

Press release

IK4-TEKNIKER will present its most recent developments at the Machine Tool Biennial

- ▶▶ *The technology centre will occupy stand C22 in hall 1 of the Bilbao Exhibition Centre (BEC), to showcase development proposals connected to Industry 4.0 applications for new and existing machines*
- ▶▶ *IK4-TEKNIKER will present the Laser for Manufacturing Lab, a new approach that uses laser technology as a vector for advanced manufacturing*
- ▶▶ *The centre will display new developments currently in the patenting stage connected to auto-checking large machines*

(Eibar, Basque Country. 24 May, 2018).- IK4-TEKNIKER, the Basque technology centre specialised in advanced manufacturing for the industrial sector, a reference in terms of machine tools and capital goods, will play a key role at the 30th edition of the Spanish Machine Tool Biennial (BIEMH) opening on May 28 at the Bilbao Exhibition Centre (BEC).

The Basque technology centre will have its own exhibition space at the trade fair in hall 1, stand C22, from where a number of recent technological developments aimed at the machine tool sector will be showcased.

Industry 4.0: enabling technologies for smart machines

In order to address the challenges that Basque companies are facing in this sector against the backdrop of new smart machines and applications developed for new or existing machines that can enhance machine 4.0 environments, IK4-TEKNIKER is currently working on a range of highly innovative technologies geared towards manufacturing smart machines capable of providing flexible manufacturing environments. Consequently, the organisation will showcase

specific solutions addressing flexible automation, modelling and machine-process simulations (virtual machine), machine health assessments, process optimisation and fleet management.

[See video](#)

Laser as a vector of advanced manufacturing

During the fair, the technology centre will also present its global range of laser technologies that has resulted in the Laser for Manufacturing Lab, an initiative that provides comprehensive solutions designed to meet specific advanced manufacturing needs connected to highly demanding sectors in terms of accuracy, quality, etc.

The proposal covers different manufacturing processes; the design and manufacture of equipment and components; additive manufacturing; inspection & measuring, consultancy and training in laser technology.

[See video](#)

Technology for automatic machine tool verification

The third development IK4-TEKNIKER will present at the trade fair is related to an internal patented solution (“Integrated multilateration for machine tool automatic verification”) that automatically checks the geometry of a machine tool throughout its entire work volume by fitting a Laser Tracker system on the machine as if it were just another tool.

Unai Mutilba, the Coordinator for Inspection and Measuring at IK4-TEKNIKER says that "thanks to this technology we are able to meet automatic verification requirements on very large machine tools that must guarantee accuracy below 0.1 mm throughout their entire work volume and we do so in a completely automatic manner".

This demonstrator will allow IK4-TEKNIKER to bring together two major proposals at this new edition of BIEMH: Laser as a differential vector for advanced manufacturing and machines 4.0 within the framework of Industry 4.0.

[See video](#)

Concerning IK4-TEKNIKER

With more than 35 years of experience in applied technology research that has been transferred to companies, IK4-TEKNIKER has achieved a high degree of specialisation in four major areas (Advanced Manufacturing, Surface Engineering, Product Engineering and ICTs). This means that its cutting edge know-how has been made available to customers to meet their requirements.

Further information

////////////////////////////////////

IK4-TEKNIKER | Itziar Cenoz

Itziar.cenoz@tekniker.es | Tel. (34) 943 256 929

////////////////////////////////////

GUK | Eider Lazkano

eider@guk.es | Tel. (34) 620 807 344

////////////////////////////////////