.

Our entrepreneurial successes, the figures and Mapei's projects are superbly presented and described and can be found in this book. At this point, I feel it is important to remind everyone that Mapei's real achievement during

"The quality of our products is unique and is acknowledged all around the world. We have a very clear corporate philosophy: specialisation in the building world, research and development, internationalisation, tailor-made service and support for our clientèle".

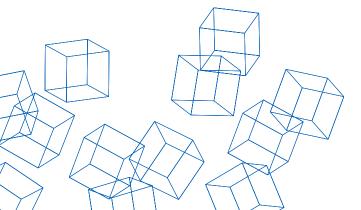


Mapei first went into business in 1937 with just 7 employees and the founder of the Company, Rodolfo Squinzi (second from the right).

these often difficult years has been to recognise, first and foremost, the quality of the people, their skills, their professionalism, their feelings. We have never made a loss or witnessed a decline in revenue, nor have we had to reduce our personnel by instructing redundancies. By contrast, we have always been committed to investing in areas such as sport, universities and the arts, benefiting people outside of Mapei.

We don't want to seem as if we are trying to promote Mapei's social role; we just want to underline, with conviction, that this is the route our road to success has taken, now and in the future. Knowing how to be forward-thinking, focusing on our "formidable team" of employees, partners, suppliers and friends as an essential part of development and innovation.

Team spirit, cohesion and our love of a challenge are what set us apart: my passion for sport is no secret, Mapei's leading role in the world of football and cycling are the jewels in the crown of the entire Group, inspired by the healthiest and most virtuous principles of sport - you will often hear me say: "Never stop pedalling". And as it is today, so it will be tomorrow. New ideas generate innovative processes which, in turn, stimulate the development of other new ideas. A virtuous circle that we at Mapei try to nurture thanks to the individual characteristics of our people, who operate in an environment that encourages the development of creativity, with well-defined objectives and a strong will to improve oneself constantly. Never forget the past,



"The secret of our success? We put people first, along with all their qualities, their professionalism and their feelings. We weave family values and corporate values together".

from where we come from and the enormous patrimony of ideas on which our first 80 years are based.

Eighty years later the story of Mapei continues, the future is now. The quality of our products is unique and acknowledged all around the world. We have a very clear corporate philosophy: specialisation in the building world, research and development, internationalisation, tailormade service and support for our clientèle. Because, for Mapei our clients are our partners.

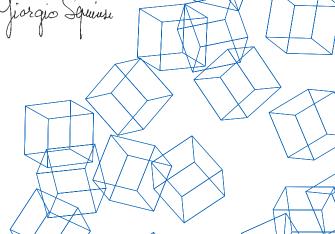
Cutting-edge, innovative, secure, environmentally sustainable solutions provide the opportunity to improve the quality of your work and life, to be leading players in the construction of our homes, but also in the redevelopment of some of the most important buildings of the world's artistic and cultural heritage and of historical sites, museums and sports arenas.

Research and development, innovation and the encouragement of individual talents are, and will always be, the driving force behind our growth. We have a bond with Italy, a country which we love and has seen us grow. It is from Italy that we begin our journey when acquiring and entering new markets. Today we have a consolidated global dimension. Our desire to make and to innovate is what has put us where we are today on the markets all around the world: Mapei today means 81 subsidiary companies and 73 production facilities in 33 different countries on the five continents; we have a range of more than 5,000 construction products and a consolidated estimated turnover for 2016 of 2.4 billion Euros.

Everywhere we go, we present our calling card based on ethics, transparency and responsibility. Our products are constantly scrutinised by accredited laboratories in Italy and abroad. Over the last few years the building market has changed profoundly. All due to the hits it has taken from the crisis, new requirements and demands and new opportunities and needs. Mapei knew how to adapt and then impose itself while looking always ahead, in a process of change and growth, while maintaining the same route with confidence and expertise, diversifying and extending our range of products in the name of constant specialisation, with internationalisation as the main highway and research and development as essential points of reference.

So, it is with a legitimate sense of pride that we look to the past, at our roots and the foundation of our success over the years, and it is with the same sense of pride and conviction that we now start a new chapter of our story which, once again, will be a story of men and women with their passions, ideas, expertise and the desire to excel.







18

Main research centres in 13 countries

### We research and produce innovation for a high speed market in the building world.

A considerable portion of Mapei's annual turnover is channelled into investments for R&D activities.

For Mapei Research and Innovation are the cornerstones and real driving force behind growth.



The primary objective of Mapei's commitment to research is to supply users with innovative, safe solutions to improve all aspects of site work, including the most complex, difficult ones. Mapei has always been highly committed to research: 12% of the Group's employees are involved in research, the majority of our new employees are destined to work in this field and we channel 5% of our annual turnover into R&D.

Mapei's research scientists work within a global network comprising **18 main Centres**, with our Corporate Research Centre in Milan acting as a central analysis laboratory and central hub to coordinate the activities of the other 17 laboratories.

The R&D laboratories, equipped with the most sophisticated equipment available, work in close contact

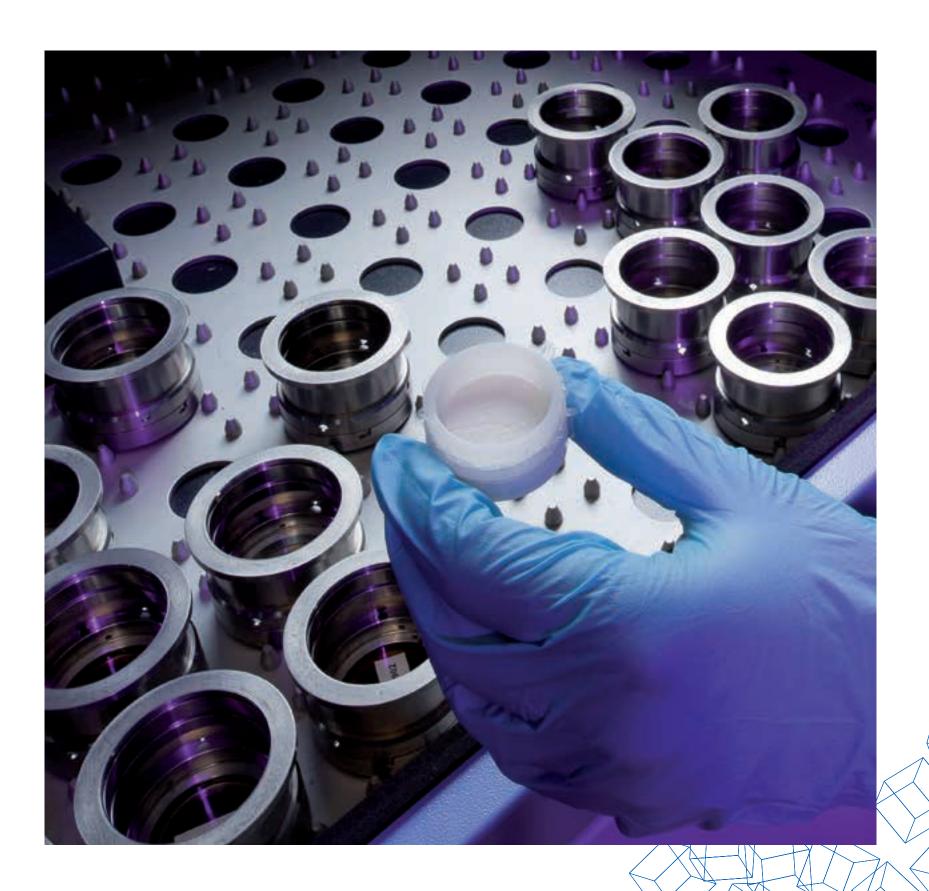
with each other, and also **collaborate with prestigious universities and scientific and industrial research institutes**. They also provide support to the Technical Services Department to help solve all the problems and reply to the most complicated requests from our customers, and are flanked by the quality control laboratories, present in all the Group's **73 production facilities**.

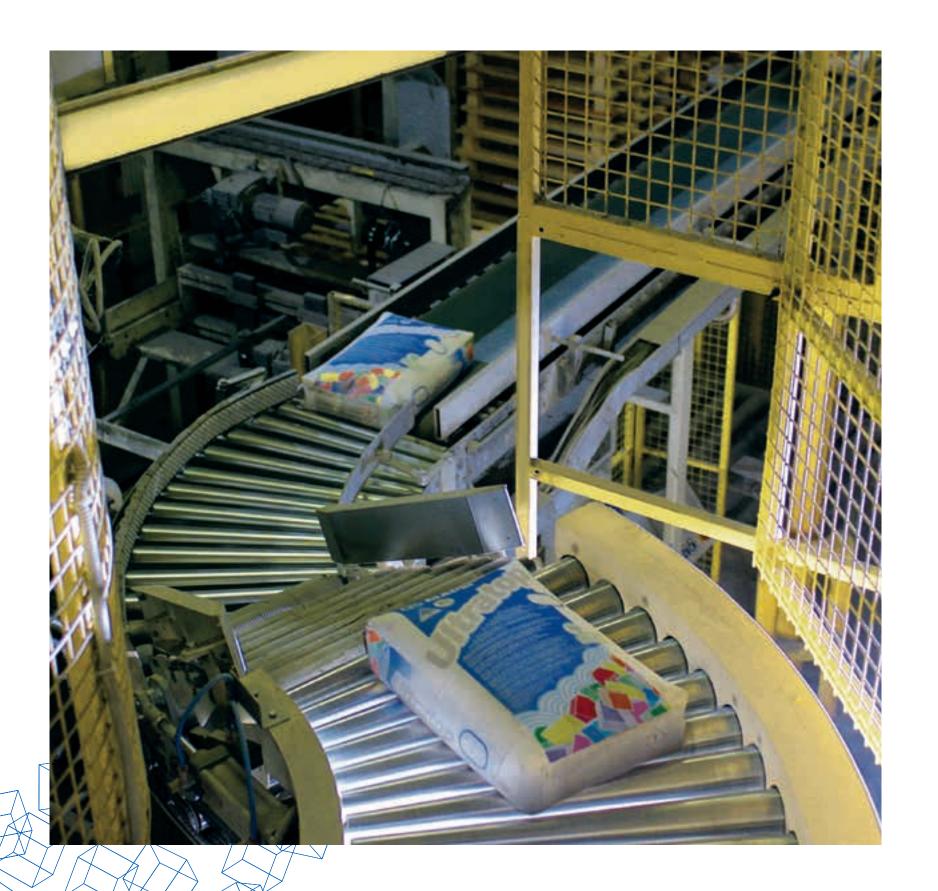
### MAPEI 18 R&D Centres around the world:

3 Italy1 China1 Poland3 United States1 South Korea1 Singapore2 Germany1 France1 Switzerland

1 Austria1 Malaysia1 Canada1 Norway









more than

25,000 tons of products shipped every day

Our production system: powerful, efficient, flexible and sustainable.

