Gianandrea Mazzola

BORDIGNON



Nitrogen gas springs and solutions for plate moulding systems 60 years of excellence

FOR OVER HALF CENTURY,
BORDIGNON HAS BEEN PROVIDING
A CONCRETE AND RELIABLE
SOLUTION TO THE DIFFERENT
REQUIREMENTS OF THE INDUSTRIAL
SYSTEM, INCREASINGLY ORIENTED
TO THE USE OF HIGH-QUALITY
COMPONENTS. DYNAMIC AND
FLEXIBLE, VICENZA GROUP PLAYS
A PROTAGONIST ROLE AND
CONSTITUTES A REFERENCE PARTNER
FOR SEVERAL MANUFACTURING
SECTORS, ON BOTH A NATIONAL
AND INTERNATIONAL SCALE.

In its 60 years of history, Bordignon brand has succeeded in standing out on the market as synonym of innovation in the sector of nitrogen gas springs and solutions for moulding systems

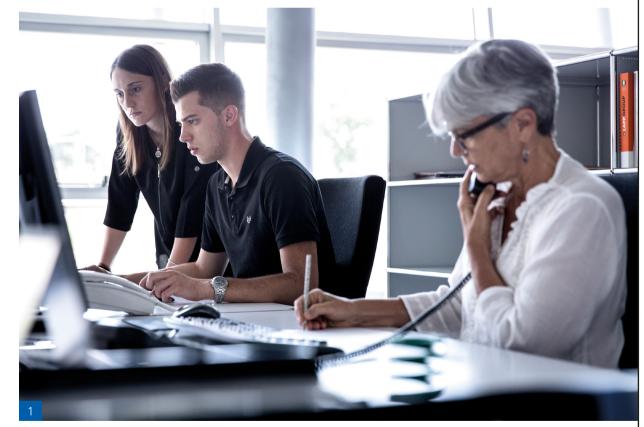
n a course started 60 years ago as small family-run company, Bordignon brand has succeeded in entering the production market of nitrogen gas springs, solutions for moulding systems and springs, standing out as reference company in the development of new technological solutions, through various growth steps. An evolutionary course that has led the Group to differentiate its product lines, maintaining its production fully in Italy, to supply various sectors, including the prevailing and competitive automotive, household appliances and industrial moulding. Three generations and a history that well represents the Italian industrial culture: a small spring producer established in 1958, at the debut of the economic boom, grown in the glorious bicycle sector and become, along the vears, a brand acknowledged on a world scale where have always converged made-in-Italy tradition and innovation. In short, a strong propensity for standing out on the market for the capability of innovating high-quality products and services. Not fortuitously, the company was the first that, in the production sector of gas springs, attained the Uni En Iso 9002 certification (now Uni En Iso 9001) for the quality system application. «Our philosophy – explains the managing director, Alberto Bordignon – is offering and proposing on the market highquality products with unrivalled performance and incomparable reliability and safety. The research of new and better solutions and a

more and more efficient customer service are our strongholds».

Return to the origins but looking at the future

Precisely on the occasion of the 60 years since the foundation, Bordignon company has undertaken a course of redefinition of its brand identity, whose results will be made increasingly tangible for the market since today and in the course of next years. «In a certain sense, it is a return to our origins but glancing at the future - declares Bordignon, highlighting the claim of this new course because all product lines, which in time had been identified with dedicated brands, are grouped again under "Bordignon" corporate brand ». A single brand, as unique is the philosophy that inspires all the actions undertaken by the

company: investing in research, innovation and new technologies to go beyond the borders and to go on proposing the approach to the total quality that distinguishes the brand on the market. *«Differentiating the various product* lines with dedicated brands – adds Bordignon – has been useful to communicate and to make the market perceive the new development ambits, hand in hand with their implementation in our offer. Now, as the company enjoys a sound ranking in the sectors of springs, nitrogen gas springs and solutions for plate moulding systems, our will is identifying everything with Bordignon corporate brand. A brand acknowledged on the markets where we operate as synonym of innovation, guaranteed reliability, product quality and after sale service». Innovation that for the company

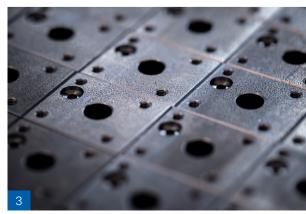


1. Customer care and after sale service are determinant aspects of the "total quality" that characterizes Bordignon brand.

2. Bordignon is the all-round partner for nitrogen gas springs and solutions for moulding systems.

3. Detail of the BRE remover valve under assembly





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Simone and Alberto Bordignon, owners of Bordignon Group companies.

The company in pills

1958 - They set up Bordignon, small family-run company that operates in the field of springs for bicycle saddles and, afterwards, of industrial springs for bed bases and mattresses. **1985** – They produce the first nitrogen gas springs under Bordignon brand. **1991** – They establish the company **Bordignon Simone that operates** in the production of accessories and components for dies. 1991 – They build the new production site at Grigno, in Trento province, where they develop in quick succession, and introduce for the first time on the market, ultra-compact nitrogen gas springs, self-lubricated and integrated with nanotechnologies. **2001** – The Group takes the current structure. **2013** – According to a vision oriented to the geographical expansion, Bordignon is present in the Czech Republic with a commercial division that operates with the B Wide Trading brand. 2014 - The B-feder brand for the production of springs for dies was born. **2018** – Bordignon Group celebrates 60 years since its foundation.

