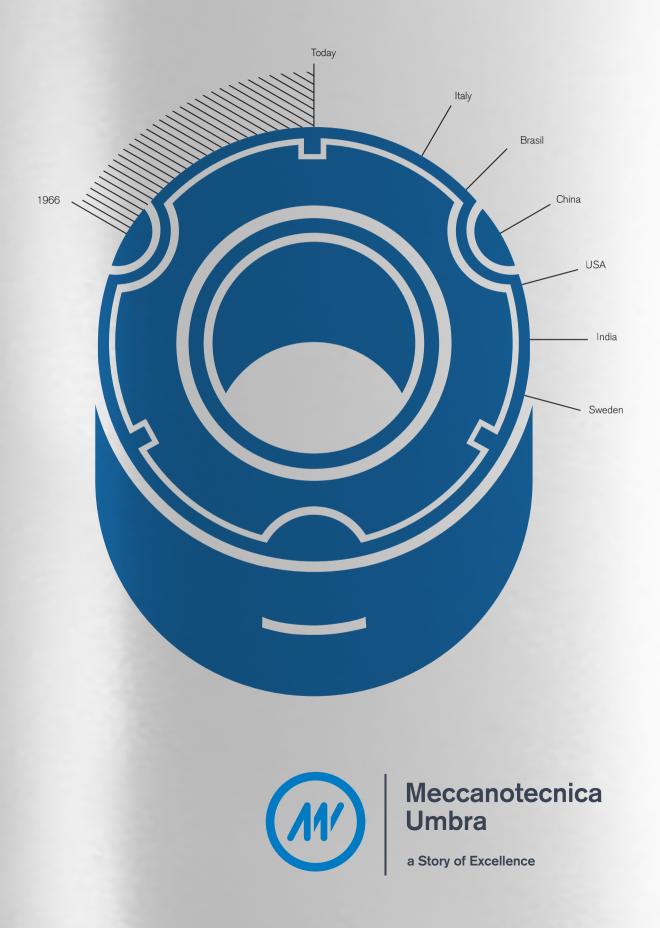
MeccanotecnicaUmbra A Story of Excellence



Welcome to MeccanotecnicaUmbra Group



Meccanotecnica Umbra



A perfect story. Half a century of history, at the pace of innovation





Fulvio Ginobri

1966

electrical connector moulding presses

Alberto Pacifici

Concezio Strappelli

Meccanotecnica Umbra was founded in 1966, becoming, over the next five decades, a leading international group in the field of mechanical seals, with a financial strength that is a guarantee for all its suppliers and vast customer base, who can rely on a certified quality system.



The founders

MTU designs, manufactures, and markets sealing systems for rotating shafts which are used, not only in the automotive field, but also in household appliances and various industrial fields such as chemical and petroleum plants, mining, food, and in the use of renewable energies.

If MTU's history and experience in the automotive sector certify its international leadership, a huge investment program is under way in the other sectors to develop the group's potential on a global scale.

Umbria, cradle of the Italian Renaissance. Our lifeblood is drawn from the roots of history

> ha of the ch se of Its a c

7

The fortified town of Campello sul Clitunno

Year after year, **Meccanotecnica Umbra** has confirmed its bond with its territory of origin, Italy and Umbria in particular, the cradle of Italian Renaissance culture, choosing as its headquarters the historic seat of Campello sul Clitunno in the province of Perugia.

Its dedication to production in Italy was a clear choice, which expresses its love for its land and Italian culture, which has always made reliability its hallmark.

Standard-bearers of made in Italy. Born with reliability in its genes





Meccanotecnica Umbra's history and rich cultural heritage has its roots in the Italian racing tradition, famous for its meticulous attention to detail and design. Alongside the largest automotive manufacturers, it is constantly developing new technical solutions to bring its products to the height of technological evolution.

Market segments

In the automotive sector, **Meccanotecnica Umbra** has reached a top position at a global level, by now established over decades. The experience gained in civil and industrial plants, the food and chemical-pharmaceutical sector, as well as in agriculture, mining, and paper mills, and in the new frontier of renewable energy, allows MTU to look to the future with certified ambition. It is equally competent in the household appliance industry, where its market leadership makes MTU a reliable partner.





