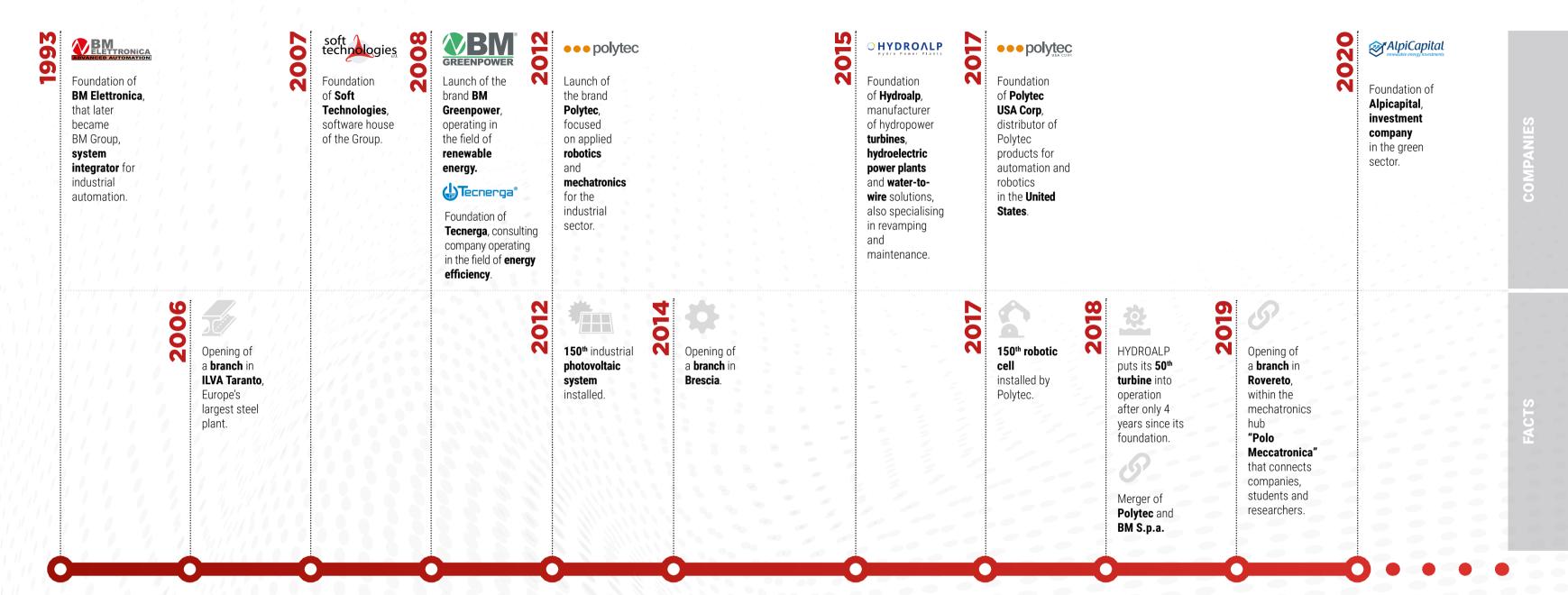




THE MILESTONES THAT MADE OUR STORY





INVESTMENTS

IIoT/AI

INTRALOGISTICS



HEADQUARTER

OUR NEW LOCATION: 100% GREEN



"Just over a year ago, in agreement with the other partners, we decided to build a new site in which to house all our departments, including our software house Soft-Technologies.

We believe in the region we have started from and this is a value we are proud of. Most of our employees come from small towns nearby, they are our driving force. We converted a disused area in Borgo Chiese.

At the planning stage, we decided to express our corporate identity also through the choice of colours, forms and materials for the building, through which we wanted to communicate passion, innovation, determination, future. Currently, 10,000 m² of a total area of 30,000 m² are allocated to offices, workshop and R&D department, warehouse, meeting and training rooms. The availability of suitable and dedicated areas for pre-testing activities and better organised offices allows us to efficiently receive customers from all over the world and to carry on our work to mark out new paths for development with a view to innovation and sustainability"

Alex Bottini, BM Greenpower Division Manager and Shareholder.







BM GROUP HOLDING S.p.A.

