

## PRESS RELEASE

### Tekniker showcases technologies at BIEMH addressing current transformation challenges

- *Tekniker will showcase overarching solutions for the machine tool sector to address challenges associated with advanced manufacturing, digital transformation and sustainability at this new edition of the International Machine Tool Biennial.*
- *The technology centre will describe progress made in terms of predictive maintenance, artificial intelligence, laser technology, precision engineering and metrology*
- *Tekniker's stand will be situated in hall 1, aisle C14 from June 13 -17 at BEC! Bilbao*

[Eibar, June 8, 2022] - In a context in which environmental, energy and digital challenges are giving rise to major global transformations, it has become necessary to deliver a sustainable response within the framework of advanced manufacturing and our industrial environment offers a key element to a machine tool sector that requires more profitable and sustainable solutions to improve its competitiveness and efficiency.

During the upcoming edition of the 2022 International Machine Tool Biennial (BIEMH), **Tekniker**, a member of the Basque Research and Technology Alliance (BRTA), will showcase a number of essential overarching technologies to address highly demanding challenges related to responsible and sustainable advanced manufacturing to ensure the quality of products and processes.

It is in this context that Tekniker will bring together technologies designed to improve advanced manufacturing systems from a multidisciplinary approach. Consequently, and during BIEMH, the centre will present elements such as precision engineering deployed to design and develop equipment. Details will be given in terms of the progress made in the area of manufacturing processes (both conventional and unconventional) and how they

interact with the system as a whole. Control and compensation strategies supported by monitoring processes and machine characterisation techniques will be developed as well as digital models at different levels by means of a range of artificial intelligence elements. All of them historically linked to the centre's technological specialisation, and at the same time, responding to current challenges that have a general impact (climate change, sustainability, digitisation, sustainable mobility, etc.) and which have even brought about change in such trivial elements as information leaflets, which the centre will bring to its stand printed on sustainable and plantable seed paper, representing the internalisation of sustainability throughout its entire activity.

## Demonstrators and collaborative firms

At the International Trade Fair, Tekniker will showcase four demonstrators featuring the organisation's technological capabilities covering a number of areas such as predictive maintenance management; artificial intelligence; additive manufacturing and other laser processes; precision engineering and metrology.

Visitors to the stand will be able to see the technology centre's full potential with regard to **predictive maintenance** actions for industrial assets by visualising and storing data compiled by several technologies that can be incorporated to digital applications.

This is the case, for instance, of companies such as Zayer, ONA, Lanbi, GH Cranes & Components, Goialde High Speed and Gamesa Gearbox, all of which have already collaborated with Tekniker on solutions of this kind.

Tekniker will also use a robotic cell to display in-house **artificial intelligence** developments for bin picking applications and person-machine interactions using voice or gestures in industrial environments. Four companies have been involved in development work of this kind: Erreka, Cikautxo, MIM TECH ALFA and Lantegi Batuak.

The technology centre will also present several parts made by means of the **additive manufacturing** technique (LMD) for ABC and Siemens Energy as well other industrial processes such as micro-drilling, texturising, etc.

Finally, Tekniker will use an industrial robot demonstrator to showcase its **inspection and measuring** solutions featuring absolute positioning precision under 0.1 mm (the same thickness as a sheet of paper) for its entire work volume.

Expertise in terms of Metrology has also been used for surgical robotic environments in collaboration with Cyber Surgery as well as with Zayer in the machine tool.

## Concerning Tekniker

Tekniker is a technology centre specialised in Advanced Manufacturing, Surface Engineering, Product Engineering and ICTs for production. Its mission is to provide growth and wellbeing for society at large via R&D&I and further the competitiveness of the industrial fabric in a sustainable manner. Tekniker is a member of the Basque Research and Technology Alliance (BRTA).

### Further information:

**GUK** ► Unai Macias

[unai@guk.es](mailto:unai@guk.es) | Tel. 690 212 067