has always represented a distinguishing trait. «Already in the Eighties – underlines Bordignon - we designed the first autonomous miniaturized gas springs. Executions that, compared to wire springs, at that time commonly used for dies, assured absolutely higher force and longer service life». The presentation to the market of the new family of gas springs called Top dates back instead to 1992, on the occasion of Chicago exhibition. «A product range – adds Bordignon – that absolutely represented the most compact and powerful selection of springs ever manufactured until that time». A record, unchallenged for many years, that has paved the way to the development of the successive products that have introduced smaller formats (like the Sml series), increased forces up to 100% (Cs series), added new diameters and developed exclusive performances, such as the self-lubricating system, the resistance to high temperatures, the slowed down recovery and the timed motion. Approach to innovation that has become more and more challenging, up to the application of nanotechnologies and new synthesis materials to their products. «We were the first and, until now, the only ones in the world proudly states Bordignon - who have applied nanotechnologies to gas springs for a long time now». With the "pioneering" approach that has always characterized its brand, Bordignon has introduced two new important innovations based on the development of nanotechnologies applied to some series of nitrogen gas springs called WiperTech and Nano-Tech2.

The added-value of the inhouse production, by 100%

As already said, as distinguishing for Bordignon is the boast of a fully made-in-Italy production, exclusively carried out inside its factories.

«Our task - declares Bordignon is granting, through the quality of our products, the efficiency and the performance of the manufacturing chains of complex and demanding sectors that we supply, that is to say automotive, household appliances and industrial moulding. This is our mission. Only highly specialized manpower, production sites that use advanced technologies and severe quality controls allow us to remain faithful to this commitment. However, constantly investing in research and development and keeping the production totally in Italy, we have succeeded in making the company and our brand reputation grow, and unceasing innovation is the value that permits us "to make the difference" on the market». At Bordignon, lathes are loaded with steels of certified quality produced in Europe, all heattreatments, grinding and other manufacturing processes are inhouse executed, with scrupulous controls in all machining phases. «Moreover – further explains Bordignon – we produce the seals and even the valves, to make use of components purposely studied for gas springs. Therefore, they are not multitasking commercial products but specific solutions that provide further added value to the production». Production and processes that have always been the company's focus in the upgrading of its machine fleet, not only in terms of productive capacity but also of machining quality. Not fortuitously, Industry 4.0 at Bordignon is nothing more than an additional opportunity. Certainly, it was not the "mainspring" for a change of mentality. *«For over ten years–* confirms Bordignon - we have availed ourselves of an internal department entrusted with the development of all automations needed by our processes. Undoubtedly, Industry 4.0 acted as an accelerator of a process anyway already in course for a long time. The flexibility of our products

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mirrors our production's. Ready to anticipate markets and, at the same time, expected to anticipate in its turn also the use of state-of-art technologies. In the early Nineties, we had already started investing in revolutionary technological solutions for that time. Still today, in our workshops we do not use machines with over 6-7 years of service life».

The keys of the success at the market service

The efficiency and the performance of a manufacturing chain depends on the choice of the technological components: starting from this assumption, it is clear that the best possible investment is staking on quality. «Quality – ends Bordignon – that in our sector is the outcome of

many components: among them safety, reliability, performances and duration. I daresay, then, that the key to success is staking on "total quality" and making it perceived by our partners: in this way, the excellence of the Italian technological know-how can catch on globally ». A neat determinate vision is expressed by Bordignon, who well defines the successful factors of a company that, in these first sixty years of activity, has succeeded in consolidating its protagonist role. Besides representing a reference reality for numerous production sectors, on a national and international scale. The latter to be meant worldwide, from Germany to Japan, from China to the United States, with an export of the madein-Italy excellence that today means about 80% of the turnover.

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- 4. The entire Bordignon production is made-in-ltaly, and is concentrated in the modern factories at Grigno (TN).
- 5. Semi-finished products are loaded by the robotic automation that will transfer them to the lathe for machining operations.
- 6. Investments in research and development have always been the driving engine for the company's growth in its 60 years of history.
- 7. The pioneering and innovative approach of Bordignon is encompassed in the new corporate brand that will identify the whole production.



Nanotechnologies applied to nitrogen gas springs

Bordignon was the first and is, until now, the only company in the world that has applied nanotechnologies to gas springs, with the "pioneering approach" that has always characterized the brand. The company has recently introduced two important innovations based on the development of nanotechnologies applied to the series of nitrogen gas springs called Csx, Smlx, Msml, Cx, Csmx, Micx and Mcsm, identified with the names of WiperTech and Nano-Tech2. The innovative nanotechnology denominated WiperTech, in particular, assures a better protection against contaminants and liquids often present on dies, thus extending the potential service life of nitrogen gas springs in such use conditions. The advantage for users is the notable reduction of downtimes, due

to the better duration of nitrogen gas springs in aggressive environment, too. The name Nano-Tech2 identifies instead the new nanotechnology, still developed by Bordignon, which allows increasing the work speed, i.e. cycles per minute, by 150% (more than the double), compared to the Vicenza company's previous standard models, without outer lubrication delivery. The advantage for users is the possibility of registering even 60% shorter time for each production batch/ press use. Moreover, the new Nano-Tech2 nanotechnology allows extending even more remarkably, compared to the previous version, the life of nitrogen gas springs in case of machining stroke of the stem not perpendicular to the base. You so attain a relevant decrease of downtimes caused by manufacturing anomalies or die use.