



Bonfiglioli Unveils Cutting-Edge Technological Solutions at SPS Nuremberg 2023

Bologna–14 November 2023 – The 2023 **SPS** trade fair in Nuremberg represents an important opportunity for Bonfiglioli to showcase its experience and expertise for industrial automation. Its innovative, cutting edge offer includes mechatronic solutions specifically designed for packaging, intralogistics, robotics and IoT applications.

The future of automation with custom solutions for mobile collaborative robotics

A corner of the booth is dedicated to Bonfiglioli's technologies for cartesian, delta and articulated robots, the latter solution consisting of a custom designed, precision planetary gearbox and servomotor developed for **ABB**.

Remaining in the field of mobile robotics applications, the spotlight is on **BlueRoll**: the high-performance, wheel-mounted gearmotor platform for AGVs and AMRs, featuring an ultra-compact and energy-efficient design for a long operating cycle. The modular drive system is available in three configurations, *Basic, Advanced and Compact*, with a customisable single gearbox load ranging from 360 to 1020 kg and a maximum speed of 2m/s. In response to evolving market demands, Bonfiglioli is currently developing integrated solutions with the aim of providing customers with a complete **AGV** movement package, including complete drive and transmission control systems. This approach allows Bonfiglioli to deliver ready-to-assemble, turnkey solutions, thereby minimizing the need to purchase interface devices from the AGV/AMRs manufacturers. The Group is also expanding its product folio by focusing on enhancing payload capacity, catering to the rigorous specifications demanded by robotic sector. The capacity to offer a diversified array of products ranging from standard precision gears and gearboxes to specially designed motors for axis movements and completely customised ones, as well as integrated solutions for AGV/AMRs drive controls, places Bonfiglioli among the leading players in this sector. The codesign with customers grant significant value in terms of performance optimisation, cost saving and accelerated time to market.

Bonfiglioli's solution-oriented approach to packaging and intralogistics

Flow pack packaging processes require automatic machines that are able to keep pace with high production rates, for which Bonfiglioli offers a wide range of compact, modular, dynamic, high-precision drive and control solutions for horizontal and vertical forming, filling and sealing machines. These include the package presented during SPS, which features a **TQ in-line high precision planetary gearbox** combined with a **BMD permanent magnet synchronous servomotor** and a highly versatile **AxiaVert smart inverter**. Alongside this process, we are also able to extend maximum handling speed to the finished products palletization, thanks to a solution incorporating our **BMD synchronous servomotor**, **Series A right-angle gear unit** and **ANG Series servo inverter**.

During the fair, we will also be presenting two intralogistics solutions: the first solution, designed for use with post & parcel and airport baggage handling systems, consists of a compact, right-angle **Series A gear unit**, available in a wide range of torque ratings, the IE4-certified **BSR synchronous reluctance motor** - an ecological and high-performance product (thanks to the absence of magnets), and a **DGM MPM decentralized inverter**, featuring **sensorless** vector operation for optimal dynamic control. The second solution, designed for use with roller conveyors, combines the **EVOX CP helical in-line smooth**





surface gearbox that can be fitted on any machine thanks to its compatibility with market standards, the **MXN asynchronous low-voltage e-motor (IE3)** developed to be modular, reliable, energy efficient and compliant with international certification requirements, and a **DGM MPM sensorless inverter.**

Visitors will have the chance to get an up-close look at the two successful applications, which have been designed in partnership with **Modula S.p.a. and I.DE S.r.l.**, for whom Bonfiglioli has developed complete, customised technical solutions.

Selcom showcases its synergy with Bonfiglioli at SPS

Since the recent acquisition of Selcom by the Bonfiglioli Group, the two companies have collaborated on numerous projects that combine Selcom's expertise in **electronic innovations** with Bonfiglioli's comprehensive mechatronic solutions, to deliver complete motorised products to end-users. A dedicated area at the SPS booth highlights this synergistic partnership and showcases the burgeoning success of this cooperation in providing fully fledged products to end customers, seamlessly integrating electronic motion controllers with PLC motor drives to meet the highest market standards. A multitude of advanced proposals are on display, highlighting Selcom's versatility, engineering capabilities and ability to develop customised solutions, such as DC/DC converters for battery-powered applications or user interface boards complete with touch buttons.

The company also offers solutions for welding, sensors, and monitoring and diagnosis of electrical parameters in the packaging sector. Other applications developed and customized for the industrial market include master PLC components and motor control inverters with integrated communication interfaces.

Bonfiglioli's IoT enables condition monitoring and predictive maintenance

Downtime, sudden breakdowns, high maintenance costs, short life spans and collateral damage to assets are some of the more critical issues facing industrial machinery manufacturers and operators. In its role as a technological partner, the group offers **condition monitoring** and **predictive maintenance** services, as well as post-sales assistance. Bonfiglioli responds to customers' requests to monitor the general status of their gearboxes and motors through its IoT platform, which makes use of a series of sensors to measure performance, consumption and real duty cycle of the machine. The predictive maintenance service, on the other hand, helps prevent damage and downtime by making key data accessible and allowing technical service operations to be planned in advance.

SPS serves as the ideal platform for Bonfiglioli to promote its extensive know-how and expertise, reaffirming its position as a **global one-stop-shop** for complete and efficient solutions covering a wide range of applications. The Group's commitment to excellence, innovation and sustainability has always set it apart in the industrial automation sector.









ANG Series



AxiaVert Series



TQ + BMD Series



A + BSR + DGM Series



I.DE Success Story



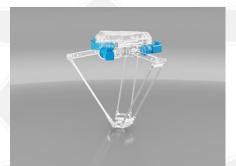
Modula Success Story



Cartesian robot







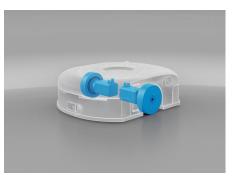
Delta robot



Articulated robot



ABB Robto at the booth



AGV



IoT



IoT

Bonfiglioli Group

Bonfiglioli designs, manufactures and distributes a wide range of gearmotors, electric motors, planetary gearboxes and inverters, capable of satisfying the most complex needs in the industrial automation, mobile machinery and renewable energy sectors. The Group offers complete solutions for greater numbers of industrial sectors and applications than any other gearbox manufacturer and is the market leader in several different areas; the three Business Units: Discrete Manufacturing & Process Industries, Motion & Robotics and Mobility & Wind Industries, embody the wealth of experience and skills acquired over the years in their respective fields of expertise. Founded in 1956, Bonfiglioli is active in 80 countries and boasts 26 commercial units, 20 production facilities and an extensive distribution network including over 550 partners The company employs over 4,800 professionals worldwide. Excellence, innovation and sustainability are the factors that drive Bonfiglioli's growth as a company and as a team, while also underpinning the guarantee of the quality of the products and services offered to its customers.

For further information, visit our website www.bonfiglioli.com.

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