BORGO CHIESE (TN) 38083 - Via Roma, 151 www.bmgroup.com

Operating Companies





Share: 100%



Brand of: BM Group



Share: 100%



Share: 75%



Share: 90%



Strategic Operating Companies



Share: 51%



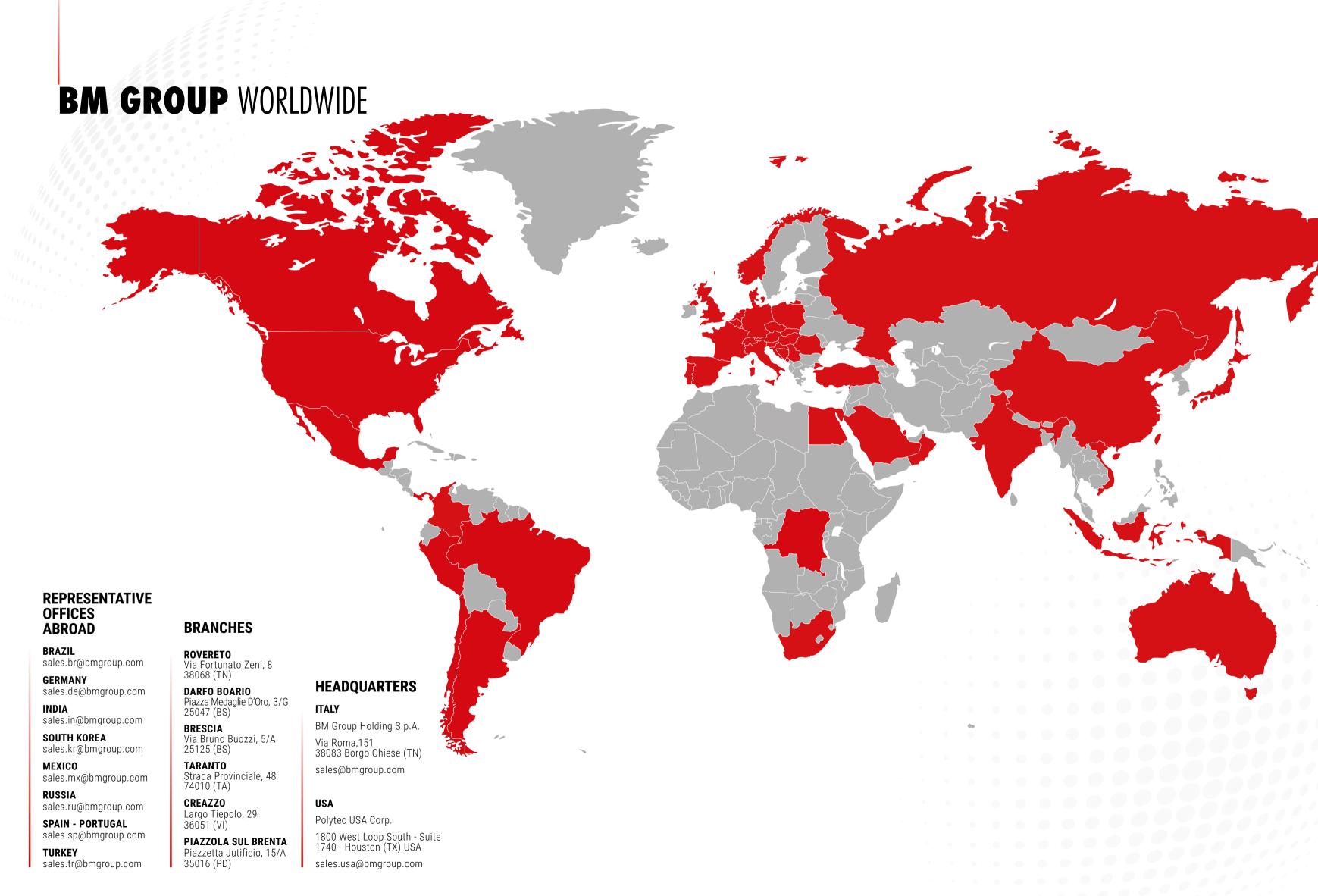
Share: 50%



Share: 80%

Special-Purpose Companies

SEA S.r.I. Share: 100%	MAGRIOLA S.r.I. Share: 95%	DARNIA S.r.I. Share: 100%
MOMMIO S.r.I.	LIMENTRA S.r.I.	BM WIND POWER S.r.I.
Share: 100% PIG S.r.I.	Share: 100% MELA S.r.I.	Share: 50% TIRRENO WIND S.r.I.
Share: 100%	Share: 100%	Share: 25%



VISION

Thinking about the future is normal, but there is not just one future. There are several futures and trying to shape them is the most exciting challenge.

This is how BM Group's story begins.

Culture of sustainability, passion for technology, desire for innovation. These are the values of BM Group, an Italian industrial group composed of companies specialising in different fields but sharing the same objective: to enable the industrial sector to implement the technological transformation it needs to become smart and sustainable.





