



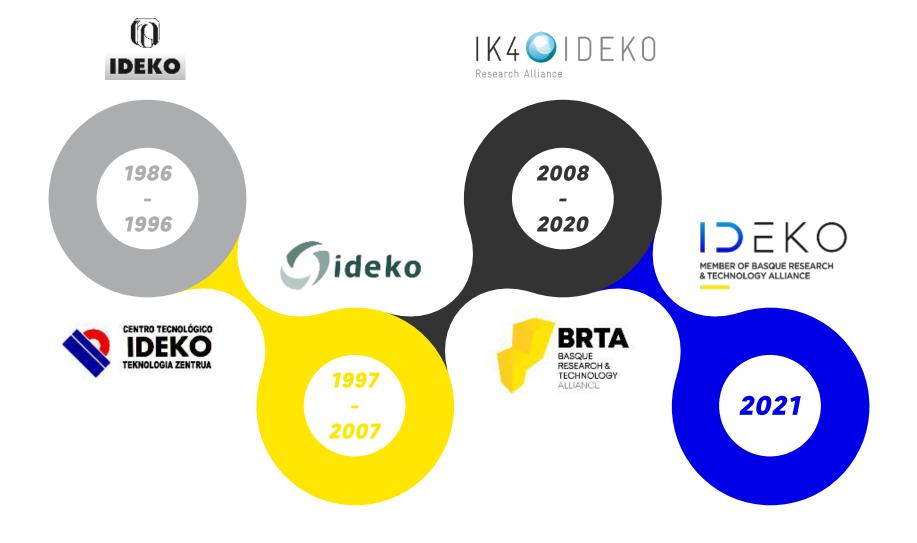
REPARENCE OF BASQUE RESEARCH TECHNOLOGY ALLIANCE

ideko.es

**IDEKO** is a Research Center member of **BRTA**, specialized in Advanced Manufacturing, with special focus on precision machines and processes and **Artificial Intelligence in** manufacturing.