RENEWABLE ENERGIES 4

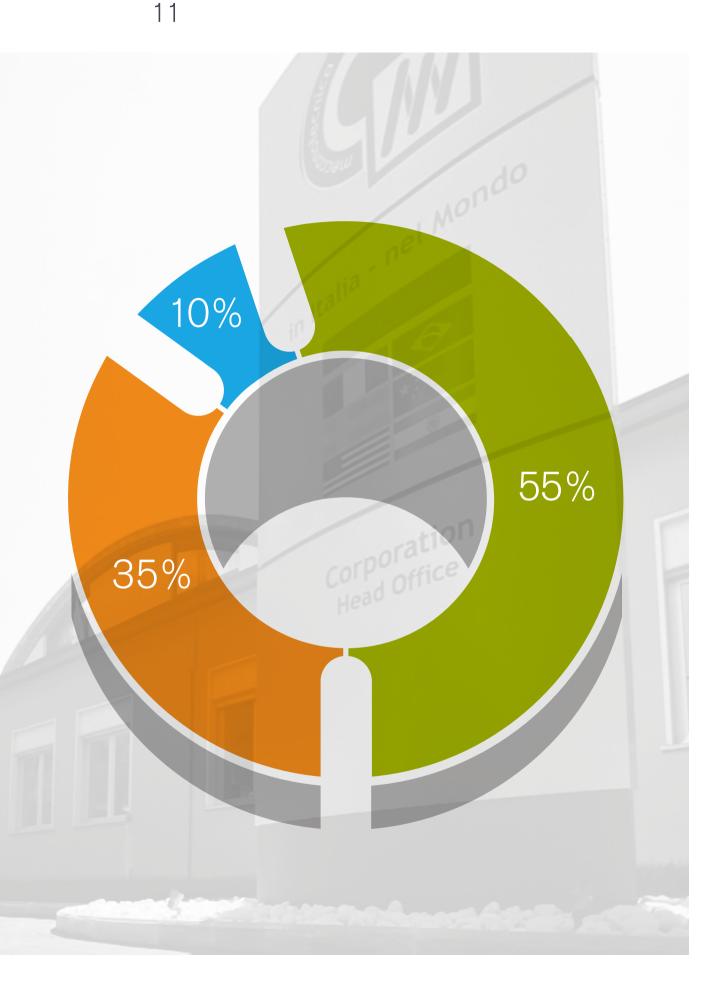
CHEMICAL AND PHARMACEUTICAL

AND PULP & PAPER EUTICAL

0

GENERAL PROCESS

INDUSTRY





APPLIANCES

An international presence for a global future. We work to enhance every detail



An international presence for a global future. We offer ourselves as a partner to those who want to challenge the market

A worker in the Campello sul Clitunno plant. Attention to detail is in the dna of our personnel

15

Meccanotecnica Umbra operates throughout the world with production facilities that also benefit the countries where they are located: In fact, from the moment it expanded outside Italy, the management has chosen to integrate its culture fully with that of the countries in which, from time to time, it has built its own production sites. A choice that expresses respect and attention to the culture of the host nations that has led the group to expand in Brazil, China, the United States, Mexico, India, and Sweden, setting the stage for a future presence on five continents.

By virtue of this entrepreneurial approach aimed at continuous growth, MTU is successfully meeting growing international competition, diversifying into peculiar niches, and gradually increasing its market share. The result is the formation of a rich patrimony, not only experiential, but also cultural, that allows MTU to evolve at the relentless pace of globalisation.

An international presence for a global future. We observe the present to improve it



We love the countries that host our subsidiaries, so much so that we encourage our personnel to integrate with the local culture, drawing on its best ideas.