INNOVATION

IS COLLABORATION

Innovation always accompanies a cultural renewal. Today, the traditional and individualistic business concept is rediscovering the added value brought by collaboration. Innovation can be achieved more efficiently and faster only through the interplay of specialised skills, integration and the connection of functions.

Innovation is risky by nature and, therefore, innovators need to move carefully along the fine line that separates success from failure, because innovation **is successful** as long as it is purchasable.

MADE IN ITALY

Over time, Italian artists, creative talents, poets and engineers left behind an important legacy around the world. Even in hard times, this typically Italian innovating spirit arises, combining passion and reason, pursuing dreams and projects and becoming the bridge between past and future that from a crisis leads to new opportunities.

6th

COUNTRY IN THE WORLD

For installed robots after China, Japan, USA, South Korea and Germany **2**nc

USER

Of robotics in Europe 10th

COUNTRY IN THE WORLD

For man to machine ratio (212 robots every 10,000 operators)

ROBOTIC WORKSTATION IN HARSH ENVIRONMENTAL CONDITIONS TO IMPROVE SAFETY IN THE STEEL INDUSTRY G.A. N. 709553

BM Group Polytec S.p.A Scuola Superiore Sant'Anna, TeCIP Institute - ICT-COISP Pisa, Italy ILVA S.p.A. Taranto, Italy. Technische
Universität Dortmund,
Sozialforschungsstelle,
Dortmund, Germany.
Research Fund for Coal & Steel

The prototype built for the safe maintenance of ladles was bought by ArcelorMittal Italia and is working in its site in Taranto, Italy.

2015



SANT'ANNA SCHOOL OF ADVANCED STUDIES

Sant'Anna School of Advanced Studies is a public university institute – with special autonomy – focused on applied sciences: Economics and Management, Law, Political Science, Agricultural Sciences and Plant Biotechnology, Medicine, Industrial and Information Engineering.

MADE IN TRENTINO

The close connection between BM Group's manufacturing business and the mechatronics cluster of the Italian region of Trentino – that includes the University of Trento, Fondazione Bruno Kessler and the prototyping laboratory "ProM Facility" of Polo Meccatronica – promotes important synergies to meet increasingly ambitious technological challenges that translate into business opportunities and competitiveness for the industry of tomorrow.



RESEARCH AND
TECHNOLOGICAL
DEVELOPMENT IN
FIGURES

2020

PROJECT IN THE FIELD OF METALS RECYCLING

BM Group Polytec S.p.A
DFP Technologies and Fondazione Bruno
Kessler 38100 Trento, Italy