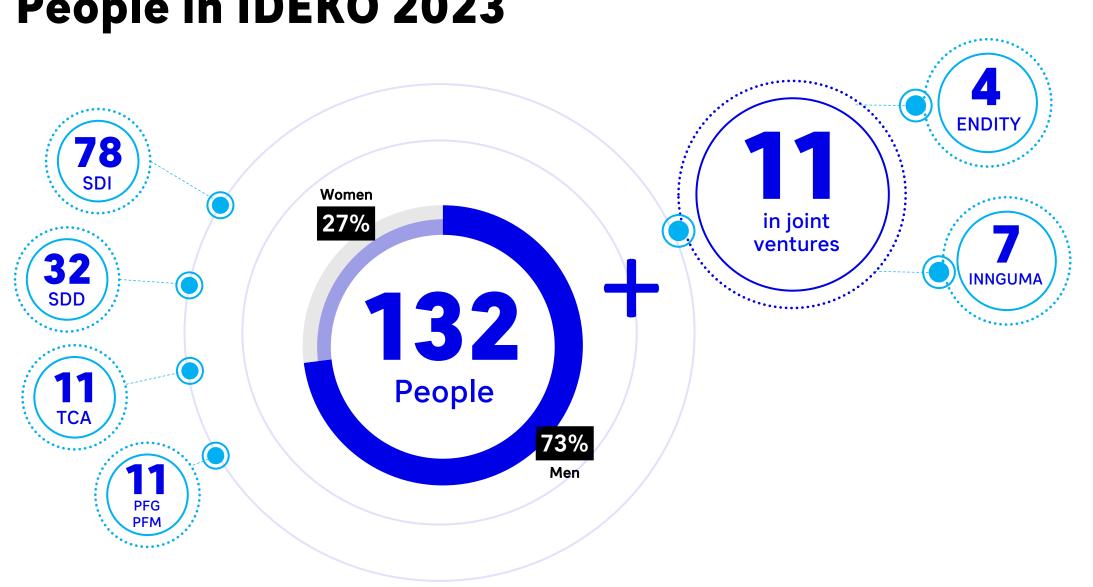




IJ

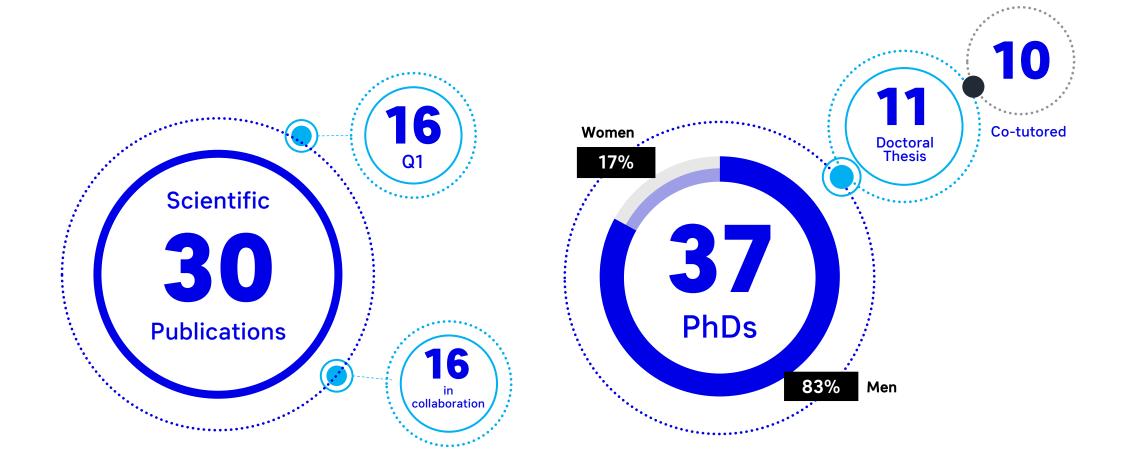
Highly qualified people to respond to the current and future needs of our clients in research, development and technology and knowledge transfer.

