

INDUSTRIAL
PROVEN

THIVE

Building a greener & efficient world of quality

See-through Terahertz & AI platform for 100% quality control in mass production.



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Teaser

Confidential



**100% quality control
processes are crucial in mass
production to satisfy Quality,
Sustainability and Financial
Targets**

**Most inspection techniques are still done in a
visual and manual way leading to:**

Higher costs

15 - 20%

Poor quality costs as a % of
revenues

Less productivity

5 - 10 weeks

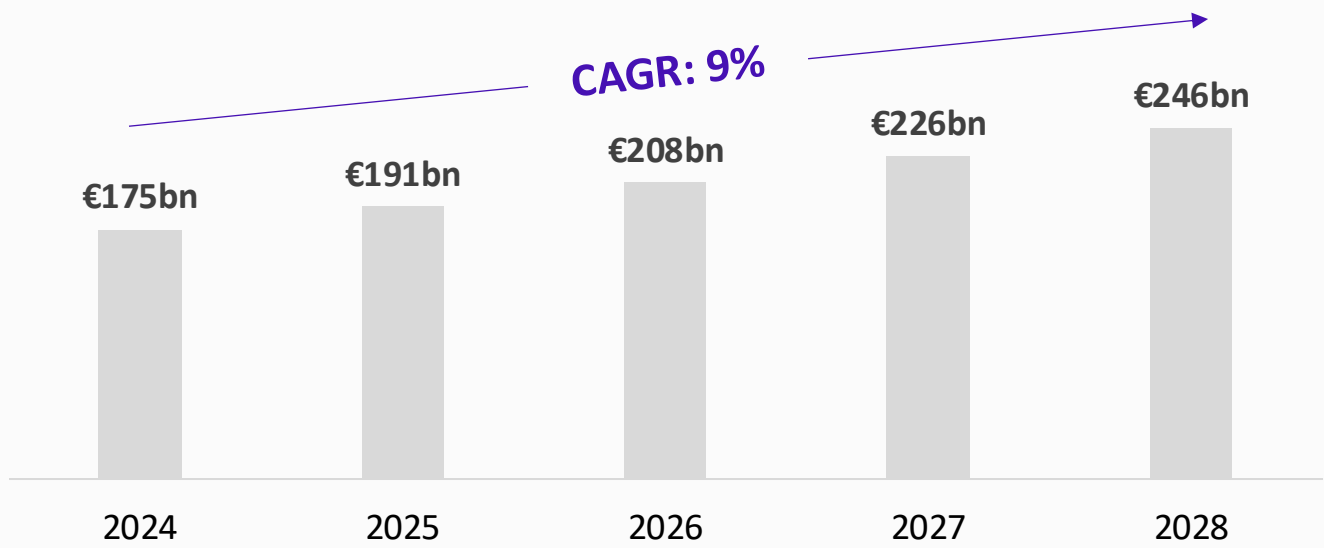
Stop of production due to
undetected metallic residues

More waste

10m tons

CO₂ waste per year in the
personal care industry

TiHive is part of a massive industrial control system market of €175bn...



Underlying growth drivers include:

- Increasing standards to comply with regulations
- Increasing consumer expectations for high-quality, safe and reliable products
- Urge to ensure sustainable production to minimize the environmental impact of waste