### **Cutting-edge production technology** is

used in Mapei's production facilities, allowing the intense rhythm of the entire chain to be flanked by **constant quality control**, from raw materials to final packaging.





73 production facilities in 5 continents and in 33 different countries. 25,000 tons of finished products leave our production facilities every day (4.5 million tons per year) along with just as many tons of raw materials to keep sites supplied all around the world. These are the figures that represent Mapei today.

And the results are there for all to see: **optimisation** of logistics costs, **proximity** to our customers, a **guarantee** of maximum efficiency of production processes with total respect for the environment and the local expectations.



### 16 product lines. An incomparable range offered for every site around the world.

With its **vast range of products, more than 5,000** in total, like adhesives, sealants, special mortars etc, Mapei helps improve the characteristics of buildings, from anti-seismic upgrading to the healthiness of the surroundings where they are used.

### Mapei products

The most innovative for the building world. Developed to reduce energy consumption, manufactured locally in production facilities that respect the environment, safe for workers and end-users alike and certified according to the most severe official standards.

Over thousands of reference sites from around the world, the most complete range available. Often invisible, always indispensable: that is what using Mapei products means.

With their cutting-edge technology, they meet all the needs of designers and end-users alike, supplying the best solutions each and every time. Aimed specifically at the needs and evolution of the market, our products combine perfectly with similar and integrated systems to offer our clientèle the most specific and advanced solutions in the building world.

Products for ceramics and stone material

Products for resilient, LVT, textile materials and sports flooring

Products for wooden flooring

Products for cementitious and resin flooring

Products for acoustic insulation

Products for building

Admixtures for concrete

Products for structural strengthening

Products for the repair of masonry

Products for thermal insulation

Wall protective and decorative coatings

Products for waterproofing

Products for underground constructions (UTT)

Elastic sealants and adhesives

Products for the marine industry

Cement additives (C-ADD)

### Certified quality

Mapei has always obtained certification for its products from internationally recognised official bodies.

For further information visit our website:

www.mapei.com









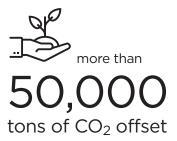
## Designers, contractors, users, building suppliers: all together to work better and to get long-lasting results.

All those who use Mapei products can see for themselves at first hand, day after day, how this choice leads to optimising their work, the **maximum application yield** and perfect results, under all conditions. Mapei is not only a supplier, but a **partner** for all those who work in this sector.

From the constant, ongoing exchange of experience and ideas with our customers and building suppliers, Mapei takes all their comments on board to guide innovation and widen their product lines and references. From the smallest to the largest sales points for ceramics and building materials, you will discover how Mapei quality is not limited to the product itself, but extends to the **competence** of the sales team, the **passion** of our retailers and the **value** of their advice. Our clientèle can also take advantage of our **Technical Services Department** and its **constant, expert support**, from the design phase right up to the execution phase, to guarantee an end result that always lives up to their expectations.

For the occasion of our 80<sup>th</sup> anniversary the new website will promote our mission, which has always been that of informing, supporting, involving and facilitating your design, construction and operating choices.





## Experience, research and innovation to construct a sustainable future together.

Reliability, durability, respect for the environment, workers and end-users and lower consumption of raw materials and energy are the characteristics put at the service of large and small quality projects in every part of the world.

The ability to offer the best and most innovative solutions. according to eco-sustainable principles, is fundamental for Mapei. This requires a sense of responsibility and the ability to make concrete choices in order to supply designers, contractors, workers and clients with products which are safe, reliable, durable over the years and which have the lowest impact possible on the environment. This means safeguarding the environment and our health and uniting quality architecture and R&D, thanks to the experience matured by the Company through operating on the most important construction sites around the world. Mapei makes a substantial contribution to the concept of "green" building by formulating products made from innovative, recycled and ultra-lightweight raw materials, specifically developed to reduce energy consumption and have very low VOC. Another important contribution to eco-sustainability is made through the development of products with improved mechanical performance characteristics and durability which, by allowing construction members and structures to be fabricated with a longer service life, lead to an inevitable reduction of waste materials and lower consumption of materials and energy. Our choice looks to the future and comes from our constant commitment to research into innovative, efficient formulas which can be integrated to form complete application systems. Maintaining quality standards of excellence also requires significant, targeted investments. Excellence, however, is not just something you declare: what we communicate is measurable, measured and certified by external bodies. And Mapei has gone even further; since 2012 we have offset more than 50,000 tons of CO<sub>2</sub> associated with the production of Keraflex Maxi S1 zerø in Italy through the acquisition of certified credits by financing wind energy projects in India. Mapei concretely promotes sustainability by joining international programmes and organizations, among which the Responsible Care **Programme (RC)** with its commitment to sustainable development and the US Green Building Council's LEED system - Leadership in Energy and Environmental Design for the design and construction of eco-compatible buildings. Mapei's products are certified in compliance with the most severe and demanding norms and standards.







### We implement the best training methods. And the results prove us right.

Technical training has an important role to play for **Mapei** and we **promote refresher courses and installation workshops all around the world** to perfect the application techniques for our products.





The courses are held by Mapei Technical Services and our expert technicians through practical demonstrations, audio-visual training and the distribution of technical and information packs. And to reach sites directly, Mapei also uses a special motor-home which is available for a number of countries, a kind of mobile training centre which allows us to form a wider network of training opportunities anywhere we wish.

Just as important is on-line training using the latest digital technology, accessible via PC's, tablets and smartphones. The consultancy service for the various entries in the "Mapei Design Guide" is also part of this joint project.

Periodically, Mapei organises technical refresher conventions and seminars in conjunction with various Chartered Bodies for designers, site managers and specialists from the construction sector.

Mapei is an accredited Advanced Training Association with the National Council of the Association of Architects Landscape Planners and Conservationists, authorised to carry out training work and **award professional training credits**.

More than 6,700 events are held in Mapei's various training centres and in our **Specification Centres** in Italy and all around the world: England, France, Norway, Germany, Singapore, United States, Poland and Hungary to name just a few. The events, many of which are also held at the premises of clients or Professional Associations, always involve expert speakers and are focused on technical and current issues regarding the building industry and design in general.



## We work to produce constant Quality: for our customers, contractors, the environment and our corporate culture.

Mapei plays an important role as **world leader** in the sector of chemical products for the construction industry through the **constant improvement in the satisfaction of its customers and of all those involved in the industry** (employees, suppliers, local communities, local authorities and proprietors).





Our Code of Ethics is our I.D.. Our management systems are our foundation stones: quality, environment, safety, sustainability, social responsibility. A Quality Management System has been applied by Mapei since 1994. It is certified as compliant with ISO 9001 standards and, since then, has been constantly updated. Mapei's main production facilities apply an Environmental Management System compliant with ISO 14001 standards. And, every year, the programme is extended to include an increasing number of the Group's production facilities around the globe. It is a source of great pride that many of our production facilities have been awarded the OHSAS 18001 certification for their Occupational Health and Safety Management Systems.

The Group's main production facility near Milan, in Italy adopts **EMAS III** (Environmental Management and Audit Scheme), and **Environmental Management System of the European Union**. The first **Sustainability Report** has been drawn up in 2017 to take stock of all our operations in the realm of social responsibility.

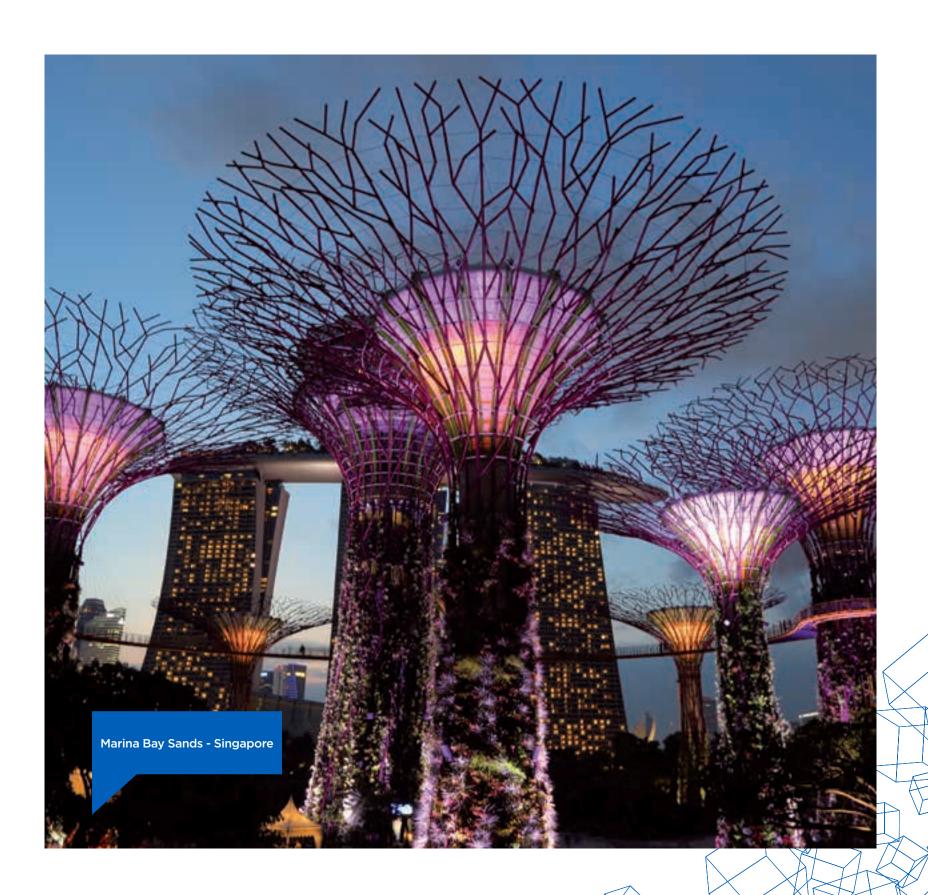
Companies certified ISO 9001: 40

Production facilities certified ISO 14001: 28

Production facilities certified OHSAS 18001: 13

Production facility certified EMAS III: 1

For further information on each of the Group's companies visit our website at **www.mapei.com** 







of the Group's employees dedicated to Marketing & Communication activities

### Global communication. Clear, complete, correct.

In all of the markets in which we operate, we guarantee that we will use all available means at our disposal to provide our clients with correct information about our products and the Company.