## OUR TEAM



### **People in IDEKO 2023**

## **Technological Excellence**

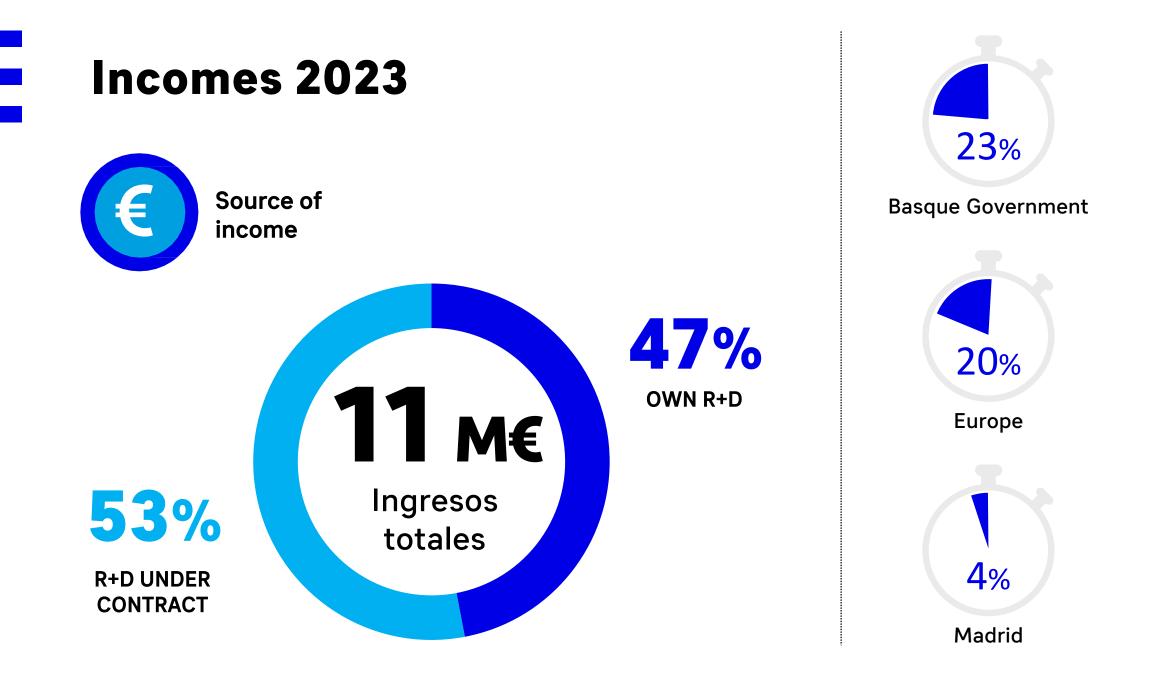


IJ

### **R&D ACTIVITY**

Our R&D activity is aimed at offering **innovative solutions** that contribute to the competitiveness of the industry.







>150 Technology Transfer Projects

**>30** Years coordinating European Projects



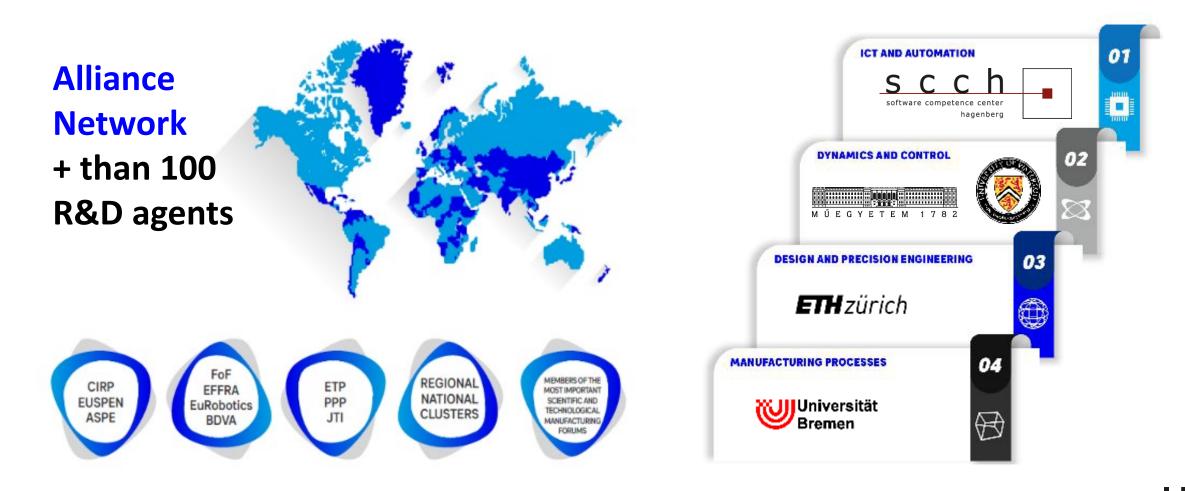
Patents

Active EU projects

# ALLIANCES & COLABORATIONS

## **Alliances & Collaborations**

### Specialization Collaboration



## **Alliance Members**

tecnal:a

CIC DIOGUNE

CIC biomagune MEMBER OF BASQUE RESEARCH & TECHNOLOGY ALLIANCE

CIC energigune Member of Basgue Research & Technology Alliance



MEMBER OF BASQUE RESEARCH & TECHNOLOGY ALLIANCE





MEMBER OF BASQUE RESEARCH & TECHNOLOGY ALLIANCE

cidetec> MEMBER OF BASQUE RESEARCH & TECHNOLIDGY ALLIANCE

Gaiker BASQUE RESEARCH EXECUTIONICOVALIANCE



MEIKER MEMBER OF BASQUE RESEARCH ATECHNOLOGY ALLIANCE







Kurutz Gain Industrioldea, 10 20850 Mendaro, Gipuzkoa Tz: +34 943 05 33 25 info@brta.eus www.brta.eus Tekniker MEMBER OF BASQUE RESEARCH & TECHNOLOGY ALLIANCE