In all operational areas, the attention to detail of MTU's personnel make them determinant partners



A culture that has reliability in its dna











Our operations

Meccanotecnica USA inc. Novi - IL, USA















Meccanotecnica Umbra Campello sul Clitunno - IT



Meccanotecnica India Pvt.ltd Madurai



Itd

Meccanotecnica Umbra Qingdao - CH



From the heart of Umbria, we select the best professionals 23







Perfection at the pace of innovation.

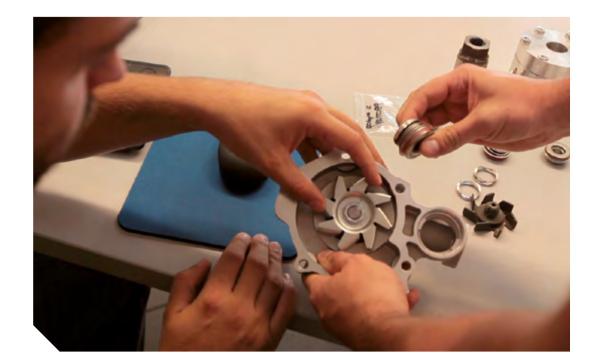
We are constantly seeking the maximum functionality Confident of building long-term relationships with its customers, **Meccanotecnica Umbra**, offers itself as a leading partner in constant growth.

The Research & Development department, in a dedicated in-house area of 2,000 m² with over 100 testing stations, continuously

25

develops new solutions and implements research programs by maintaining contacts with universities and national and international organisations, to develop scientific knowledge and possible collaborations. Its links to the academic and institutional world are the feather in the cap of MTU's management.





Attention to detail as its hallmark

27

The prototypes made in the plants of the Meccanotecnica Umbra group are subject to periodic process certifications that are monitored and evaluated with the aim of constantly improving their performance. The products are produced in the in-house workshop, are sent for mechanical testing of the seals, and the validation programs are agreed with customers.





The final control is acceptance testing to guarantee the quality of the materials produced. So, MTU has a certified production chain where nothing is left to chance.

A world leader in mechanical sealing systems

The heart of **Meccanotecnica Umbra**'s business consists of the production of sealing rings, a field in which the Campello sul Clitunno company is a world leader.

Specifically, MTU produces mechanical seals and rings made of silicon carbide, carbon, and PTFE-based composite materials (the latter with the Mecflon registered trademark) all with high tribological characteristics able to increase the efficiency of engines and machinery worldwide. It is a work carried out in-house, within the walls of the plant in Campello sul Clitunno, in Umbria, with attention to every detail and without entrusting delicate production steps to third parties.

All rings are inspected, both at the acceptance stage and during the process, with special automatic vision tools.

After stamping, they are assembled on semiautomatic lines, where the human touch certifies the correct operation of the chain. All rings are tested in critical condition and at subsequent acceptance testing before packing, so that no detail is overlooked.





Our products

TYPE OF APPLICATION



AUTOMOTIVE APPLICATIONS

STRUCTURE Simple, one-piece mechanical seals

for circulation pumps.

FUNCTIONALITY Used in the cooling circuits of internal

combustion engines of motor vehicles, cars, industrial vehicles, and fixed installations.

VALUE ADDED

Innovation solutions available for the reduction of CO_{\circ} in cooling circuits.

TYPE OF APPLICATION

LIGHT INDUSTRIAL APPLICATIONS

STRUCTURE

FUNCTIONALITY

VALUE ADDED

TYPE OF APPLICATION



APPLIANCE APPLICATIONS

STRUCTURE

Mechanical seals for small electric appliances.

FUNCTIONALITY

Ensuring the silent operation of everyday appliances such as dishwashers and boilers.

VALUE ADDED

Innovative solutions available for the bushings of brushless motors.

TYPE OF APPLICATION

HEAVY INDUSTRIAL APPLICATIONS

STRUCTURE

33

Mechanical seals for pumps used in civil, agricultural, and industrial applications.

- Used in particular for heating systems,
- drinking water autoclaves, irrigation pumps
- and drainage wells, wastewater treatment plants,
- and pumps for swimming pools and whirlpools.

Wide choice of designs and material combinations to satisfy every application.

Standard seal solutions or on specific customer request.