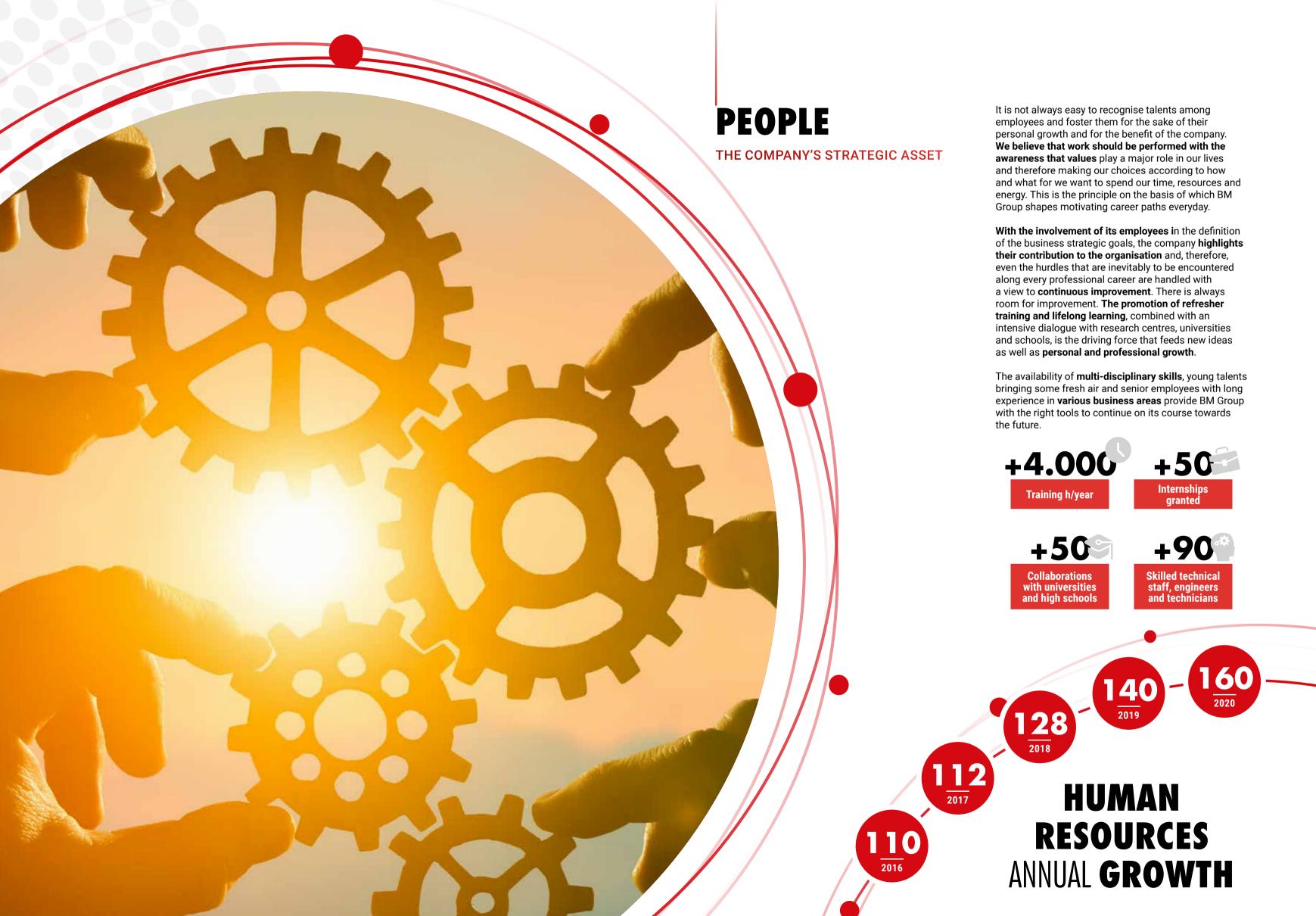
FONDAZIONE BRUNO KESSLER

Collaboration and exchange activities with national and international research organisations make the Fondazione Bruno Kessler one of the most important centres for scientific research and technological development in Europe, with over 400 researchers.



POLO MECCATRONICA

BM Group has an Engineering and Development office inside the centre for mechatronics Polo Meccatronica in Rovereto, Italy. **Conceived as a hub**, here players from the areas of manufacturing, education and research – all related to mechatronics – exchange views and collaborate. The co-existence of startup companies, high schools, university departments, research centres and industry accelerators sets the ideal conditions to **test and create innovative processes and products**.



INSIGHT

THE PATH THAT LED TO 4.0

After overcoming the crisis in the years 2007-2013, the manufacturing industry has reached a crucial moment in its history. **Driven by competitive** pressure compelling them to become agiler, more innovative as well as more costeffective and enabled by advanced digital and analytic technologies, manufacturing companies of all sizes have decided to pursue a vision for the future of their business that will change the rules of competition, work, organisation and leadership.

"The key technologies around which Industry 4.0 is developing – explains Martin – involve the whole business cycle: design (augmented reality, mechatronics), production (adaptive, autonomous and collaborative robotics, 3D printing, cyber-physical systems, smart materials), infrastructures (IoT, Big Data, Cloud, Machine Learning), connectivity (M2M, remote service, LPWAN, 5G), logistics (smart sensors, RFID, AGVs, drones), maintenance (wearable devices, apps), supply chain and new generation business management software (Scada, Mes, Erp).

The main technological features of Industry 4.0 are focused on the interconnection of machines, devices, sensors and people and on the relevance of the data exchanged between them.

The Fourth Industrial Revolution assigns a central role to the **power and strength of data** and the capacity to analyse multiple sources with the use of **Big Data**. Data are a critical element of business competitiveness and the capacity to analytically process them has gained strategic importance in every company." This book also offers an interesting **set of groundbreaking and encouraging examples for the whole Italian industry**: thirty outstanding case histories that highlight the value of different companies from the point of view of the digital transformation.

The book by Armando Martin "Industria 4.0, sfide e opportunità per il Made In Italy" is a guide to the Fourth Industrial Revolution devoting special attention to the Italian manufacturing system. It is focused on 4 main sections: business models, enabling technologies, innovation scenarios beyond factories and Italian pioneers in business 4.0. In other words, it provides the reader with the tools he needs to understand the enabling technologies of Industry 4.0 as well as examples of typical implementation, without overlooking factory organisation or public and social aspects.

