



WindEnergy: a sustainable future blowing strongly with Bonfiglioli

Calderara di Reno, Bologna, 23th September 2024 - At the Wind Energy trade fair, the world's biggest and most important wind business platform, taking place in Hamburg from the 24th to the 27th of September, Bonfiglioli showcases its groundbreaking solutions, result of its **more than 40 years of experience in the wind turbine market**. Through its global presence, with production sites and distributors scattered all over the world, and backed by solid experience in the designing and manufacturing of gearboxes and in applications on wind turbines, Bonfiglioli has developed complete range of products, which seamlessly enables the control of energy generation, from rotor blade positioning with a pitch drive to nacelle orientation with a yaw drive.

Focus on powerful offshore and onshore solutions, as well as service

At the **Booth 366, Hall B6, complete solutions for pitch and yaw drives** for offshore and onshore turbines are displayed, this year with increased power, capable of reaching **18 Megawatt**. As with other sectors, the goal of Bonfiglioli is to offer comprehensive solutions that combine all its expertise in developing mechanical, electrical and electronic components. Special attention is then dedicated to assistance both on-site, with rapid and targeted interventions, and remotely through the development of a condition monitoring system.

In the corner dedicated to the **offshore** sector, a **yaw drive** and a **pitch synchronous permanent magnet servomotor with increased power** – both can reach **18 Megawatt** – will be displayed. The yaw drive combines a **sensorized 716TW planetary gear unit**, a **BE 160 asynchronous three phase motor** and the onboard **DGM modular inverter**, directly integrated in the yaw motor. The 700TW series is chosen by a number of leading wind turbine manufacturers thanks to its advanced technical features, ensuring the **highest level of performance** and **maximum torque density** (peak torque of 225.000 Nm). Among its benefits, also its **high radial/thrust load capacity** and **efficiency**. The BE Series of asynchronous motors with aluminum frame is the right choice for many industrial applications. This compact motor is available in the IE2 efficiency class and can be equipped with several options: **protection class up to IP 56, tropicalized, corrosion-resistant paint** and **anti-condensation heaters** for an overall reduced operating cost and energy saving. The **pitch servomotor** displayed belongs to the BMD Series. Characterized by high torque density and compact dimensions, this permanent magnet synchronous servomotor meets the most stringent demands for dynamics and speed & position profiles thanks to low inertia and high overload torque, even at zero speed. The best results are reached by integrating frequency inverters and planetary gearboxes.

In the corner focused on the **onshore** sector, both the **yaw (714TW) and the pitch (709T3W) drive are coupled with a BMD 132 permanent magnet motor**, a quite innovative technology in the wind sector, compared with the traditional asynchronous three phase motor and the **AxiaVERT inverter**. The pitch drive is a 709 TW model, capable of reaching 60,000 Nm of peak torque coupled with a BMD motor. Both pitch and yaw drives can achieve 8 Megawatt and belong to the 3rd generation, therefore they feature almost double the torque density and an improved structure compared to the first





generation. Moreover, the **PM motor** mounted on them allows for a significantly **better control in the field**.

A fifth yaw drive solution is present on the trade fair, aimed at underlining Bonfiglioli's engagement towards a better **service**. The drive on display belongs to the **700 TW Series** – a 709 T3W – and is fitted with W and Z sensors, as well as with a **torque limiter** which has been specifically developed to manage those overload phenomena that may occur in the field, sometimes causing mechanical component failure. The torque limiter acts as a sort of fuse protection which prevents the mechanical components from breaking. The yaw drive integrates also an **energy saving asynchronous three phase motor of the BN Series** which, like Bonfiglioli's e-motors, can be equipped with several options, such as the BrakeMotor version with a selection of AC or DC brakes. To maximize the flexibility of e-motors, all of them can be controlled with inverters.

The commitment of Bonfiglioli towards a greener carbon-free future

For years, Bonfiglioli has upheld its commitment to the 'local for local' approach, establishing production and distribution sites close to its end customers. This strategy enables more efficient, targeted responses while actively reducing the company's carbon footprint. In addition, Bonfiglioli is driving decarbonization at the company level through dedicated workshops with customers, where together they chart a path toward sustainability, reducing CO2 emissions progressively each year. Furthermore, as a member of the **APQP4Wind Association**, Bonfiglioli is dedicated to meeting the increasingly stringent technical and quality standards expected by the wind industry and its customers.

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.

Further information is available on the website 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 - Laura.Manfredi@bonfiglioli.com