FUNCTIONALITY

Mechanical seals made to measure for the food, pharmaceutical, chemical, mining, pulp and paper, and petroleum sectors.

VALUE ADDED

Innovative solutions available for plants for the production of renewable energies.



environment

Meccanotecnica Umbra holds the most important environmental certifications at both the product and process level. Every plant and every machine is certified conforming to the UNI EN ISO 9001, ISO/TS 16949, UNI EN ISO 14001 standards and EMAS and OHSAS 18001 regulations.

Environmental sustainability is the hallmark of every product made by MTU, which boasts all plants certified conforming to the latest regulations in the automotive and industrial sectors, ensuring a healthy work environment especially for its employees, the real power and resource of the group. Quality, technical expertise, and service are the tools for winning in a competitive market, and they are the foundation of the company's strategy that is focused on "value" for the customer.

MTU loves informed production, which takes place in full respect of the environment and society, promoting protection and adapting operational methods to the requirements of the reference standards. The maturity gained in recent years has allowed the Group to implement an Integrated Environmental and Safety Management System (IMS) with the goal of continuously improving environmental performance and occupational health and safety.





Health and safety in our workplaces are essential requirements New challenges for future growth. Projected forwards to remain leaders



37

Meccanotecnica Umbra operates at the pace of innovation and bases its corporate culture on guiding values such as transparency of conduct and the assumption of a strong corporate responsibility. For this reason, we continually seek new challenges, today represented by the dynamic solar thermo, from drilling at sea to aerospace. To face these new challenges, from time to time MTU allocates considerably to investment programs, on average 5% of annual turnover.





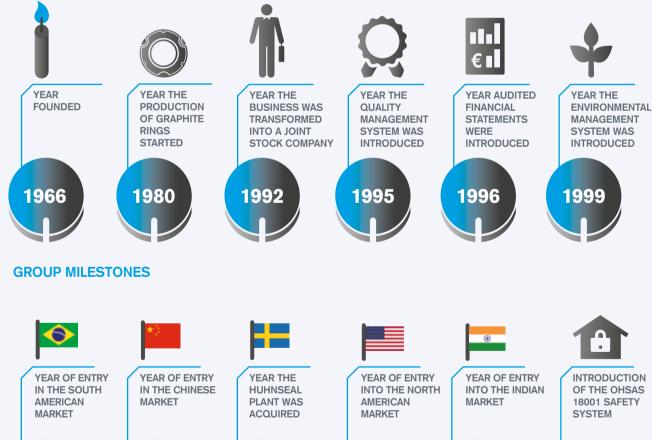
The choice of innovation is aimed at improving products and services and the consequent reduction of costs so as to increase profitability and the satisfaction of our employees and customers.

A remarkable share of our investments is dedicated to reducing environmental impact, confirming the company's eco-sustainable mark. Quality, innovation, social responsibility, and the wisdom that comes with the continuous training of our personnel ensure a future of growth, even for new generations, and represent a guarantee for customers of the permanence of a solid and long-lasting partner.