vicontech

MEMBER OF BASQUE RESEARCH A TECHNOLOGY ALLIANCE

LORTCK MEMBER OF BASQUE RESEARCH A TECHNOLOGY ALLIANCE

Leartiker

#### **3.906** Researchers

**391** PhD / year

### 1.551

**BRTA** 

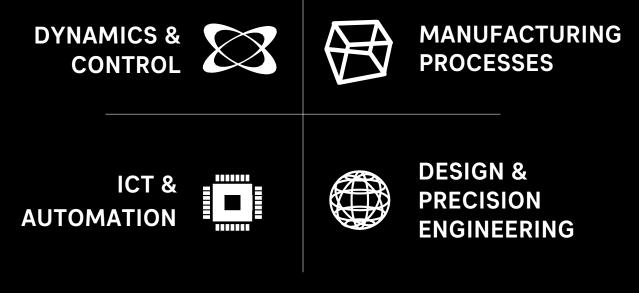
BASQUE RESEARCH & TECHNOLOGY ALLIANCE

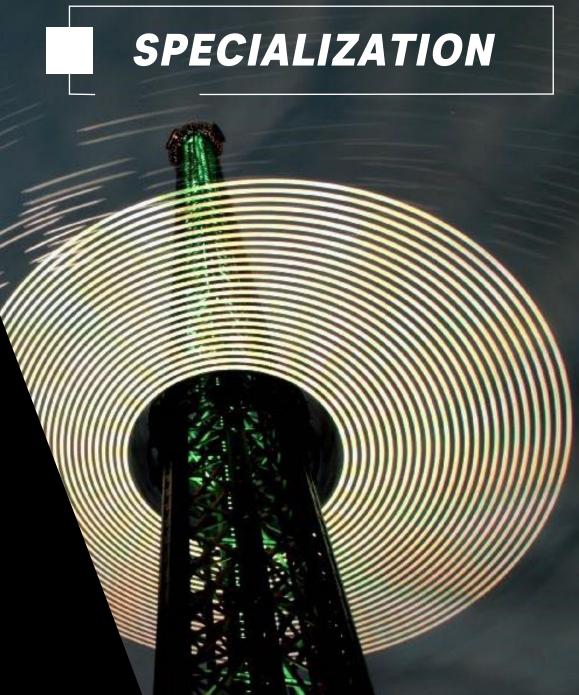
Scientific Publications / year

> **120** Patents / year

### 337 M€

Total incomes: 60% Public Administration + 40% Private Contract We have **multi-disciplinary team** to generate knowledge, develop solutions and transform them into value on the market. We accompany you **from the first research phases** to the implementation of results in innovations **for the market**.



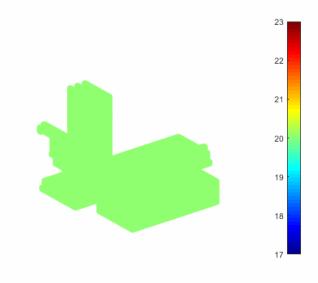


## SPECIALIZATION Design & Precision Engineering

This research group focuses on high-performance product design and development such as prototypes, mechanisms, structures, modelling and simulation of components. They develop measurement systems for precision and reliability with photogrammetry, laser, optics or contact sensors technologies.

They also carry out behavioural studies of precision of equipment, mainly in relation to thermal effects and geometrical errors. This task is performed through experimental observation of compensation on the machine, the development of highdynamics precision systems and calibration equipment.



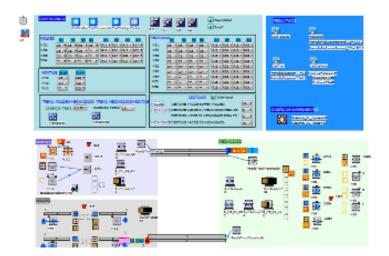




## SPECIALIZATION Manufacturing Processes

In order to solve existing problems in industrial processes and increase efficiency and productivity of manufacturing processes, it brings together the development of machining technologies by removal and abrasion, such as turning, grinding, milling, bending, drilling or laser together with the management and organization technologies of Industrial Production, such as simulation programs.