ARMANDO MARTIN INDUSTRIA 4.0 SFIDE E OPPORTUNITÀ PER IL MADE IN ITALY About Armando Martin Industrial Engineer, Directional Consultant and Scientific Journalist.

It provides an overview that includes examples of advanced IoT applications (Cimbali Fameccanica, Fedegari, IMA, Salvagnini, Zoppas Industries), models that are highly integrated with the supply chain (Acque Minerali San Benedetto, Barilla, Brembo, Bonfiglioli, Gragnano, ICAM, Luxottica, Marcegaglia), the most advanced examples of smart factory (Agusta Westland, Ansaldo Energia, Avio Aero, Dallara Automobili, Marchesini Group, Maserati, Sacmi, Weerg) and the most unique models of system innovation (A2A, Costa

Crociere, Fonderie Zanardi, Gruppo Fontana, Loccioni, OVS, Polytec, Technogym). With the book "Industria 4.0, sfide e opportunità per il Made in Italy" published by Editoriale Delfino, Armando Martin was awarded the National Prize for Scientific Dissemination 2018, in the area of "Engineering and Architecture". This initiative involved Italian and foreign researchers, teachers, journalists, scholars and writers, with the aim of making books and reading more attractive for the Italian public within an effective scientific dissemination.

DIGITAL TRANSFORMATION: A NEW WAY TO WORK AND PRODUCE





Digital transformation in industry requires a three-dimensional approach, including a deep understanding of production processes, a thorough knowledge of the opportunities offered by new technologies and a cultural renewal for a new generation of workers.

AN ATTRACTIVE INDUSTRY FOR THE NEW GENERATIONS

Process automation allows to manage and control processes, standardising machining and improving production, with therefore lower costs and greater accuracy and reliability.

Moreover, every task executed by a smart robotic cell is saved in a local database, which is then replicated to the CLOUD with the aim of collecting, managing, analysing and viewing data on production and process performance, as well as running diagnostic tests and taking consequent preventive measures.

Thanks to the availability of objective data, today we can take more effective decisions.



ROBOTICS

AND MECHATRONICS

- ✓ Robotic cells for the steel industry
- ✓ Robotic cells for the paper industry
- ✓ Robotic cells for handling and palletisation
- Robotic cells for foundries
- Customised robotic cells for the industrial sector
- Intralogistics and Driverless vehicles
- ✓ Integration of robotic cells with new and existing automated lines
- ✓ PLC, robot, SCADA software development
- ✓ 2D and 3D artificial vision systems



In robotics for the steel industry

+200

Installed robots worldwide

+1.000

Completed automation projects

+50

Prototypes

Prototypes that became bestsellers with more than 20 references worldwide

> **20 Patents**





Steel







Automotive



www.bmpolytec.com





A NEW CONCEPT OF AUTOMATION



Systems innovator: this is how BM Group Polytec should be defined, because its capacity to influence planning choices with a view to the future extends far beyond the assembly of hardware and software components.

For years, factory automation has allowed to achieve some improvements in the production chain and every single machine, but the new frontier of industrial automation uses data interconnection and sharing as essential factors to increase productivity and enhance efficiency.



AUTOMATION AND INDUSTRIAL SYSTEMS

- ✓ Process automation and DCS systems
- Hardware and software upgrade for existing automation systems
- Electrical engineering
- **Automation Panels & Drive Panels**
- Power Distribution Center
- PLC, Drive, SCADA and tracking software development



- ✓ UNI EN ISO 14001:2015
- ✓ UNI EN ISO 9001:2015
- ✓ UNI CEI EN ISO 50001:2018
- ✓ UNI EN ISO 45001:2018
- ✓ Certificate of Compliance UL 508A/CSA 22.2
- ✓ Siemens Solution Partner for Drives & Motion
- Siemens Solution Partner for Factory Automation
- ✓ Rockwell Recognized System Integrator Control
- ✓ Kaspersky Gold Partner
- ✓ Attestazione SOA OG6/II OG9/VI OG10/V OS30/IV-BIS