...across many industries

HYGIENE	
SECURITY	
TEXTILE AND FASHION	
ENERGY	
PLASTIC AND WASTE	
PHARMACEUTICALS	
AUTOMOTIVE	
FOOD & AGRICULTURE	

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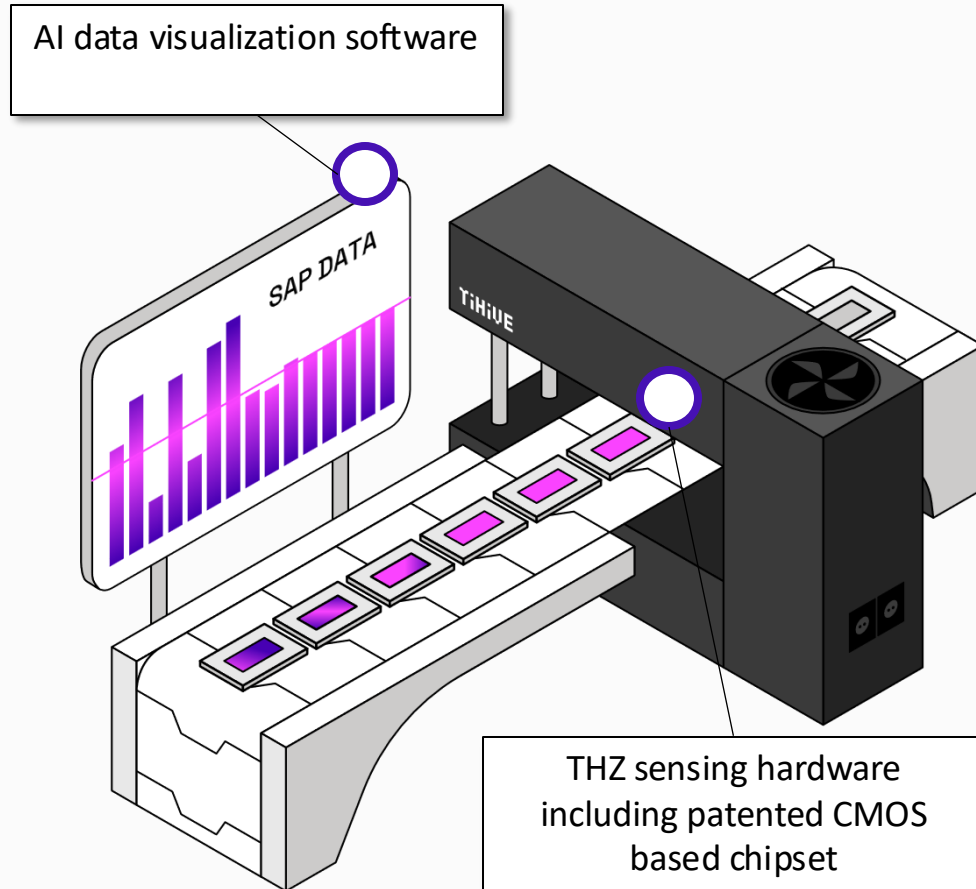
TiHive is the world's first to generate, detect, and analyze Terahertz waves that can analyze inside of materials in a compact and high-speed manner using embedded CMOS chips and AI

”



Unique inline monitoring solution combining Terahertz capabilities with AI computing...

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...to see through and inspect 100% of the products

1

Adapted to industrial constraints

Measures 100% of products at high speed and in harsh environments, robust to vibration and temperature variations