### Sales points and promotional activities

It is here that dialogue and choice really start. This is exactly what our information corners are there for. To promote the quality of our products and product lines. Targeted promotions act as an incentive to sell Mapei products.

### Websites and social networks

Information about the Group and the products available on the various markets. Simple consultation and readily available answers to all your needs are what characterise Mapei's presence online. The use of social media means Mapei can encourage dialogue, interacting directly with its clients and end-users.

### **Packaging**

Easily recognisable, well presented and in line with the norms and standards applied in every country. The product details, application data and final performance figures are clearly visible on all our packaging and correspond to the true performance properties of the products.

### **Advertising**

From specialist technical journals to daily news and sports papers, from radio programmes to internet and social media campaigns.

### **Mapei Design Guide**

Technical specifications available on our website for the use of design engineers and technicians from the sector.

### **Technical documentation**

Featuring a host of technical details, from typical areas of use right up to technical specifications, with information that is always both transparent and truthful. Price lists have been designed to be a practical work tool and easy to consult.

### Realtà Mapei

170,000 subscriptions in Italy alone: the main means of communication between the Company and the world of building. It reaches out to every professional operator in the building industry. In addition to the Italian version, we issue an English version, Realtà Mapei International, printed and distributed all over the world. Furthermore, local versions of Realtà Mapei are published in a total of 19 editions all around the world, reaching hundreds of thousands of readers.

### **Trade fairs**

Taking part at specialist sector trade fairs is an ideal opportunity to present new products and systems and to tell the world about Mapei's knowhow by participating in and organising side events and conventions during the trade fairs themselves.



1984

Mapei's first year as a fully-fledged Corporate Subscriber of the La Scala Theatre in Milan

### At the heart of culture and the arts.

Our love of culture, with its multi-faceted expressions, our commitment to promote culture and the desire to have the name and heart of Mapei associated with cultural events in Italy and abroad, have always been a part of the Group's genetic heritage.





We were a key player at the Milan Expo, just as we were at Shanghai in 2010. But Mapei's commitment alongside great events held in the name of culture, sustainability and solidarity is borne out of R. Squinzi's firm conviction that "work can never be separated from art and passion". Our heart has a bond with Milan and with the La Scala Theatre: it was 1984 when we took out our first "Corporate **Subscription"** and our passion became unstoppable when we took part in the renovation and restoration of the structure. The artistic union between Mapei and La Scala was definitively celebrated in 2008 when we became a "Founding Member" and the bond became even stronger in 2016 when Giorgio Squinzi was invited to join the Board of Directors. Another Milanese institution whose collaboration is particularly dear to us is the National

### Museum of Science and Technology.

Mapei's passion for culture and the arts spread even further and now embraces the whole of Italy and the world: with our products we have helped restore the Petruzzelli Theatre in Bari, the San Carlo Theatre in Naples, the "Antonio Salinas" Museum of Archaeology in Palermo, the Solomon R. Guggenheim Museum in New York and the Peggy Guggenheim Collection in Venice. Mapei is also proud to have become a Founding Member of the National Academy of Santa Cecilia. Mapei has always had a special interest in any issue concerning the environment and the conservation of Italy's artistic heritage and we are a Corporate Golden Donor of the F.A.I. (the Italian Environment Fund), with which we have taken part in various restoration projects.







1988

our first year as sponsor of the Sassuolo Calcio football club

### Sport breeds passion and commitment.

"Sassuolo Calcio is a story from the provinces, in the more noble sense of the word, made up of hard work and the local territory and its bond to the great tile market. Cycling is my great passion, a metaphor of life and my motto: never stop pedalling" (Giorgio Squinzi).





### Sassuolo, a European reality

After the first period of sponsorship from 1988 to 1991, a form of recognition for the ceramics industry, Mapei again became sponsor of the Italian local U.S. Sassuolo Calcio football club in 2002. And after just 10 years, starting from Serie C, Sassuolo made its debut in the Europa League: an unprecedented success story, recognition for the enormous effort and hard work built on skill, professionalism and enthusiasm. The Mapei Stadium in Reggio Emilia, Italy, is home to the Sassuolo team. After undergoing a series of interventions to bring it up to the standards set by the Serie A Football League and UEFA, it now hosts matches for some of the most important international football competitions. Thanks to the "Open stadium - no more barriers" project, with the removal of all the barriers between the fans and the pitch, it became a symbol of football without violence, a place fit for youngsters and families.

### Cycling: an unwavering bond

A particularly exciting moment was to see Giorgio Squinzi presented with the **Vincenzo Torriani Prize in 2016**. This prestigious award, in memory of the most popular organiser of cycling events, starting with the Giro d'Italia, reaffirmed how much Mapei "believes" and invests in this sport: from 1993 until the end of the 2002 season, the Group owned one of the top teams in the world, credited with 654 victories, including 4 World Road Cycling Championships, 4 individual World Championships, one Giro d'Italia, one Vuelta, 5 Team World Cups and victories in a myriad of important classic races that took the team to **top of all the international rankings**. In later years Mapei supported youth teams and sponsored cycling events: for 10 years they have been UCI Main Event Partner at the World Cycling Championships.

### Mapei figures\*



2.4

18

Main research centres in 13 countries

\*Updated to April 2017



New formulates every year of the Mapei Group

more than

1.000





consolidated turnover in 2016

Billion Euros estimated



more than

9.000

Employees, with 12% working in R&D

81



Subsidiaries in the Group

more than

5.000

Products for the building industry of the Mapei Group



more than

Tons of CO<sub>2</sub> offset

50.000



Clients around the world

66.000



more than

25.000

Tons of products shipped every day



**245** 

of the Group's employees dedicated to Marketing & Communication activities



Plants in 5 continents, in 33 different countries



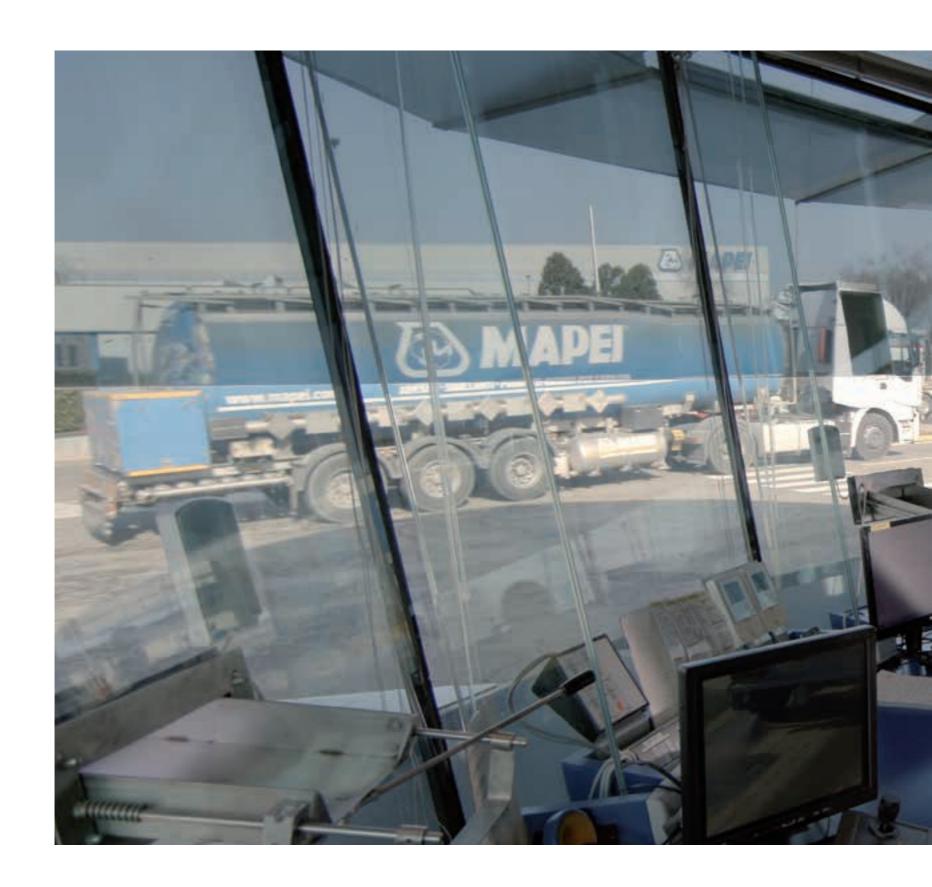
Professionals from the sector involved in Mapei training courses