FROM PLC TO HoT A GREAT SOFTWARE HOUSE

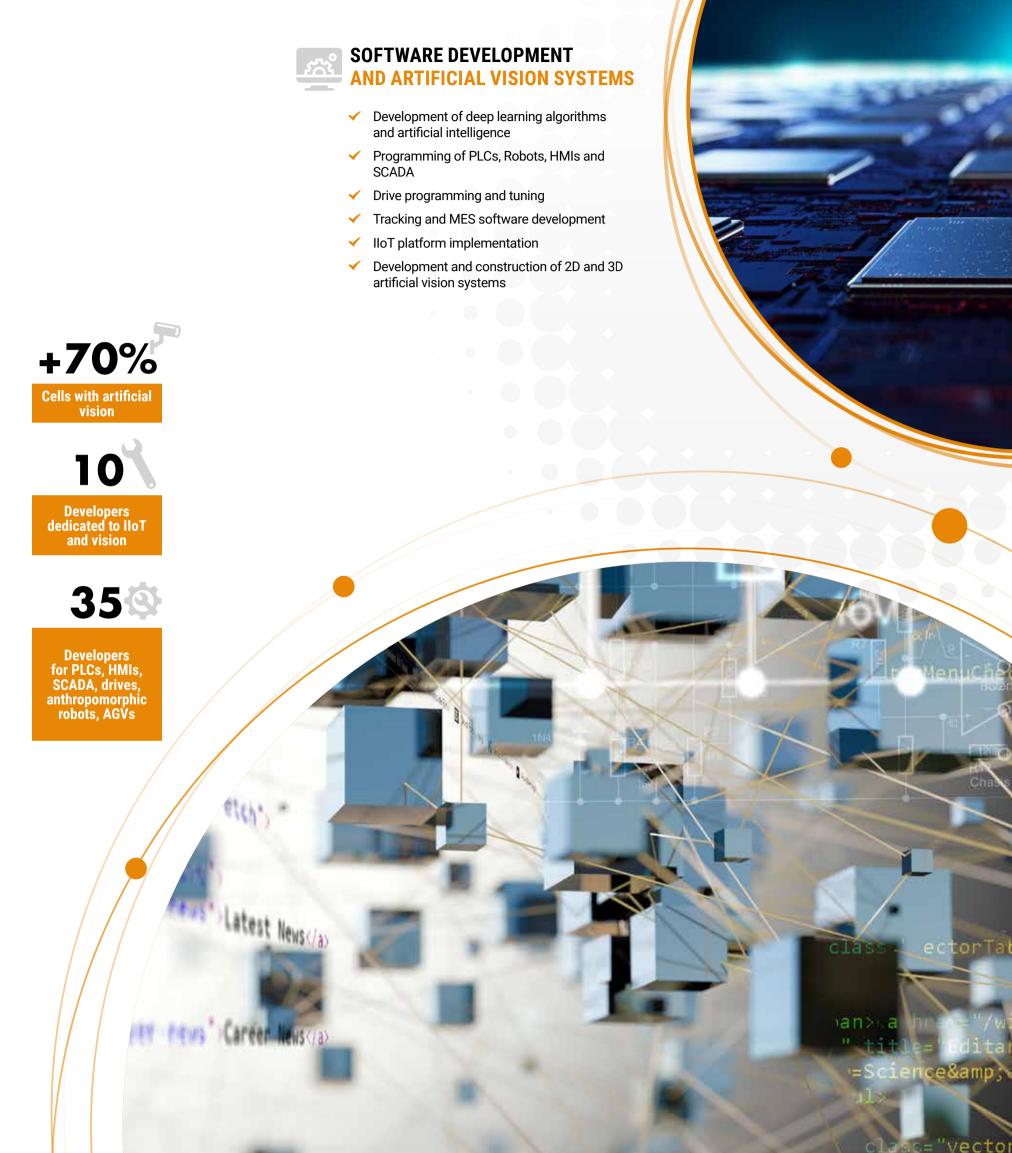




BM Group software house, Soft Technologies, brings together all fields of expertise related to software and employs almost fifty people. between developers and programmers.

In addition to the development of programming software for platforms that are the "pillars" of automation, like PLCs, SCADA and robots, for years, the Group has been bringing together several other fields of expertise, more innovative and increasingly interconnected. 2D and 3D artificial vision systems, resulting from the integration of optical, electronic and mechanical components, also combine with software processing for the recognition of certain image features, for verification, classification, identification and selection.

The development of artificial neural networks, supported by powerful computational hardware, is the working basis for the design of deep learning algorithms and artificial intelligence, which is increasingly being used in the industrial sector. The implementation of these innovative technologies in the industrial field, in connection with important R&D projects, allows to bring to market products that can change and make work more efficient in factories. Data are later centralised in the Cloud and can be viewed on web and mobile platforms to enable a qualitative and quantitative analysis, on the basis of which strategies for improving production and, in some cases, for predictive maintenance are defined.



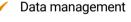
TECHNOLOGIES FOR CIVIL AND INDUSTRIAL INFRASTRUCTURES



BM Group Polytec is a provider of automation and software solutions for industrial and commercial buildings and infrastructures that allow to control and supervise various systems in working conditions, thus improving safety, uptime and energy efficiency.