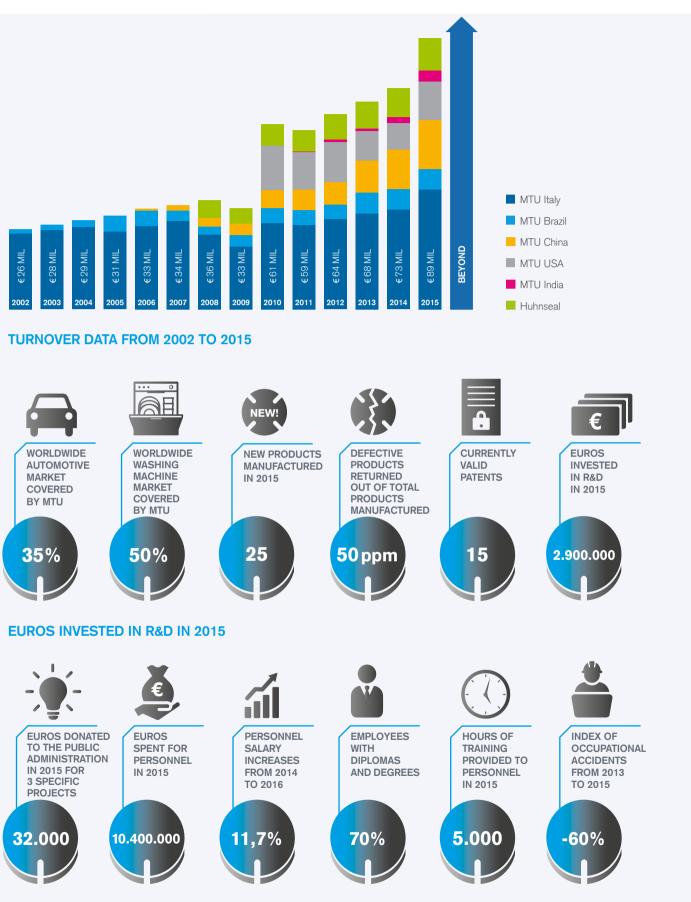


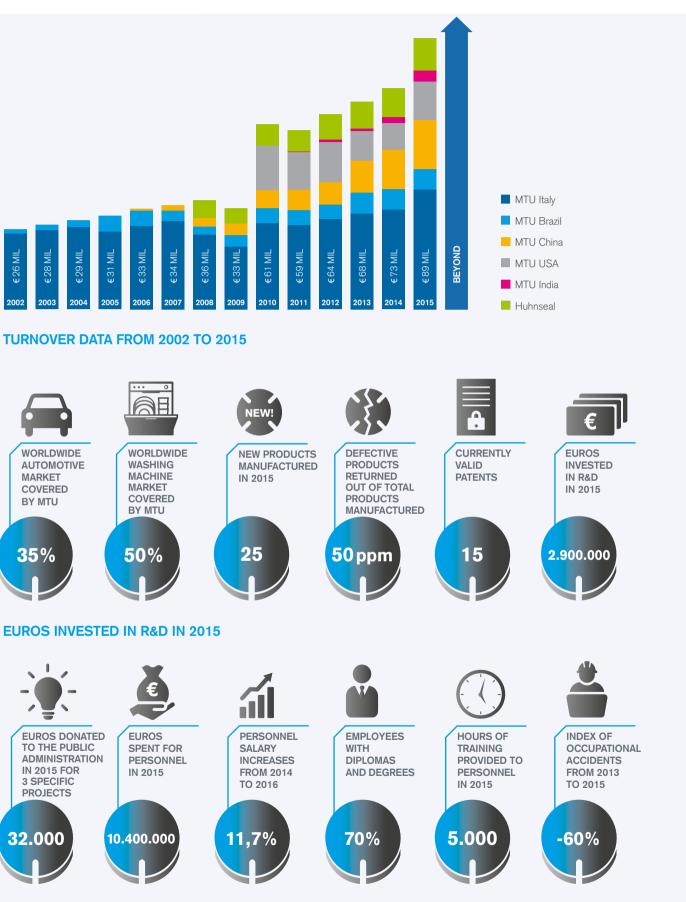


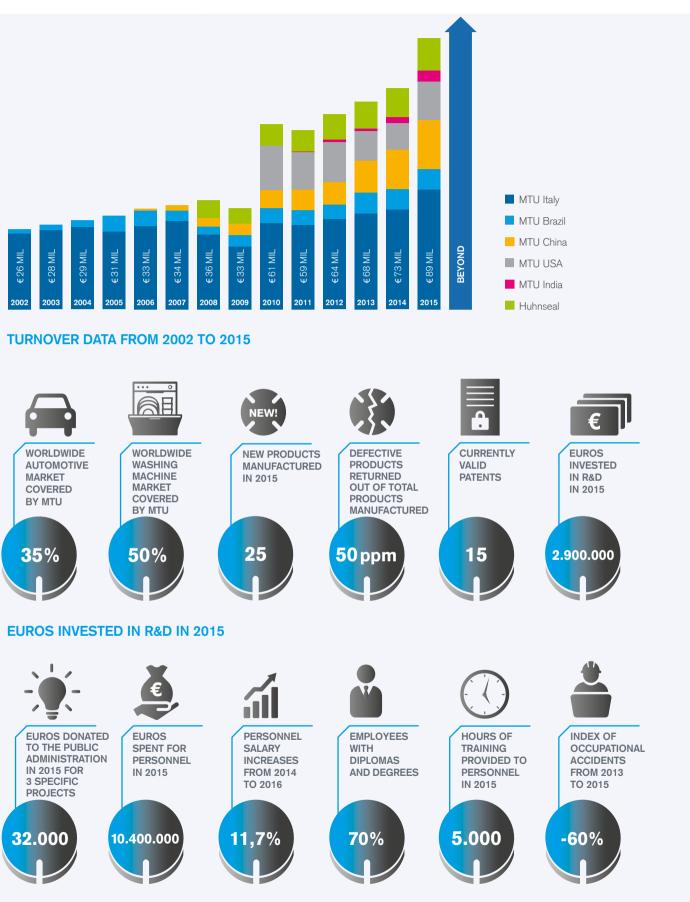
The figures of our history



GROUP MILESTONES







PERSONNEL DATA

Meccanotecnica Umbra worldwide

Mecanotécnica do Brasil Itda

R. João Maria Goes, 399 83060 - 206 São José dos Pinhais PR - BRASIL Phone: +55 41 3381 2600 Fax: +55 41 3381 2621 1 unit surface = $20,000 \text{ m}^2$ (3.500 m² covered) brasil@mtu-group.com www.meccanotecnica.br.com

Meccanotecnica Umbra (Qingdao)

North of No 8 road jiao zhou wan industrial park Jiao zhou, Qingdao, PRC Phone: +86 532 8729 3888 Fax: +86 532 8729 3118 1 unit surface = 18.000 m^2 (6.000 m² covered) china@mtu-group.com www.meccanotecnica.cn.com

Meccanotecnica USA inc.

Corporate & Distribution Center Seguin Rd. Suite F Pharr. TX 78577 Phone: +1 956 782 2400

Sales Technical Office 41650 Gardenbrook Road Suite #110 - Novi, MI 48375 Phone: +1 248 347 0606 ext. 224

Production Unit San Fernando, Tamas - Mexico 1 unit surface = 28.000 m^2

(13.000 m² covered) usa@mtu-group.com www.meccanotecnica.us.com

Meccanotecnica India Pvt. Itd.