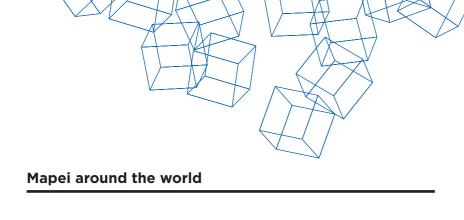
more 161.000



Tons of CO<sub>2</sub> saved thanks to Mapei additives for cement grinding

3.000.000

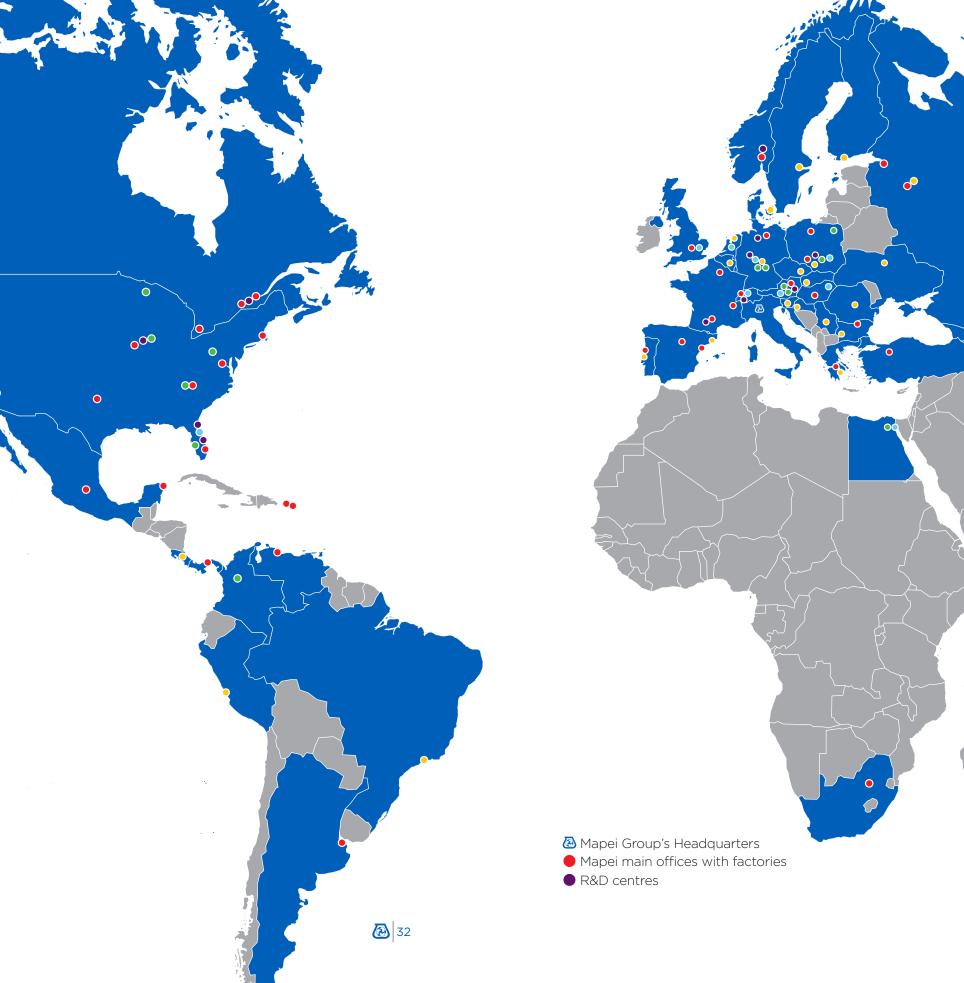


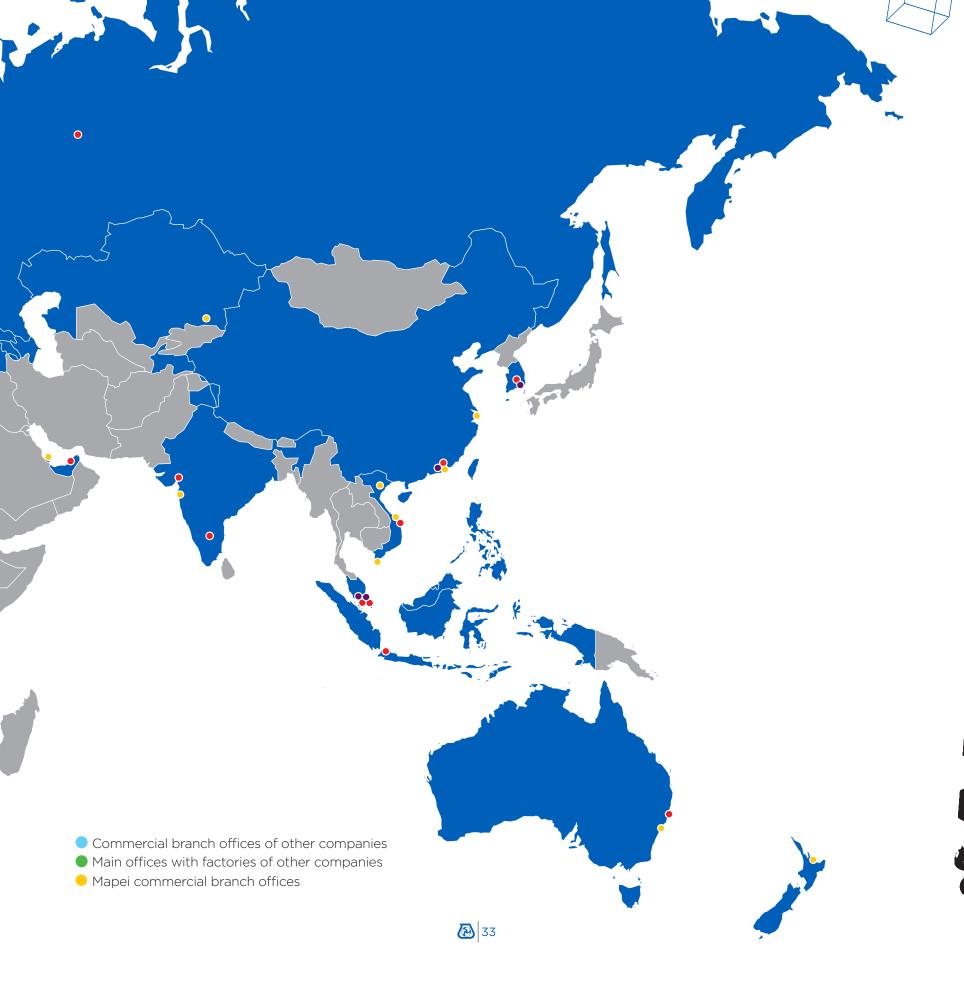


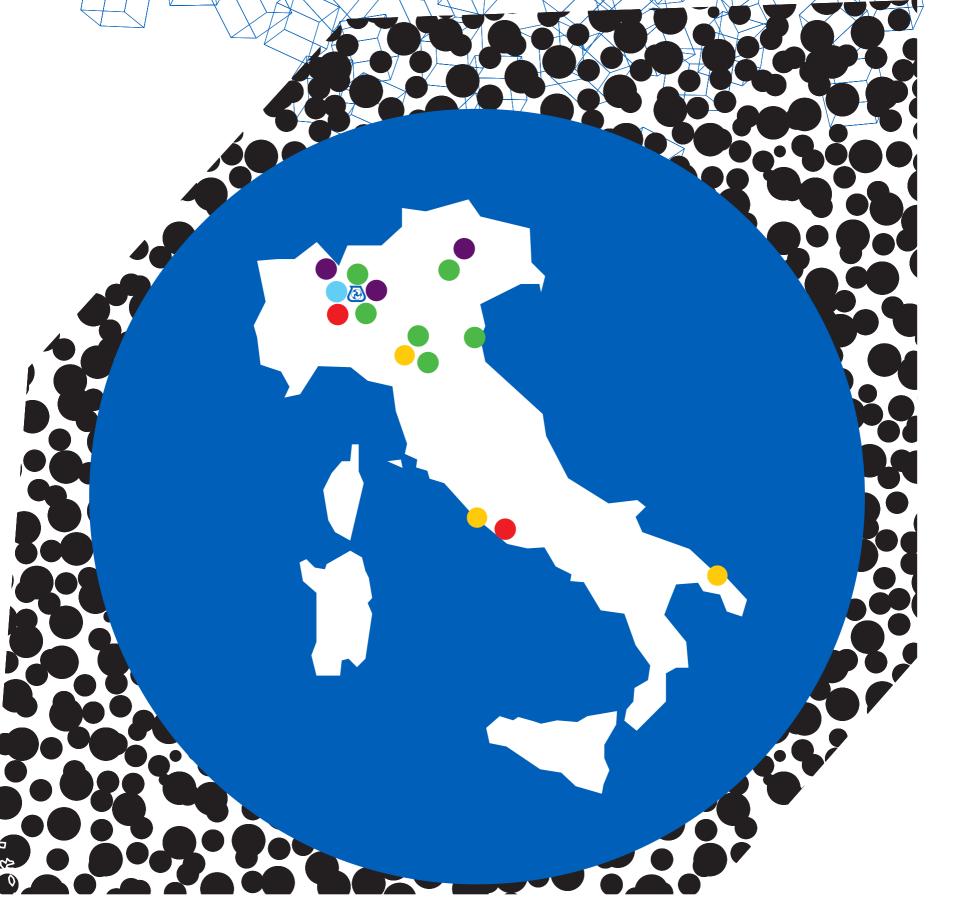
### 73 plants and 81 subsidiaries, synergy to create added value.