- Electrical engineering
- ✓ Power Distribution Center
- Automation Panels
- Motor control centres
- Redundant automation systems
- ✓ Safety management
- ✓ PLCs & Drives
- ✓ HMIs & SCADA





THE INNOVATION OF INDUSTRY

A NEW AMERICAN DREAM





The Fourth Revolution began in the United States earlier than in Europe but focusing on system integration in the first place and attributing lower priority to the technologies concretely applied to the production process.

Following the first important projects in the field of robotics in the USA, BM Group Polytec drew the attention of America's top steel producers, who highly appreciated the advantages deriving from the implementation of robotic systems and automation platforms in their facilities. The willingness to develop the market to its full potential and ensure a constant presence and a quick response in that area led to the foundation of Polytec USA Corp., the American company of BM Group, conceived to provide full after-sales support (service, spare parts etc.), expand into new markets and reach new customers.

+50

Installed robotic cells

+50

Automation upgrade projects

+10*

Sales/Technical team





POLYTEC USA Corp.

HOUSTON

1800 West Loop South - Suite 1740 - Houston (TX) USA www.polytec.us



A VIEW TO THE FUTURE Part 1

with: ANDREA TONINI Sales Director and Shareholder.

"Every new achievement is the result of the experience that we gain day by day and the innovating spirit we stand out for.

We aim at setting trends that can conquer the critical mass through our innovations, in the knowledge that innovation is a progressive process that takes some time to be understood.

We ask ourselves what will be the next needs to which we can respond. We listen to the market with great attention and dialogue with companies that differ from ours. We are aware that the global market compels manufacturing companies to increase the efficiency, flexibility and productivity of their plants.

We will focus on intralogistics, a field that plays a central role in all processes, confident in the fact that it will prove to be one of the leading sectors in the "Industry 4.0" revolution. Our first important projects, that also included automated guided vehicles, made us realise how our know-how is perfectly suited for the development of these identification, handling, traceability, tracking, geolocation and inter-process communication platforms. This is why our goal for 2021 is to gain market share in this field."

Andrea Tonini



THE ENERGY OF THE FUTURE IS RENEWABLE



With twenty years of experience in the design and construction of photovoltaic, wind and biomass power plants at national and international level, BM Greenpower is the Group division specialising in renewable energy plants and a reliable partner providing "turnkey" solutions as an EPC contractor.

From technical and administrative procedures to after-sales service, BM Greenpower is a one-stop provider that takes care of all aspects for its customers. The possibility to rely on the **company's strong background in the fields of automation, plant engineering and software development** is the added value through which this professional team can offer high-tech and top-performance solutions.

BM Group's solidity is reflected in the proven reliability and quality of every accomplished job.



- Feasibility study
- ✓ Design
- ✓ Installation
- Commissioning
- Maintenance



+70MW

Constructed photovoltaic systems

+500

Designed and constructed photovoltaic systems

Dedicated engineers and technicians

+ 12MW

Constructed wind power plants

Designed and constructed biomass power plants



BM GREENPOWER A BRAND OF BM GROUP

BORGO CHIESE (TN) 38083 - Via Roma, 151

www.bmgreenpower.it

HYDROELECTRIC TECHNOLOGY

FROM THE HEART OF THE ALPS



Hydroalp was founded in 2015 as a spin-off company of BM Greenpower for the design of hydropower turbines. Within about five years, it gained an important position in the segment of small hydropower plants.

A renowned technical team with **previous experience** in the most important companies operating in this field is the key to the company's success that has quickly allowed it to accomplish important projects and extend its business to water-to-wire solutions. Supported by the expertise of the other companies of BM Group in the fields of automation and software development, it successfully operates on the market of plant revamping. From civil works to after-sales service, Hydroalp today acts as an EPC contractor and is **oriented towards the international market**.