They incorporate **NDT technologies** for the inspection of parts and industrial processes with the aim of adding value and improving industrial production processes and ensuring the quality of the parts.







## SPECIALIZATION **Dynamics & Control**

It develops technologies for the characterization, modeling and design of solutions to improve the dynamic behavior of machines, mechatronic systems and machining processes.

It has a recognized prestige in the international field of science and technology of the chatter in machining processes and machine dynamics.









## SPECIALIZATION

They develop software applications and automation solutions to provide advanced capabilities to manufacturers of machines and manufacturing lines.

They research and develop state-ofthe-art **ICT solutions** with applicability in advanced manufacturing technologies and industrial production.





## **6** Specialization Lines

#### PRECISION MACHINES AND PROCESSES

Development of precision solutions addressing the entire value chain: from the measurement and verification of the quality of the machined part, working on the process and machine technologies.

#### ARTIFICIAL INTELLIGENCE IN MANUFACTURING

Application of AI techniques to obtain data performance on quality.

#### ACTIVE AND SMART COMPONENTS

Development of smart components that provide special functionalities, integrated into the machine or as accessory devices.

#### SIMULATION – DIGITAL TWINS

Development of models that allow designing and optimizing a production process in all its different scales.

#### PROCESS AND APPLICATIONS OF STRATEGIC PARTS

Development of innovative solutions to provide a competitive advantage in special parts offers.

#### ROBOTICS

Collaborative application of robots with machines and operators, to provide them with special capabilities and functionalities and eliminate manual operations.