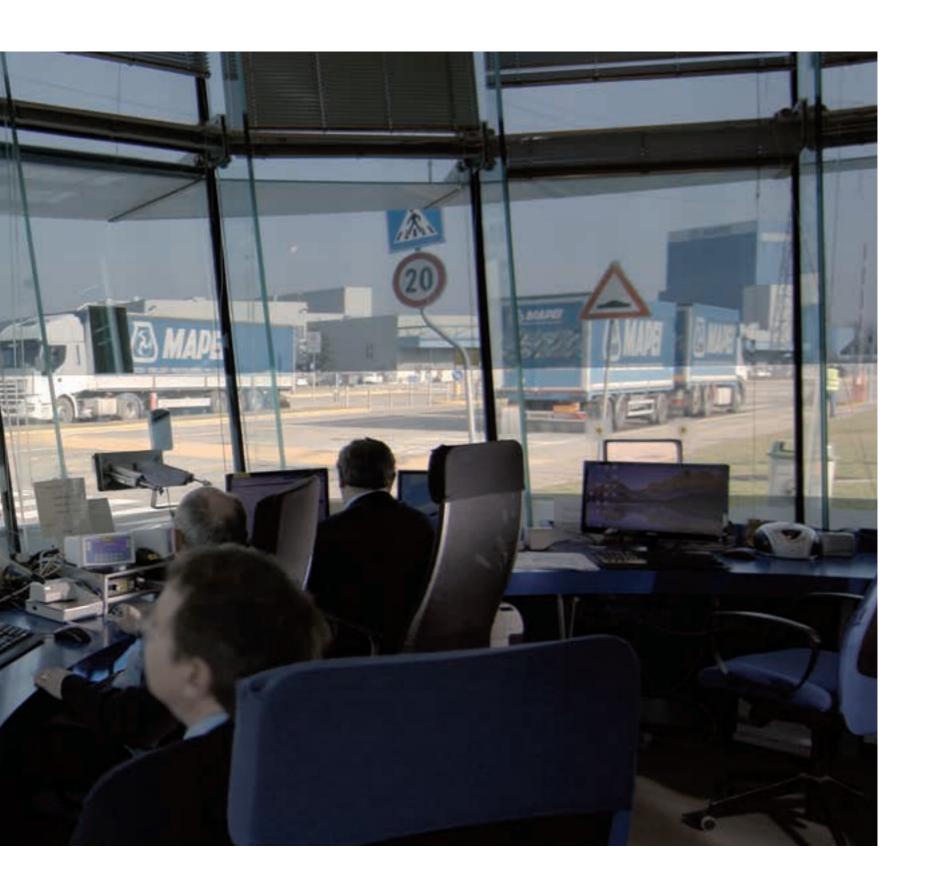
The dialogue between Mapei set-ups worldwide and building professionals strengthens the Group and helps everyone have their share of the developments.

Mapei continues to grow by building on the knowledge and relationships from both within and outside the company.









# The strength of transparency

You can touch Mapei's **Values** yourself. They are present and are openly expressed in our daily mission: to play a key role in improving the quality of people's lives by creating increasingly sustainable chemical products for the construction industry. Values we wish to share with the market, our clients, our suppliers and all the people and organisations we collaborate with.

Ethics, Transparency and Social and Environmental Responsibility are our cornerstones and the challenge for the future. For Mapei they mean full respect for our ethical code and abiding by national and international regulations, constant collaboration and promotion of the territories in which we operate and the launch of new campaigns to defend the quality of the chemicals for the building industry sector.

**Integrity, Loyalty, Commitment** and **Respect** have been Mapei's patrimony for eighty years and we will carry them, with strength, into the future. **Internationalisation** and **Innovation** are the routes we constantly follow.

We invest 5% of annual turnover into **Research** and **Development** in our 18 laboratories located all around the world. Our products meet the requirements prescribed by international standards and we constantly improve their properties.

Safety and Quality are always at the forefront. The 16 product lines we sell respect the environment and are safe for people. We apply Quality, Environmental and Health & Safety management systems certified according to international standards ISO 9001, ISO 14001 and OHSAS 18001. The Group's main production site also operates according to EMAS III, an Environmental management system of the European Union. Our products and systems are also certified and safe. In fact, many of them have been certified by the most prestigious Italian and international organisations.

Mapei has always played a leading role in the prevention of risks in the **Workplace**: with communication and training activities in universities, schools and associations.

Today, Mapei is a world leading company thanks to these **Values** and to all the **People** that are part of our "extended family" - a formidable team of 10,000 people which not only make our products leading players on all markets, but which have also stamped the Mapei brand in so many of our homes and in some of the most important structures and artistic, historical and sports constructions in every continent.







### Product lines

Mapei products help improve the quality of life by improving the aesthetics, comfort and safety in the environments we inhabit. In fact, Mapei products are everywhere in our homes. Beneath floors, in concrete used to make pillars or on the surfaces of historical buildings. Substrates which are often invisible, but always indispensable. A focus on market adaptation enables us to provide answers and solutions to all requests – developing products, where possible, into balanced, integrated systems to offer our clientèle specific solutions to the widest array of needs in the world of building.

More than 5,000 technologically-advanced products have the capacity to meet all the requirements of designers, professionals and end-users, supplying solutions from the foundations right up to the roof tops. Mapei is synonymous with innovation and constantly creates complete product systems to respond to any type of request. This is the real reason why Mapei is world leader in the market of adhesives, sealants and chemical products for the building industry.

Products for ceramics

and stone material

Products for resilient, LVT, textile materials and sports flooring

Products for wooden flooring

Products for cementitious and resin flooring

Products for acoustic insulation

Products for building

Admixtures for concrete

Products for structural strengthening

Products for the repair of masonry

Products for thermal insulation

Wall protective and decorative coatings

Products for waterproofing

Products for underground constructions (UTT)

Elastic sealants and adhesives

Products for the marine industry

Cement additives (C-ADD)



### **Products for ceramics** and stone material

### Ours are always beautifully set.

Small and large format tiles, wood-effect tiles, decorative terracotta features and heating systems Mapei is there. In every type of surroundings.





Mapei offers a complete range of products for installing ceramic and stone wall and floor coverings: adhesives, grouting products, sealants, screed mortars, primers, smoothing and skimming compounds and complementary products. Cutting-edge products in step with new developments in the ceramic and stone wall and floor coverings market.

This means we will always be a trusted partner, a partner with a solution for all the requirements of a constantly evolving market in terms of types of coverings, formats and thicknesses, and a partner that can offer product systems suitable for every possible area of use. All our adhesives and grouting products are classified according to EN 12004 and EN 13888 standards and their performance properties are rigorously tested

and certified using evaluation methods prescribed by European standards.

Mapei is also the leading company in this sector for the attention it pays to the environment: there are more than 150 products carrying the "Green Innovation" logo - products that meet the requirements of environmental sustainability thanks to their very low emission of VOC, and which help earn credits toward the most important environmental certification protocols, such as LEED and BREEAM.

From the installation of ceramics to all types of stone material, Mapei research guarantees the most complete range of products to enable you to select the best installation system for every specific need.



# Products for resilient, LVT, textile materials and sports flooring

#### The secret is under the floor.

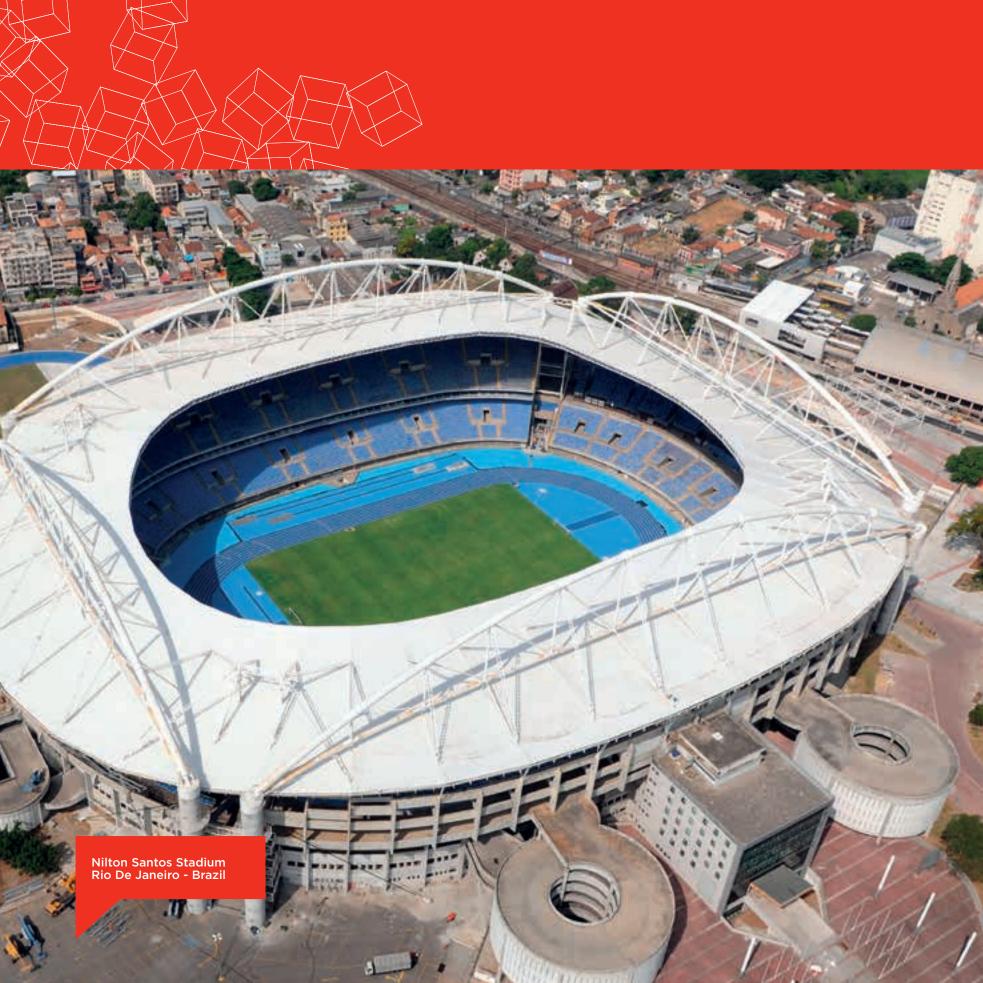
The aim of Mapei research has always been to develop products that are less harmful for those who use them and which have less impact on the environment Our R&D laboratories are equipped with environment simulation chambers to measure the emission of volatile organic compounds (VOC) according to international standards.





Mapei pays a lot of attention to new trends in materials and proposes a range of systems that provide a technical support to complete the installation of resilient, LVT and textile floor coverings. These types of floor covering have certain characteristics in common that make them particularly suitable for environments such as hospitals and clinics, schools, gymnasiums, airports, offices, shops and industrial surroundings. That is, in all those areas where cleanability, hygiene and comfort are of primary importance, yet at the same time areas where surfaces are subjected to intense traffic and constant use. It is because of the special technical properties of resilient floor coverings that the substrate needs to be carefully analysed and appropriate installation solutions need to be employed. In fact, you must make sure the substrate

is strong enough for this type of material and various factors have to be carefully analysed (moisture content, the flatness and evenness of the substrate, etc.) to guarantee its durability and maximum performance. The constant support of Mapei's Research and Development laboratories, enables Mapei to propose a complete range of cutting-edge products and systems, including screed mortars, primers, smoothing compounds and adhesives. Since 1980 our solutions for resilient, textile and LVT floor coverings come with certified eco-sustainability, fully compliant with international programmes aimed at safeguarding the environment and our health. And since 2005 all our products are EMICODE labeled, tested and certified by GEV, an association of which Mapei is a member.