+85

Mounted turbines

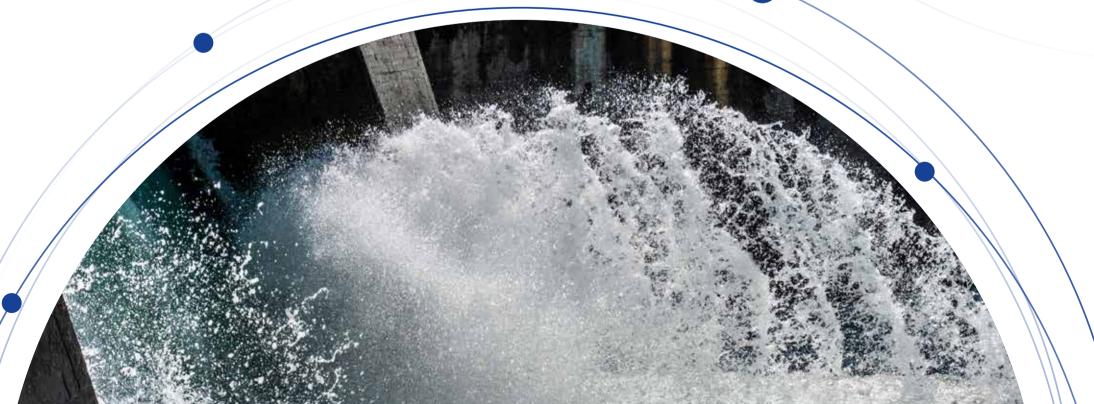
+40

Water-to-wire

+100^{MW} Installed

projects





HYDROALP S.r.I.

CREAZZO (VI)

36051 - Largo Tiepolo, 29

DARFO BOARIO TERME (BS)

25047 - Piazza Medaglie d'Oro 3/G www.hydroalp.com

THE SAFEST INVESTMENTS

ARE GREEN



SHZ WENT SHZ

Goals and skills of different origin make Alpicapital – the youngest company of the Group – a great enterprise despite its age, aiming at achieving a leading role in the energy transition, both at national and international level.

A team of professionals from the areas of finance, investments, banking, analysis, marketing, assisted and supported by the strength and solidity of BM GROUP.

4

The company aims at becoming a proper investment fund over time in order to exploit all the opportunities offered by the green market as well as to attract private and public investors.



Solar power



Hydroelectric



Wind power



Diamag





DRGO CHIESE (TN) 083 - Via Roma, 151

A VIEW TO THE FUTURE Part 2

with: MIRKO BOTTINI. Technical Director and Shareholder.

"The continuous research for the development of increasingly high-performance products also involves BM Group division for renewable energy power plants. We are working at new functionalities that can meet different needs, from residential systems to large-scale plants.

Our expertise in the area of process digitalisation translates into the **creation of systems that are increasingly easy to install**: with intuitive APPs, we facilitate the work for installers and provide owners with an easy-to-use tool to manage and monitor their systems, with prompt support by our technicians, also in remote mode, in case of problems."

Mirko Bottini



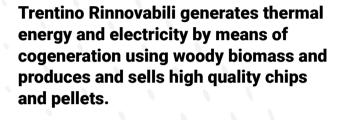


CLEAN ENERGY FROM THE WOODS









In cooperation with Coradai S.r.l., an important company located in the Italian region of Trentino and operating in the fields of wood cutting and chipping, Trentino Rinnovabili **provides top quality products and an effective consulting** service to optimise and efficiently exploit wood, complementing BM Group's offer in the field of renewable energy.











TRENTINO RINNOVABILI S.r.l.

BORGO CHIESE (TN) 38083 - Via Roma, 151 www.trentinorinnovabili it

EFFICIENT ENERGYMANAGEMENT





Tecnerga is a company of the Group specialising in consulting services for a better energy policy within the companies. Energy efficiency plans, measures to lower energy consumption, feasibility studies for investments in the energy sector and training: these are the services provided by the company, which is also an ESCO.

Tecnerga is a company certified to UNI CEI 11352:2014 that provides **Energy Consultancy** to the private and public sector, taking care of administrative matters within a dialogue with energy operators, GSE (the Italian state-owned energy service company) and public authorities, thus acting as a reference point for energy services within the Group.



10.00C

White certificates obtained

25

Customer companies for consultancy, energy audits and ISO 50001 certification

48

GSE certified power plants for high-efficiency cogeneration (CAR) and renewable energy resources (FER)

163

Yearly operated power plants

TECNERGA S.r.I.

PIAZZOLA SUL BRENTA (PD) 35016 - Piazzetta Jutificio, 15 A

www.tecnerga.com

SOCIAL RESPONSIBILITY

LAND AND COMMUNITY

Sport significantly affects the development of soft skills and personal growth of all of us.

For this reason, BM Group has always supported numerous sports associations in order to contribute to fostering talents and to the growth of its region. Thanks to these associations, a lot of young and older athletes can practise their favourite sports close to their homes, with duly trained staff, in a positive and motivating

The principles of corporate social responsibility have an impact on the local community and support local growth. BM Group attaches great importance to education, social issues and voluntary work and therefore promotes constructive relationships that contribute to a sustainable growth and development of the region and its community.