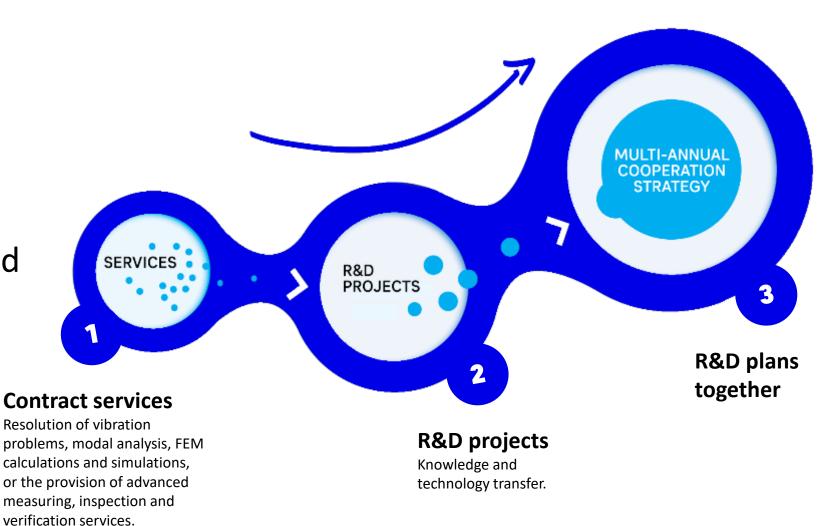
IJ

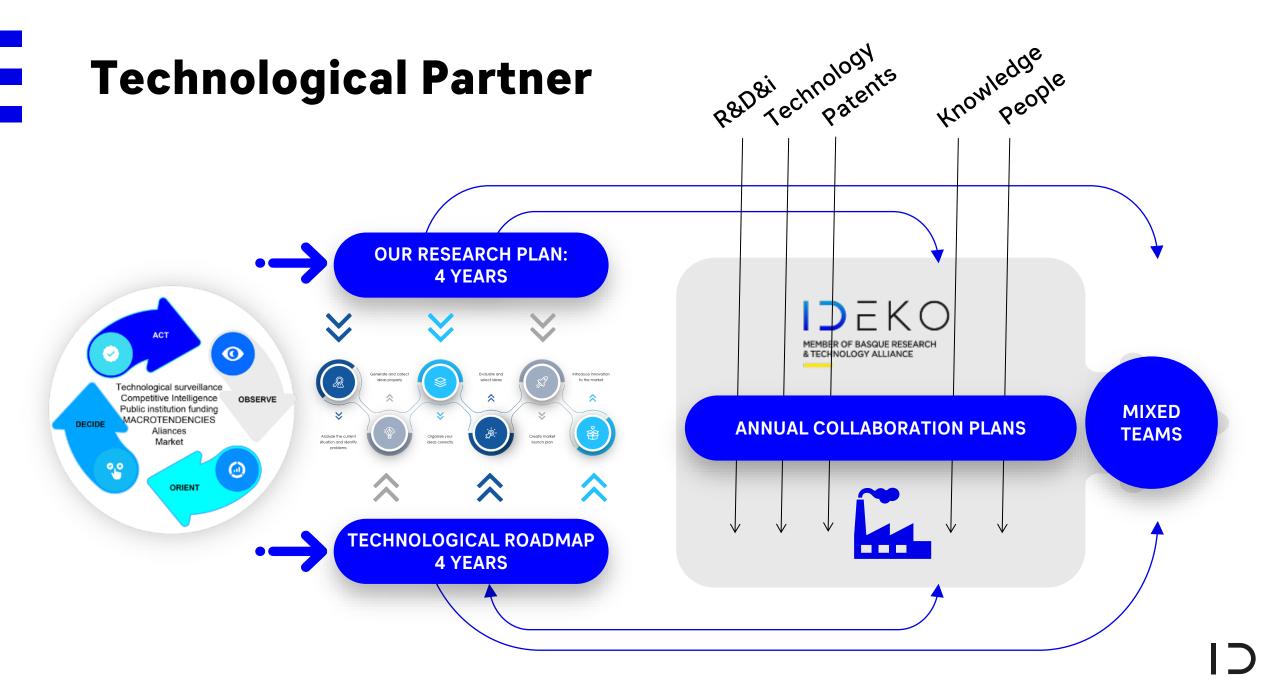
## INNOVATION MANAGEMENT MODEL

 $\mathbf{D}$ 

## **Technological Partner**

We offer an **integral solution** for the needs of today and the future in advanced manufacturing.





-AERNNOVA	euskotren ����	GOIMEK	🛆 DANOBAT		
EROMEC BURGEN	AIRBUS			ΟΝΑ	SIKULAN
🥢 A L D A K I N	Engline Power Components	Ø Irizar		RONALGROUP	Tenaris
	endity 🛒	IBERMACH		Orona	
BOEING	<b>&gt;&gt;&gt; ekin</b>		Loramendi Total Performance in foundry	SAKANA	
<b>~4F</b>	<b>EUSKO</b> MACHINING		🕕 Korta	sarralle <sup>.</sup>	ZEINN
$\sim$ cometel		<b>اەا (@</b>	MYL	SAVVY	Uurola
	ETXEPE	Ingeteam	Custortizad machinety solutions	Sidenor	UNESA
<b>ALORRES</b>	Group	Gestamp 🌽	MONDRAGON ASSEMBLY	SIEMENS	
		GAI	LOXIN	SIEMENS Gamesa	GRUPOWEC finiting kannet





DIGITAL GRINDING INNOVATION HUB



PRECISION ENGINEERING LAB.



PRECISION METROLOGY LAB.



HIGH PERFORMANCE DYNAMICS LAB.



COMPOSITES LAB.



LASER LAB.



NDT LAB.



ROBOTICS

## FACILITIES Multi-localization



Donostia | Zuatzu Business Park



Zamudio | Technological Park

#### EKO MEMBER OF BASQUE RESEARCH & TECHNOLOGY ALLIANCE

#### ZAMUDIO

CFAA Technological Park of Zamudio (Bizkaia)

#### ELGOIBAR

Arriaga kalea, 2 20870 Elgoibar (Gipuzkoa)

+34 943 748 000

ideko.es

(in 🕅 f 🎯 🖸

DONOSTIA

Zuatzu Business Park Donostia – San Sebastián (Gipuzkoa)