2

Modular

Fits anywhere within production lines and for any product size

3

Multi-parameters

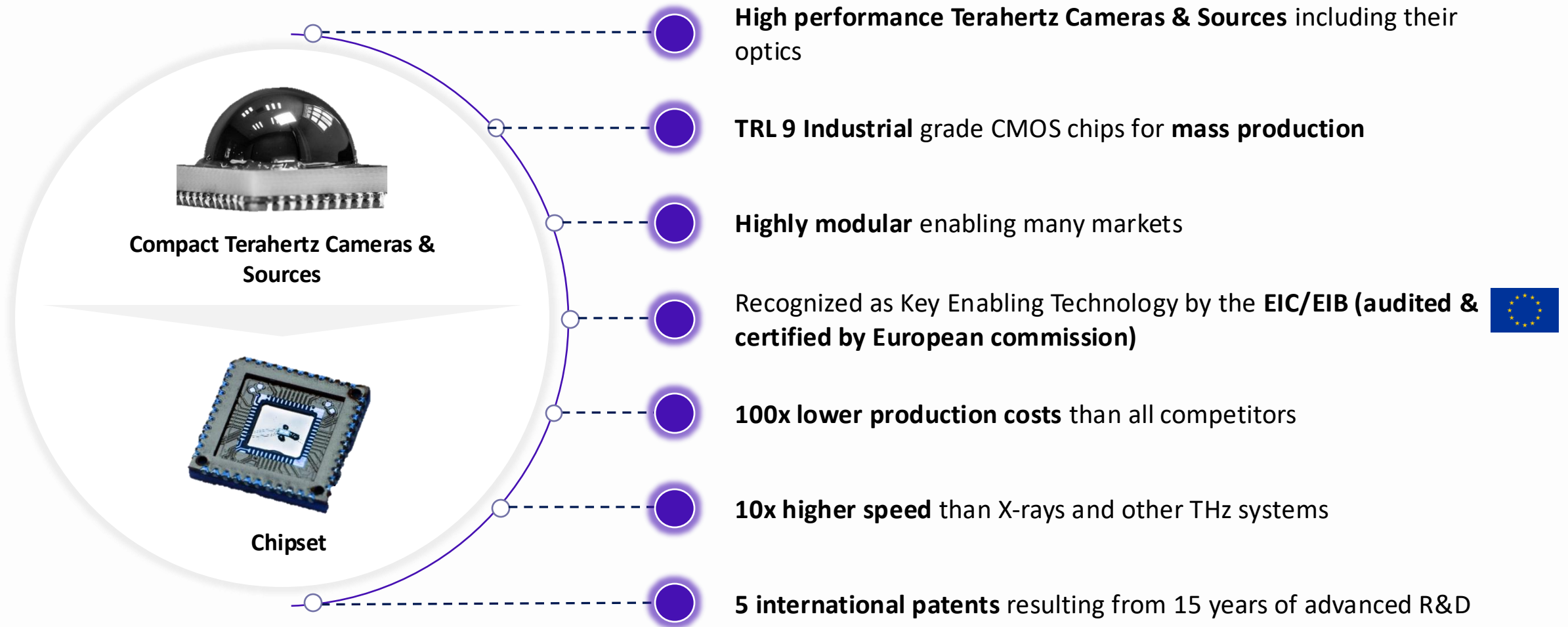
Detection of visible and invisible features and defects within products, measurement of total weight and distribution of raw materials, measurement of humidity levels

4

Multi-material

Hygiene products, textiles, plastics, leather, polymers

Breakthrough deeptech: proprietary semiconductor CMOS based chipsets embedding AI



