



Bonfiglioli at Bauma 2025: the N° 1 partner for construction and mining machinery

Calderara di Reno, Bologna, 7th of April 2025 – Global leader in final drives and state-of-the-art technologies, Bonfiglioli participates in Bauma 2025, the world's largest trade fair for construction machinery. Thanks to its almost **fifty years of experience** and **expertise**, Bonfiglioli is able to provide **high-performance**, **customized complete systems**, ranging from **electronics** to **mechanics**.

Sustainability through Bonfiglioli's next gen electrification

Bonfiglioli supports customers on their **path toward electrification**, regardless of their field of application. At Bauma, Bonfiglioli is showcasing its steps along **this path which involves the final drives**, not just the main power source. This approach, compared to the one where the engine is replaced by a single electric motor, offers significant advantages in terms of energy efficiency, reduced emissions and a considerable reduction of maintenance costs, resulting in a much faster return on the initial investment.

In **earth moving**, the electrification process targets **excavators** (**mini and midi**) for which a special kit has been developed, combining three different components: an **electric swing drive** of the 700TE Series, ultra-compact and high-performing, equipped with an electromagnetic brake and speed and temperature sensors; an **electric track drive** of the 700CE Series, easy to install and maintain due to the reduction of mechanical parts; and an **electric motor for pump drive of the BPM Series**, featuring permanent magnets with SAE connections and ideal for the electrification of mobile machines. The system is completed by inverters responsible for motor control. By adopting Bonfiglioli's Next Gen Electrification Approach, the Battery Capacity can be reduced by 50% thanks to the improvement in energy efficiency and reduction of maintenance costs.

Focus on Bonfiglioli's flagship solution for **compact track loaders**: machines ranging from 1.5 to 6 tons, for which it supplies the planetary track drive paired with high-power density electric motors, specifically designed for electric systems. The 5-6 ton compact track loader version also integrates the **IoT functionality** through the sensorization of the gearmotor, allowing the user to view all the main operational data of the machine and use it correctly. Bonfiglioli's electrified solution represents a cutting-edge product already available as standard on machines from leading manufacturers.

For **road construction**, reliable, high-performance gear solutions are showcased, which keep the fleet of **pavers** and **tandem rollers** running smoothly. For both, a **totally electrified solution is proposed**, i.e. all drives – track and loader for the paver, drum rotation for the tandem roller – and motors – in the latter, the one responsible for the vibration and steering functions – are electric. The same transformation has also involved **cranes** and **aerial platforms**. For the former, Bonfiglioli develops winch drives – 800 Series – marked by high modularity and flexibility, thanks to the possibility to add further standard stages, motor flanges and bevel gears of the 300 Series. For aerial platforms, scissor lifts and boom lifts, Bonfiglioli provides the **travel drives** of the 600WE series, boasting **compact dimensions**, **low noise** and **high efficiency**. An advanced powertrain solution which uses a two- or three-stage gearbox offering reduction ratios of up to 1:145 to satisfy the widest possible range of needs.





A dedicated solution for twin shaft mixers used in the road and building construction is presented. An evolution of Bonfiglioli's, **modular planetary drive of the 300 Series** – a **highly versatile gear**, due to several options for mounting, gear layout, output shaft – it is a specific bevel gear set which allows to have both e-motor bell housing and synchro drive shaft. Easy to fit and almost maintenance-free, it optimizes the machine structure, by avoiding the presence of pulley and increases the efficiency with a positive impact on the Total Cost of Ownership. The set guarantees the easiest layout configuration for asphalt and concrete applications by virtue of its simplified assembly and maintenance procedures.

For electrified **mining equipment**, the protagonist is the gear unit of the **3/H Series**, a product boasting resistance, robustness, thermal capacity, high performance and torque density, thanks to the **combination of the planetary** and the **helical bevel Heavy Duty gear units**. In this case, the drive is integrated into an apron feeder, but also applicable to several applications, such as bucket wheels for stackers/reclaimers and horizontal roller crushers, as well as belt filters. For **apron feeders**, Bonfiglioli offers the entire system in an ultra compact design, consisting of gearbox and motor that can be mounted directly on the machine shaft or installed with a base plate. All units can be supplied with IoT instruments for predictive maintenance function, able to measure real time working conditions, in order to support end users within their mantenance programs. The 3/H Series is designed to endure extreme environmental conditions, withstand temperatures ranging from -50 to +50 °C, high shock loads and extremely dusty environment.