Sales offices 351, Sr. No. 28/3/1 Ambegaon Kh. Near Jambulwadi Lake Pune 411 046 Phone: +91 020 67919600

Production Unit C-23 & C-24 SIPCOT Industrial Complex Pallapatti Village, Nilakottai Taluk Dindigul District - 624 201 Tamil Nadu, INDIA Phone: +91 04543 238222 1 unit surface = 16.000 m^2 (3.500 m² covered) india@mtu-group.com www.meccanotecnicaumbra.com

Huhnseal AB

Box 288 Järvgatan 1 26141 Landskrona SWEDEN Phone: +46 418 449940 Fax: +46 418 449969 1 unit surface = 2.700 m^2 sales@huhnseal.com www.huhnseal.com

Meccanotecnica Umbra S.p.A. Headquarters

Via Giovanni Agnelli, 7/9 06042 Campello sul Clitunno (PG) ITALIA Phone: +39 0743 2791 italy@mtu-group.com www.meccanotecnica.it

Meccanotecnica Umbra Group Company video



3 Production Plants = 30.000 m^2 $(14.000 \text{ m}^2 \text{ covered})$ Production plants via Giovanni Agnelli 7/9 via Giovanni Agnelli 6/8 via Giovanni Agnelli 25 06042 Campello Sul Clitunno (PG)

Share capital € 4.330.000,00 Perugia Business Registry Tax Code and VAT No. 00163450547 Business and Economic Registry (REA) PG 82116 ATECO Code 25.99.99