90%

of hardware produced in EU

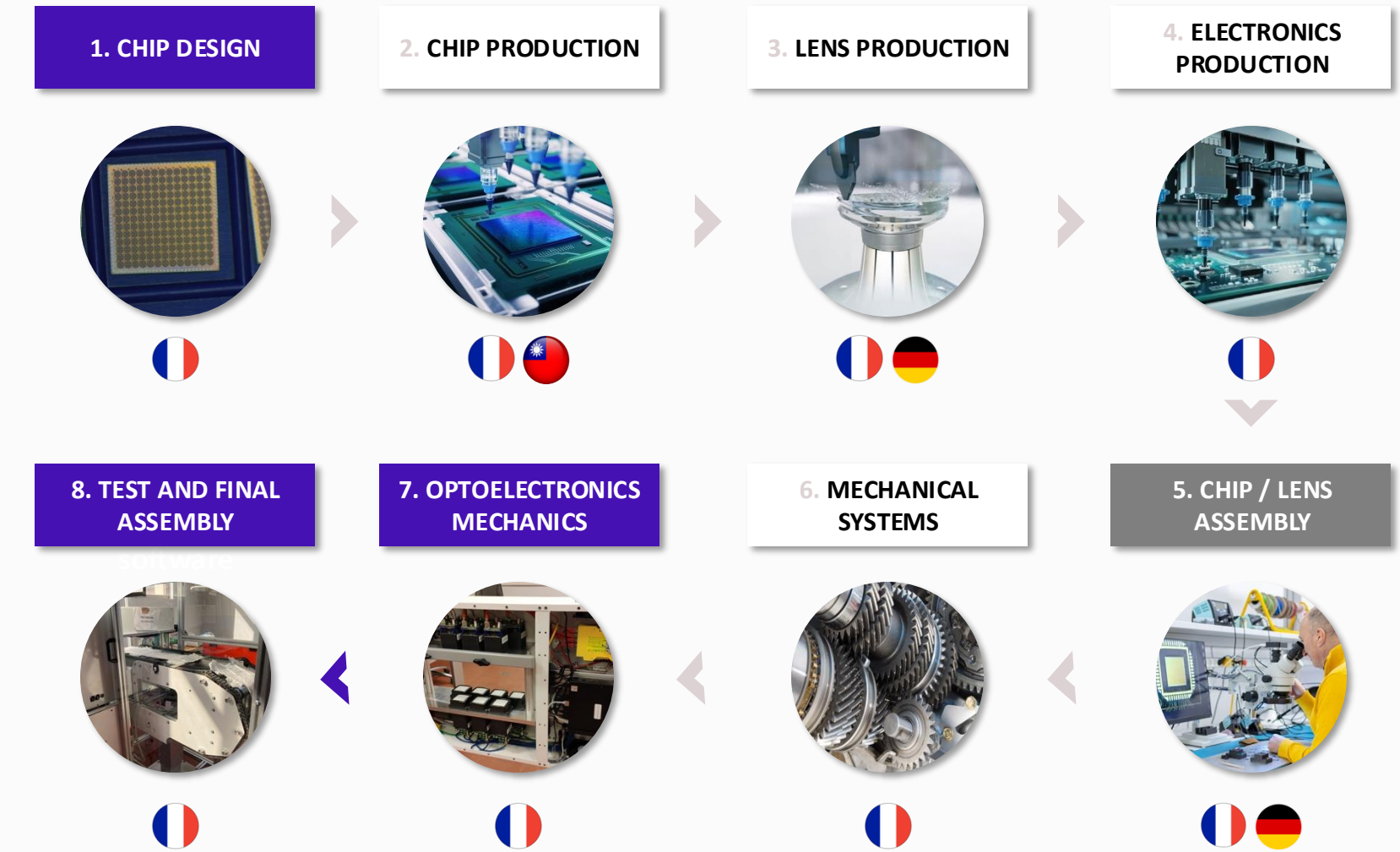
FINAL TOUCH

The final assembly, testing and qualification phases at TiHive

1H

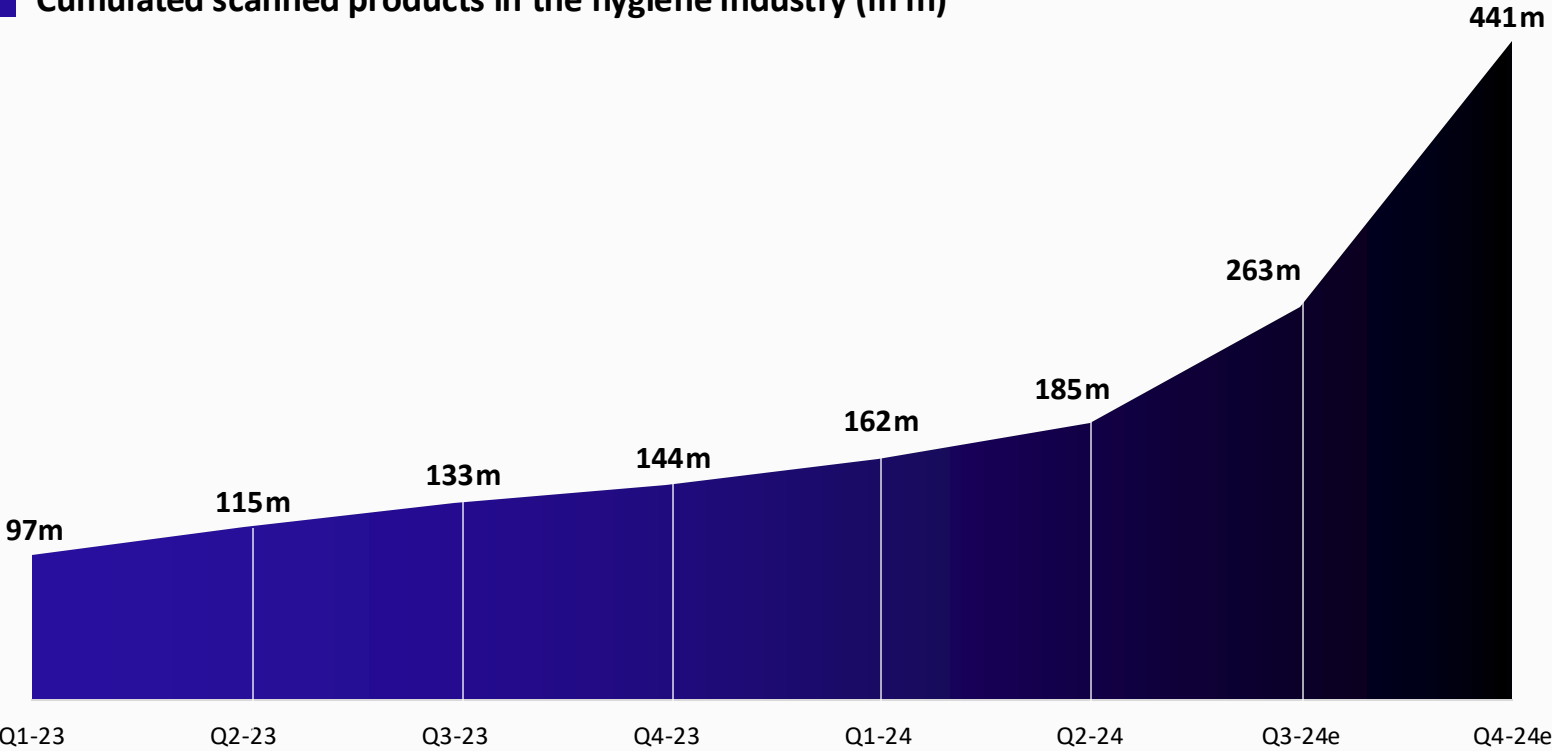
Deployment time

Fabless approach



Field proven platform with more than 180m+ products already measured by TiHive generating strong ROI

Cumulated scanned products in the hygiene industry (in m)



Up to 2m

Scanned products per week

10+

Different types of products scanned

4m+

Kg of measured raw materials

8+

Types of production anomalies detected

Savings and implied ROI on each line

Up to €1m

of raw materials and operational saved per year per line

50t

of plastic reduction per year per line

250t

of CO₂ emissions reduction per year

- + Increasing brand loyalty
- + Reducing weeks of troubleshooting problems

Bootstrapped company with an international team of deeptech & industrial specialists