Customized and electronically enhanced hydraulic systems for earth moving and mining

At Bauma, Bonfiglioli takes center stage with its latest **hydraulic solutions**, addressing the evolving demands of the industry. Today's machinery must continuously enhance performance while becoming increasingly eco-friendly. This means that even non-electric machines must integrate smarter technologies to optimize efficiency. For earth moving machines, Bonfiglioli provides comprehensive systems incorporating all the hydraulic and mechanical functions: powerdrive, operating and travel speed, hydraulic and mechanical emergency braking and overload prevention. At Bauma all eyes are on the **groundbreaking technological innovation** of **the 705XT track drive** for high-performance **compact track loaders**, designed for high pressures and featuring **fully variable displacement**. A big plus which enables hydraulic gearboxes to **continuously and adaptively adjust their operating parameters** based on system requirements, therefore offering **greater energy efficiency**. Power can now be adapted to demand, **better speed and torque control**, in favour of optimized machine performance and **reduced fuel consumption and emissions**, making this track drive ideal for eco-friendly applications.

For the **mining sector**, Bonfiglioli positions itself as a full-line supplier, offering a wide, complete, well-adapted range of solutions, both for rotation and translation functions, which take on the harsh and dusty environment of mines. For **large excavators**, Bonfiglioli showcases two sensorized travel & track drives of the F Series – F620 and FTU900 - targeting at mining excavators, respectively of 300 and 400 tons. Both ultra-compact and highly efficient, the FTU also simplifies maintenance, as its replacement does not require disassembling the entire track. Additionally, the drives can integrate IoT-based predictive maintenance functionality, which is extremely important for large machinery operating in challenging environments.





Selcom: the right electronic solution for any construction need

Leader in the design, production and sale of **customized high tech electronic solutions**, such as motion controllers, PLCs, sensors, displays and inverters for drives and power transmission gear motors, Selcom is present at Bauma both with a **power device**, a **DC/DC converter** and **with a human-machine interface solution**, in form of a **display** and a **communication board**. The former is available in a version that can manage power even at low voltage, hence compatible with Bonfiglioli's electric motors and optimized towards the reduction of consumption and the highest energy savings. The display embeds **next-generation micro-controllers** in order to integrate and upgrade the **cyber security function**. For its part, the electronic board can be equipped with **sensors** capable of importing external signals, i.e. parameters, such as distance measurement, wear or fill level, in favour of **greater machine autonomy** and **improved remote assistance**. Selcom's solutions can be applied to excavators, but also to agricultural machines and forklifts, with the aim of a 360-degree customization.

Bonfiglioli's participation in Bauma reaffirms its commitment to innovation and excellence in the construction and mining industry, showcasing cutting-edge solutions designed to enhance performance, efficiency and sustainability in heavy-duty applications.

Bonfiglioli Group

Bonfiglioli is a worldwide designer, manufacturer and distributor of a complete range of gearmotors, drive systems, planetary gearboxes and inverters, which satisfy the most challenging and demanding needs in industrial automation, mobile machinery and renewable energy. The Group serves more industries and applications than any other drives manufacturer and is a market leader in many sectors; its three business areas - Industry & Automation Solutions, Mobility & Wind Industries, Selcom Group - embody all the expertise and experience acquired over the years in the respective industries. Established in 1956, Bonfiglioli operates worldwide in 80 countries with 23 commercial sites, 18 production sites, a wide distribution network comprising more than 550 partners, and can count on over 4.700 professionals. Excellence, innovation, and sustainability are the drivers behind the growth of Bonfiglioli as a company and team and represent the guarantee of the products and services quality offered its clients. More information available at www.bonfiglioli.com.

Media relations | Lbdi Communication – Beatrice Cevolani – <u>b.cevolani@lbdi.it</u> – Chiara Ravanelli – <u>c.ravanelli@lbdi.it</u> - Ginevra Fossati – <u>g.fossati@lbdi.it</u> Tel. + 39 02 43 91 00 69 – Skype Lbdi_PR

Internal & External Communication Manager | Bonfiglioli - Laura Manfredi - <u>Laura.Manfredi@bonfiglioli.com</u>