#### **Products for resilient, LVT,** textile materials and sports flooring

### You worry about playing. We'll take care of the rest.

Since the 1970's our products have been used in every sports stadium and facilities in the world Our products contain technological solutions that take care of sports performances, the health of those who handle and apply the products and those who use the areas where they are applied.





Sport is important: for children and adults, for the psycho-physical health of people and for the wellbeing of the community in general. Mapei has always been very close to the world of sport. Sport played and enjoyed by everybody: from amateurs to professionals.

This is why, for more than 40 years, Mapei has been working in the field of sports facilities and structures and. thanks to its commitment to research into innovative solutions, they have been named as main technical partner for the identification of the best solutions for installing every type of playing surface, from the consolidation of subbases to the application of seaming tape. We supply the adhesives used for the most prestigious track events in the athletic calendar: a range of specific products for the leading manufacturers of resilient sports surfaces.

We have various systems available for the construction of subbases for natural and artificial glass playing surfaces, adhesives to bond synthetic grass, as well as calibrated aggregates for high performance drainage systems.

We develop specific solutions for the most diverse types of sport, with a certified range of acrylic and polyurethane resin-based systems suitable for various indoor and outdoor sports, with special care taken to guarantee comfort, strength, aesthetics and players' safety during games.

Mapei and sport. A constant challenge that we win every day.



#### With us wood is very much alive.

From small to large formats. For every size. Mapei always has the right installation solution.





To make work quicker and simpler for floor layers, guaranteeing the durability of wooden floors over the years: these are Mapei's aims, proposing technologically-advanced products which, at the same time, are simple to use whilst not forgetting to safeguard the health of floor layers and to respect the environment.

Mapei's constant commitment to the development of eco-compatible products with very low emission of volatile organic compounds (VOC) has led to the formulation of products which guarantee the safety of both floor layers and end-users.

Our line of products dedicated exclusively to wooden floors consists not only of adhesives, but of a complete range of solutions, starting from the preparation of installation beds with binders, admixtures, pre-blended screed mortars, primers, consolidators, waterproofing products for substrates and high-strength smoothing compounds, right up to surface finishes with coloured oils and water-based lacquers and specific maintenance products.



# Products for cementitious and resin flooring

### The beauty of being walked all over.

From clean rooms to lofts: Mapei develops certified, pro-grade floors with artistic qualities.





Mapei has developed a series of systems for epoxy, polyurethane and cementitious floors in their research and development laboratories which, thanks to their special characteristics, allow users to upgrade any surroundings effectively and quickly to suit their real needs and use.

With Mapei flooring, you can choose the most attractive finish or pattern without neglecting its all-important technical aspects, such as resistance to abrasion, impact, cracking and aggressive chemicals, while guaranteeing flatness and easy cleaning.

Our systems are developed to meet all your needs: rooms with a contemporary feel, places of artistic interest, areas for co-working, lofts, etc.

And that's not all. Mapei's proposals are so flexible and focused on the most severe certification protocols that they may be widely used in numerous sectors of industry, such as food and drinks and chemicals and pharmaceuticals, as well as in white rooms, car-parks and civil and commercial environments.



### **Products for** acoustic insulation

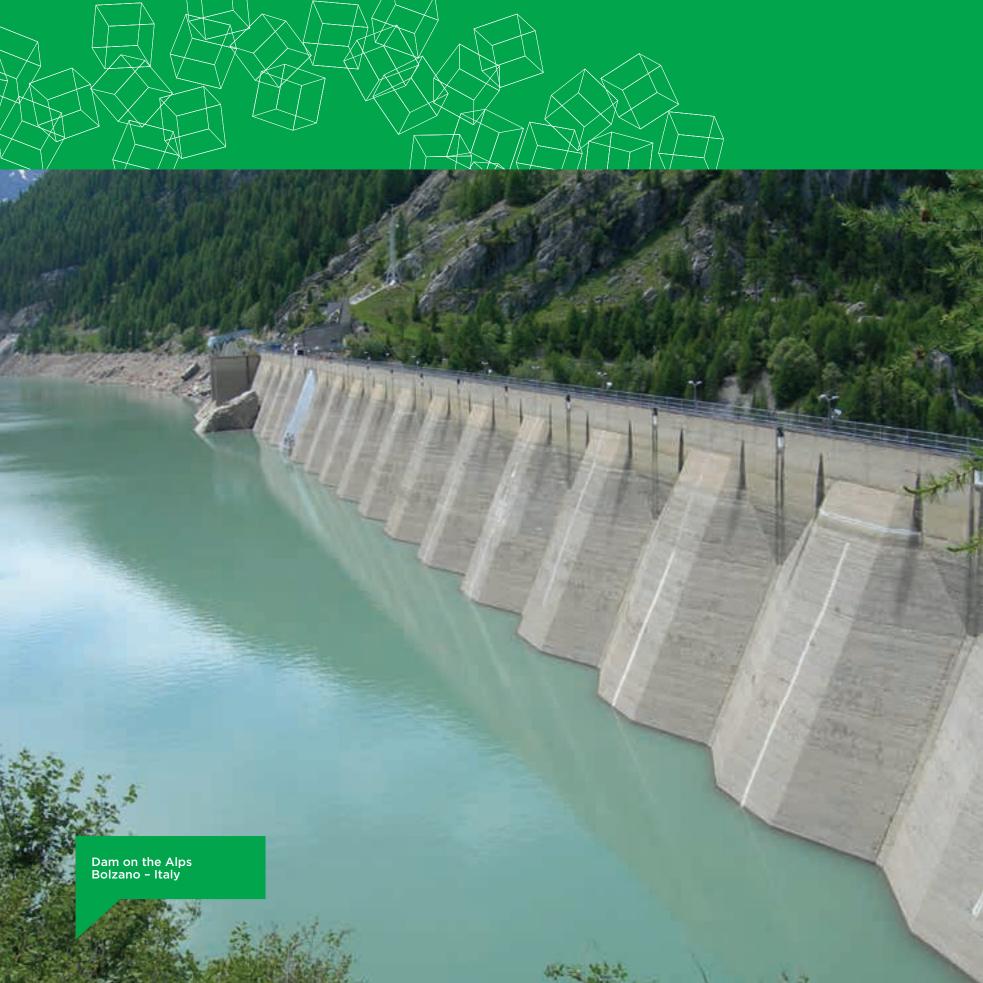
### Silence is golden.

Our soundproofing systems, with their excellent acoustic properties and resistance to foot traffic and impact on site, are simple to design with our free DataMapesilent calculation software.





Interest in the concept of living comfort has been growing in recent years which has led to an increase in the use of soundproofing systems inside buildings. Whether we are talking about renovating a residential building or a hotel, or a newly designed apartment or office block, designers and building companies are required to comply with strict design criteria which determine the minimum level of soundproofing that needs to be guaranteed in buildings according to the characteristics of the structure and its area of use. To meet specific acoustic requirements to comply with current legislation or design specifications, soundproofing systems must be simple and quick to install and their soundproofing properties must remain unchanged over the years. Mapei has a specific line of certified products available to soundproof slabs and floors against noise caused by footsteps, consisting of soundproofing membranes in rolls or tiles, special compressible strips that go around the edges of rooms and special tapes to seal joints. Systems which are ideal for use in new builds, to quickly and simply create floating screeds perfectly isolated from the substrate, allowing you to comply with soundproofing standards and considerably improve the sense of comfort actually perceived. Older buildings under renovation can also reap the benefits of employing Mapei's special soundproofing systems and their ability to effectively contrast the transmission of noise with just very thin layers, thereby avoiding having to remove old flooring.



### 6 Products for building

### Place your bets on winning systems.

Technologicallyinnovative materials and systems of the highest quality for long-lasting projects.





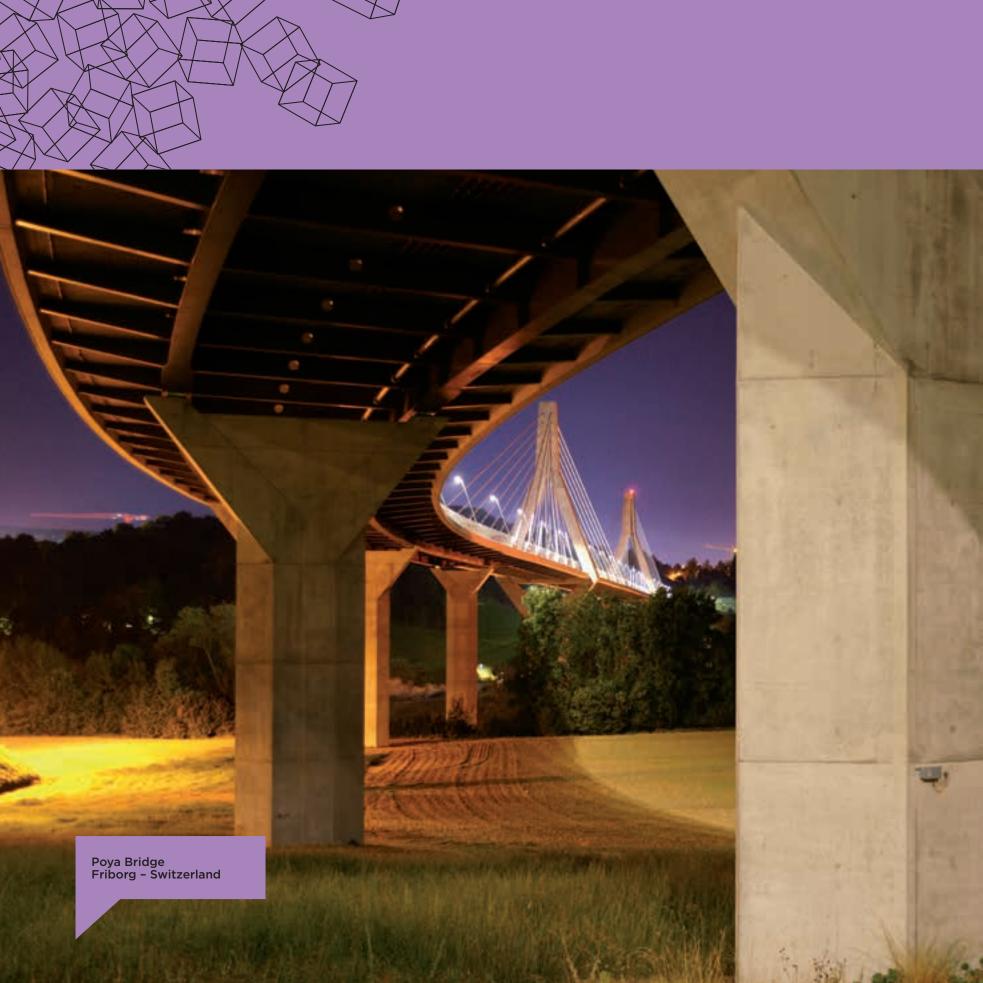
Dams, viaducts, canals, depuration plants and residential buildings, right up to the buildings of the future.