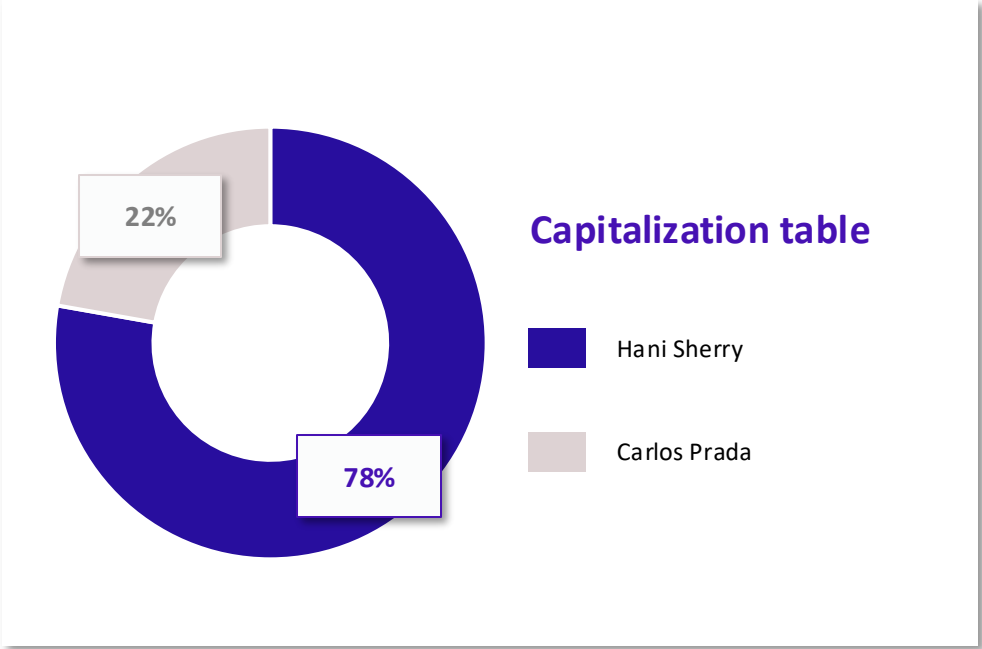
HANI SHERRY
Co-Founder, CEO

- 15 years industrial experience
- PhD in THz semiconductors and Exec-Ed in Entrepreneurship and Negotiations



CARLOS PRADA
Co-Founder, CFO and CIO

- 15 years industrial experience
- PhD in High Performance Computing and MBA in Finance



17 FTE

With expertise in Terahertz, AI, HPC, chemistry and material sciences and quality control

10

Engineers

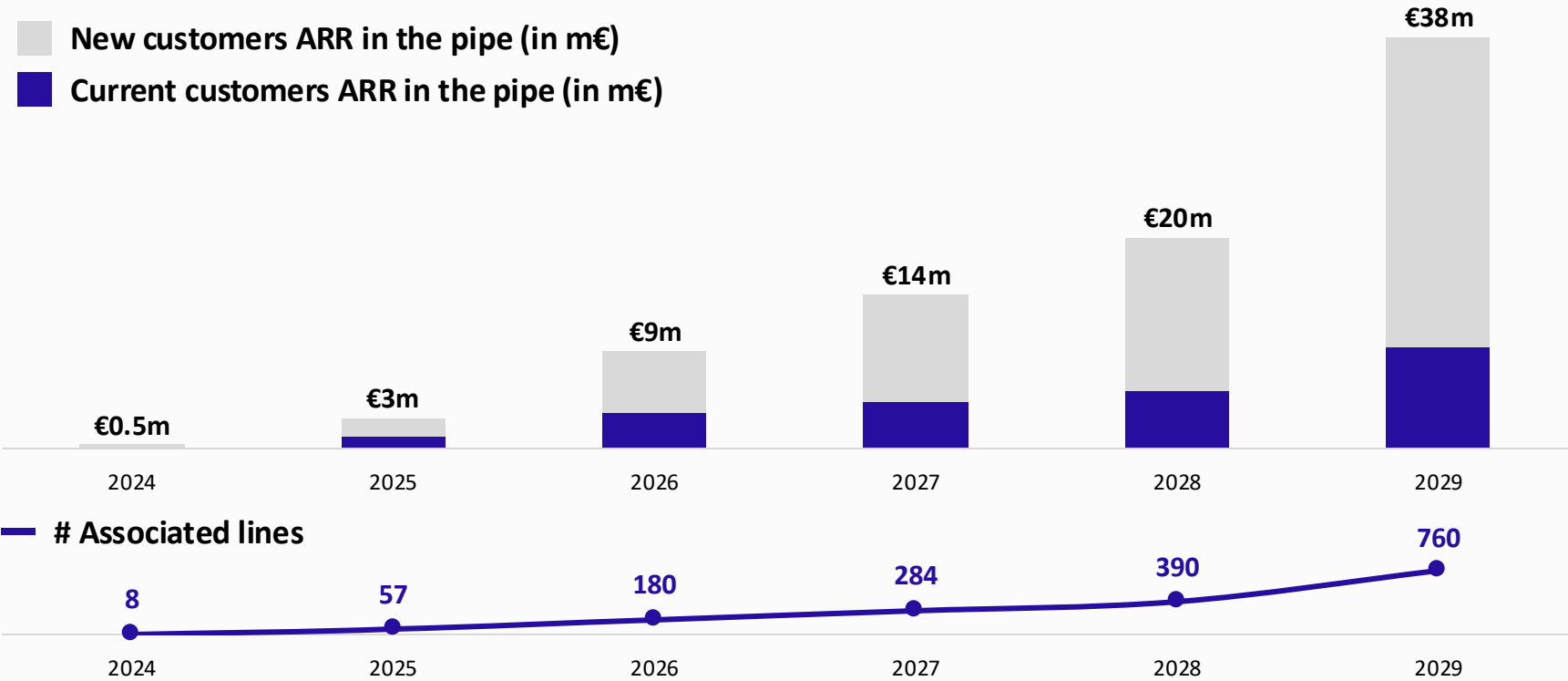
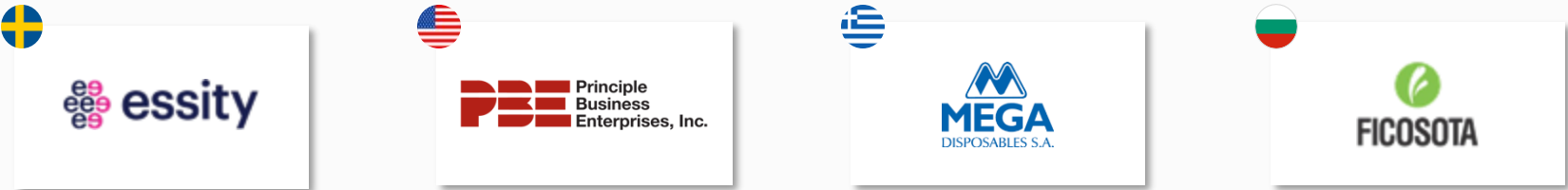
6