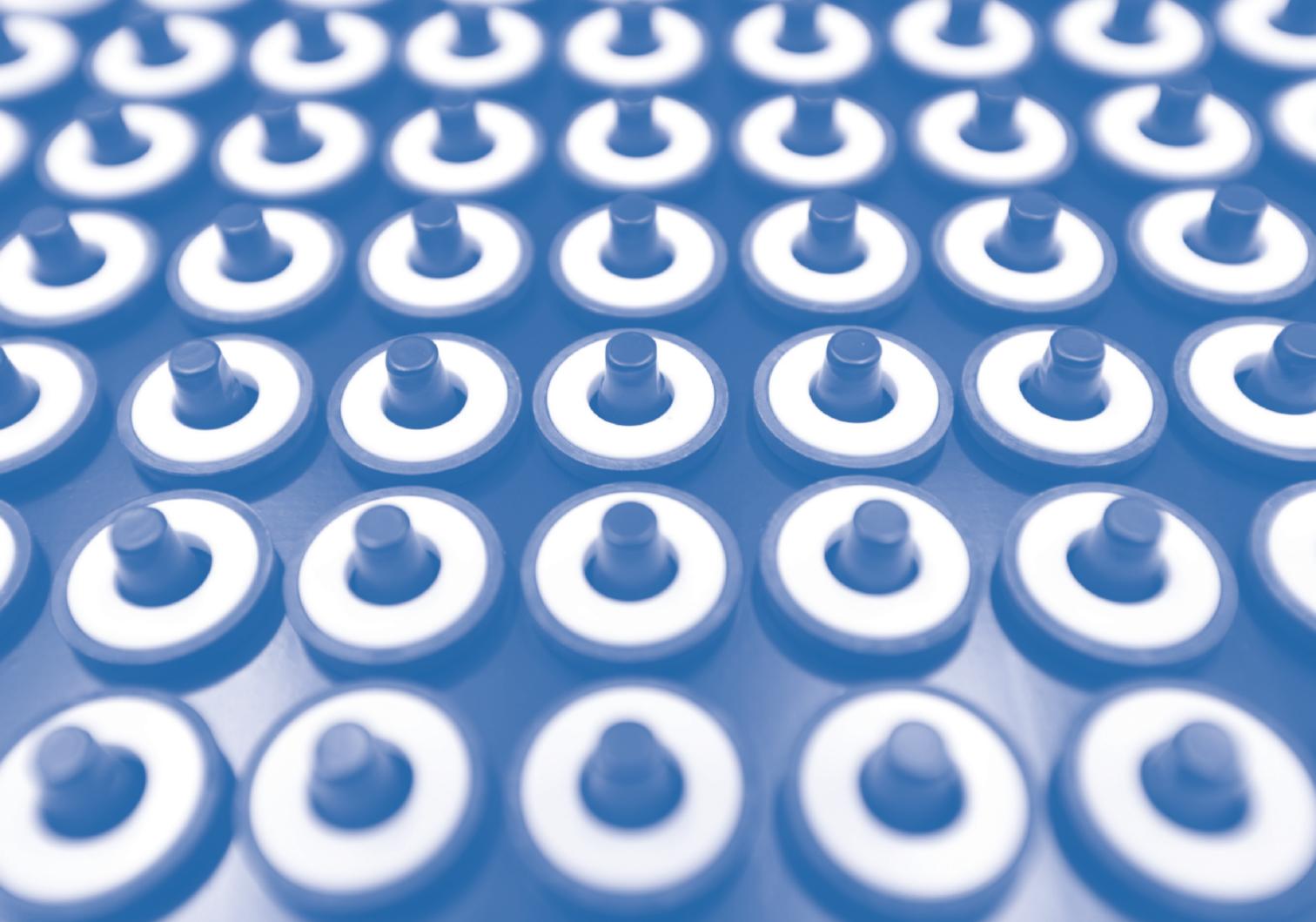




Join us



©2017 Meccanotecnica Umbra Group



www.meccanotecnica.it