Mapei's building products line was established in 1988 on the understanding that a durable, sustainable structure can only be achieved by thinking in terms of systems rather than products. Which is why, year in year out, this particular product line has been enriched with the addition of new, technologically-advanced systems and materials with the aim of supplying solutions for every type of problem encountered on site.

The line is made up of numerous products, including mortars for repairing, skimming and protecting concrete. The range is completed by its numerous epoxy mortars and systems for structural bonds, crack injection and for making anchor points.

Various new technologies have been added over the years, such as cathodic galvanic protection to protect rebar in highly aggressive environments, and high-ductility, high-strength, fibre-reinforced mortars suitable for all those areas and applications subjected to dynamic stresses.

These innovative ideas help improve the level of expertise and competitiveness in the construction sector by providing contractors with the tools to tackle issues such as the durability and service life of structures and infrastructures from a different point of view; all this in compliance with international standards currently applied in every country.



### **Admixtures for concrete**

### Give me an admixture and I shall move the world.

Research continues into the best solutions to overcome any challenge.





Today, concrete is still the most widely used construction material in the world. The most advanced technology is required, however, to be able to transform a relatively simple product into a material of the very highest quality. Mapei's vast experience supplies a complete range of admixtures for concrete; technologically-advanced products and solutions to help execute from the smallest to the largest building projects - a perfect example of Italian excellence all around the world.

Mapei takes great care in the development of its formulas and produces each single admixture to overcome the most complex, technological challenges and satisfy the widest range of needs you could possibly require on site.

Our admixtures line is constantly updated with innovative, higher performance products which comply with the most severe international standards, respecting the norms applied in the countries where they are distributed, by designing the most appropriate mixes and choosing the most suitable admixture. Free on-site technical assistance service combined with research and development ensures Mapei can recommend the best solution to make pervious concrete, mass concrete, selfcompacting concrete, controlled-shrinkage concrete or any other special type of concrete.

A wide-reaching network of fully equipped vehicles and highly qualified Mapei engineers and technicians guarantees that the performance characteristics of concrete are checked and measured during every phase of its use and application directly on site.



### **7**Admixtures for concrete

### Every road leads to Mapei.

With our technology we help make cities safer and more beautiful, sound in the knowledge that constructions will last for a very long time.





The Mapei admixtures line also includes a range of specific systems to make highly attractive, architectural road surfaces, specially developed to meet the various needs of anyone involved in the design of external spaces - be it a road surface with an exposed aggregate finish or the upgrading of a modern architectural road surface in porphyry or interlocking stone.

Whether it is a surface for pedestrians or for vehicles, or the installation of a new surface or renovation work on an old surface, every site has its own individual characteristics and every designer has his own very specific aesthetic, functional and technical needs.

Architectural road surfaces made from one of the Mapei systems have the characteristic of being unique, employing local resources and are easy to personalise with colours, patterns, inserts, joints, etc., so they integrate perfectly with their surroundings, while at the same time guaranteeing exceptional mechanical properties and durability, simple and cost-effective installation, respect for the environment and safety, and less maintenance work.

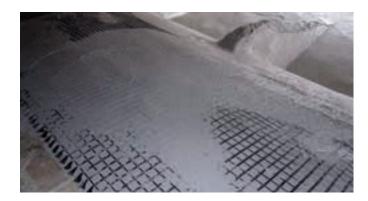
All this according to our corporate philosophy of complying with current norms and standards applied in each individual country.



### **Products for structural strengthening**

# Sound the charge, reinforcements are on their way.

Various systems and different technologies to guarantee the safety of every type of structure: reinforced concrete, wood and brick, stone or tuff masonry. Expert support, from the design stage to site work. Tested and certified systems. All this from just one line of products.





Every day, structural engineers have to face the most arduous and complex challenges. In order to provide a solution for every requirement - from historical masonry buildings to those made from reinforced concrete, right up to the largest of infrastructures - Mapei has created various strengthening systems to meet all your needs: plates, fabrics, meshes and connectors in carbon fibre, glass fibre, basalt fibre or steel in combination with polymeric matrixes or inorganic mortars, special microconcrete with very high performances and innovative solutions to protect non-structural elements.

From Mapei, 4 systems: our FRP Systems (Fibre Reinforced Polymer) for reinforced concrete structures, masonry and wood, FRCM Systems (Fibre Reinforced Cementitious Matrix) for masonry structures, including our range of cement-free systems specific for historical buildings, HPFRCC Systems (High Performance Fibre

Reinforced Cementitious Concrete) developed for reinforced concrete structures and all types of floor systems, our innovative helical stainless steel bars for reinforced stitching of cracked masonry. Along with our patented system to protect non-structural elements. Our products are all characterised by their high mechanical performances with the minimum impact on the overall architectural shape of the structure.

All this has been tested by simulating seismic activity on full-scale models of buildings and by European research centres and Universities with which Mapei carries out continuous, rewarding research projects. Mapei has always collaborated with these institutions in order to obtain Italian, European and American certifications for its own structural strengthening systems and to develop free of charge calculation software to support design work.



### **Products for the repair** of masonry

### We excel in history and geography.

For severals decades we have been taking an interest in our History and our Surroundings. A vast range of solutions to renovate all types of buildings, designed and created with respect for the environment and their original charm.





A problem often encountered in buildings, both historical ones and those built more recently, is deterioration of the masonry and construction elements. These structures require the right operations; sometimes they may need consolidation work, other times to be renovated or they are in need of conservative restoration.

This is why it is necessary to identify exactly what has caused the problems to appear by carrying out a thorough visual analysis and, if necessary, appropriate diagnostic investigations. The results will determine the appropriate intervention using the correct technology.

Mapei is fully aware of these needs and has developed a wide, articulated line of products comprising various types of materials with different cement-free, lime-based compositions or materials made from lime and cement.

Every product is formulated to have elastic-mechanical characteristics as similar as possible to those of masonry mortars and render used in the past, making them compatible with any type of original masonry or structure, including those found in listed buildings.

The line is made up of volumetrically stable, super-fluid, fillerized injection slurries to consolidate masonry, binders to be mixed with different grades of aggregates to mix masonry and rendering mortars on site, macro-porous, salt-resistant de-humidifying renders, transpirant and structural renders applied in combination with metal or composite reinforcing mesh, coloured masonry mortars, skimming mortars with different textures, waterproof protective coating products, consolidating products for weak, crumbling substrates and adhesives for strengthening wooden structures.

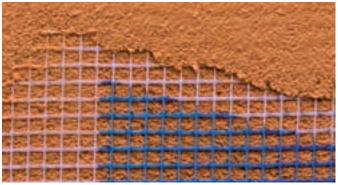


# **10**Products for thermal insulation

### Tailor-made overcoats. Certified to suit every size.

Up to 35% less energy consumption, improved living comfort, high durability and environmental sustainability.





Apart from being an effective way of reducing energy consumption in new homes, dressing a building with an external insulation system is the most advantageous way of achieving an immediate improvement in the energy performance of an existing building and also an immediate reduction in  $CO_2$  emissions into the environment, leading to a considerable reduction in costs and an improvement in living comfort during both the summer and winter.

The system is so versatile that even natural stone and ceramic tiles can be applied to coat the surface, and in particular large format tiles, giving walls a finish of high aesthetic value. The system is quite complex since it is made up of various materials and accessory items (adhesive, insulating panels, plugs and studs, skimming compound, reinforcing mesh, primer, finishing material and various

installation accessories), in which each component must be correctly designed and manufactured to suitable quality standards. With a constant commitment to the research and development of innovative products and systems, Mapei has developed an external insulating system that uses only certified components compliant with the most stringent European standards.



# Wall protective and decorative coatings

### With us you finish in style.

Coloured finishes give added value to the final work.





Mapei's range of finishing products for external surfaces allows our clients to make the most of our quality and experience. More than 100,000,000 square metres coated and painted, the advanced formulation and use of raw materials with high performance characteristics in terms of protection and durability, a cutting-edge production facility: our in-depth knowledge and vast experience is what allows us to be the reference company also in this sector.

Depending on your precise needs, Mapei's line of external finishes guarantees a mix of excellent cover, ease of application, good filling properties, water-repellence, elasticity, resistance to UV rays, transpiration and cleanability. From our experience with finishes for external surfaces, Mapei has also developed products of the very highest quality to protect and decorate

internal surfaces. Our products, which are available in more than 1,000 different colours, adhere perfectly to all types of masonry, render, skimming compounds and old paintwork - the ideal finish to obtain excellent resistance to dirt and aggressive microorganisms, as well as a high level of durability.



### **12**Products for waterproofing

### The proof is in the waterproofing.

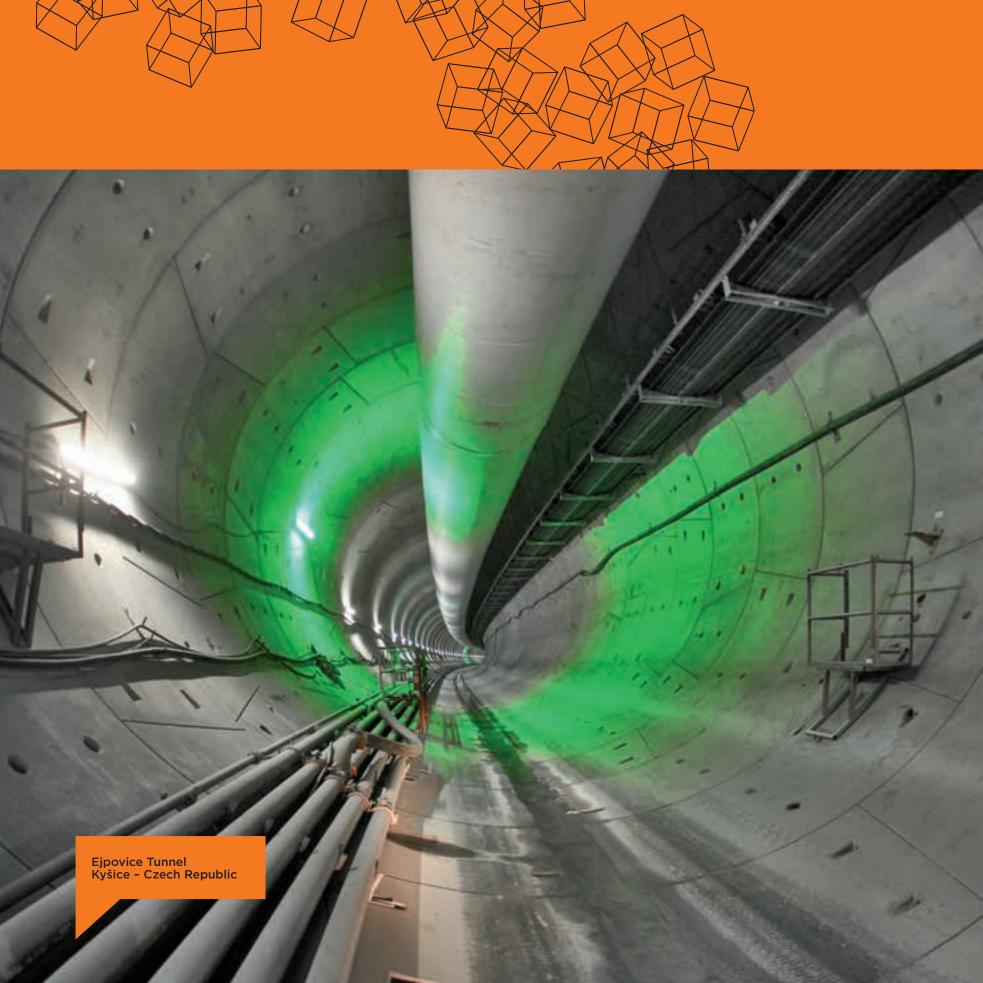
An international experience applicable in every sector: from the largest infrastructure projects, such as dams and viaducts, to terraces and swimming pools in the residential building sector. Our solutions for all your areas in contact with water.





Waterproofing is an area that Mapei has always taken on with great success by offering a vast range of sound, long-lasting, specific solutions to tackle any problem encountered on site. Whether it is the construction of a residential or industrial building or an infrastructure project, old or new. When building new structures, or when working on old buildings where structures are in contact with water such as areas below ground level, hydraulic structures, roofs and damp areas in general, it is very important to guarantee they are water-tight and well protected to increase their durability.

Mapei has developed various product systems for all these areas of use which, used in combination with their special accessory items, may be used to carry out waterproofing interventions that are secure and guaranteed and which also take extra care of all the minor details. One example is the range of cementitious and acrylic systems for waterproofing terraces, balconies, bathrooms and roofs, or the range of polyurea-based membranes that allow you to intervene on larger areas, such as road decks, swimming pools and storage tanks. Mapei also offers a complete range of solutions for waterproofing structures below ground level, from bentonite sheets to cementitious products and bitumen emulsions.



# Products for underground constructions (UTT)

## When the solution enters the tunnel.

We are by your side in tunnels, from the start right up to the very end of your project. We are your reference point for underground structures.





When the *Underground Technology Team* was formed in 1999, it represented Mapei's clear, decisive response to the growing demand from the construction market for a line of products and technical assistance dedicated to underground spaces. Underground works have unique characteristics due to their complexity during the design phase, but especially because of the severe work environments which require specialised technicians and special technology.

Through our *Underground Technology Team*, our objective is to provide a global solution to all the technical requirements of our clients operating in the underground construction sector. In fact, UTT Mapei offers a complete range of products to meet the operational needs of all underground operations: from conventional excavation

operations to automated boring systems and from repair work to finishes and waterproofing systems.

Satisfying the requirements of the market, including and above all in terms of respect for the environment, is the main aim of UTT Mapei, which is constantly committed to the research and development of increasingly specialised and competitive products for the global market. Our on-site technical support during all the application phases of our products guarantees that the UTT Team is a constant point of reference for underground operations all around the world.



## **Elastic sealants** and adhesives

## Sealing the deal.

The quality of a building starts with the care taken over the construction details





Forming elastic seals and bonds, fixing components and filling gaps and cavities are routine operations that improve the performance characteristics of building components and increase the level of comfort in offices. One and two-component acrylic, silicone, polyurethane, epoxy-polyurethane, vinyl-ester, polyester and hybrid products: the technical and application needs of tradesmen and professional contractors are satisfied to the full by our range of elastic sealants and adhesives, chemical anchors and foams.

The expertise and professionalism of our research and development laboratories, along with the capacity of Mapei's production facilities, are always at the service of the market. Their aim is to find effective solutions to design and execution needs. From traditional sealants for daily use to more sophisticated products for industrial applications, chemical anchors for use on walls to dedicated products to withstand seismic stresses and loads.

The dedicated Mapei range for specialised users includes more specific products with advanced performance characteristics, so that professional building contractors can rely on well-defined performances and reliable, long-lasting results.



## **Products for the** marine industry

### Ship-shape is our standard.

All the solutions you need for internal and external areas in the shipbuilding industry: areas open to the public, areas reserved for members of the crew, spas, kitchens, areas dedicated to sporting activities and children, external bridge decks and swimming pools.





The shipbuilding industry has evolved significantly over the last few decades due to the constant development and progress in construction technology and the continuous research work carried out on materials. Cargo ships, military vessels, cruise liners, pleasure craft and yachts. They are all looking for the best solutions. The need to offer rooms and spaces with increasingly high levels of comfort and liveability acts as a stimulus to develop new solutions, materials and finishes that combine aesthetics and functionality and safety and hygiene.

Mapei Marine line is the answer to these requirements. Solutions and products developed through a process of research, conducted in the name of sustainability and attention to mankind and the environment, strategically integrated to form a truly complete system that guarantees excellent performance characteristics and certified quality - functionality and reliability, durability over the years, ease of use and simple application. Our solutions have been developed to cover all areas: those open to the public, internal areas reserved for the crew, areas dedicated to sports and spas, kitchens, external bridge decks, swimming pools and play areas for children.



### 16 **Cement additives** (C-ADD)

### The right ingredient for business.

Every cement plant has its own special characteristics, both fascinating and precious This is why our mission is to formulate products specific for every client.



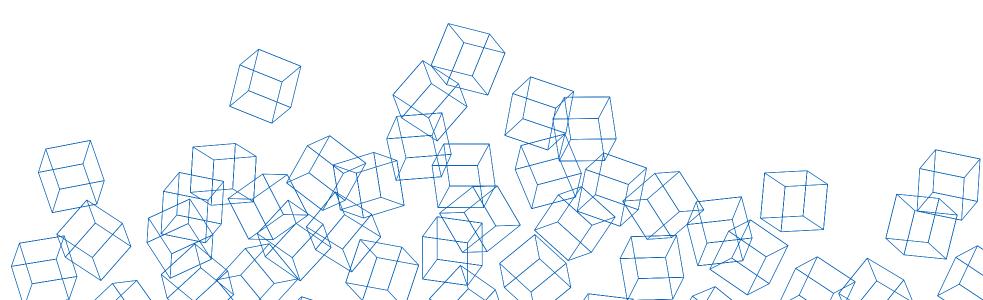


Additives for cement are special products aimed directly at cement plants. They are chemical additives used during the cement grinding process that lead to a significant reduction in energy consumption and, as a result, the emission levels of CO<sub>2</sub>.

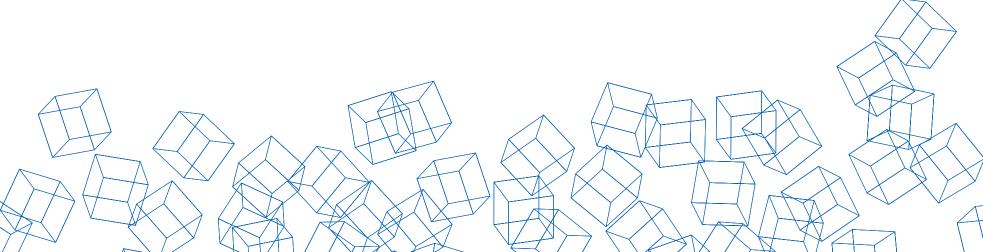
Their effect on the quality and performance properties of cement help reduce clinker content - a significant contribution to the sustainability of the construction industry. The additives are formulated to solve agglomeration problems in tubular grinding mills and to improve the quality of cement. Their action mechanism helps eliminate agglomeration phenomenon (pack-set) between the ground particles and reduce agglomeration inside grinding mills. Their use allows operating conditions of plants to be optimised, improving the quality of finished cement while offering interesting economic advantages in the running of cement plants. Mapei produces two families of standard cement additives and has the technology to formulate tailor-made additives designed and produced ad hoc for specific requirements. The philosophy behind this division of Mapei includes the maximum care for the quality of their formulates and special attention to ensure that each and every one of their clients is completely satisfied. The aim is to "deliver quality", reducing fixed costs (transport, production, etc.) so that comparisons may be made on the basis of total cost per metric ton of cement produced, to meet the real requirements of cement plants.



## THE WORLDWIDE PARTI



## NER IN CONSTRUCTION



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