PhD holders in the team

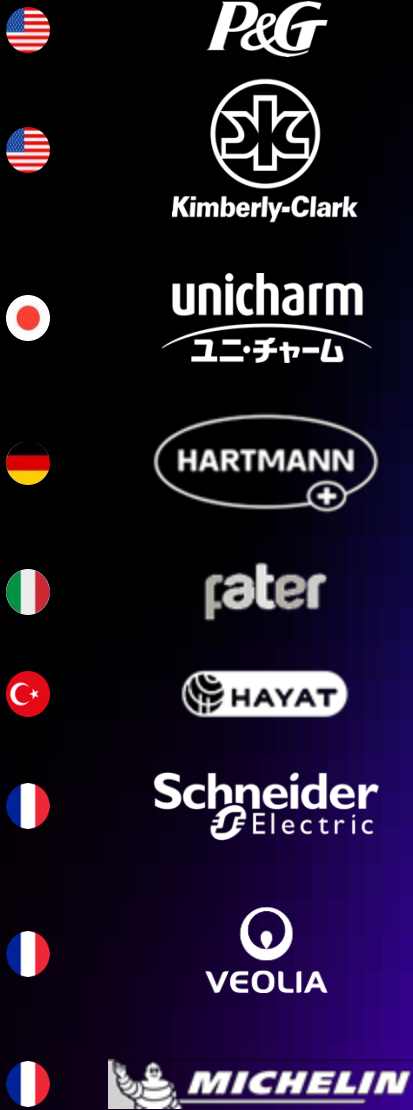
10+

Nationalities and languages

First inline solutions signed with international leaders in the hygiene industry unlocking strong upsell potential



Hot leads 2024:



Looking for €10m* to fund TiHive's scale-up



Structuring commercial development and setting up a customer success team



R&D and product development (new market verticals in inspection and sensing)



Reinforce IP and technical position with at least **10 new patents**



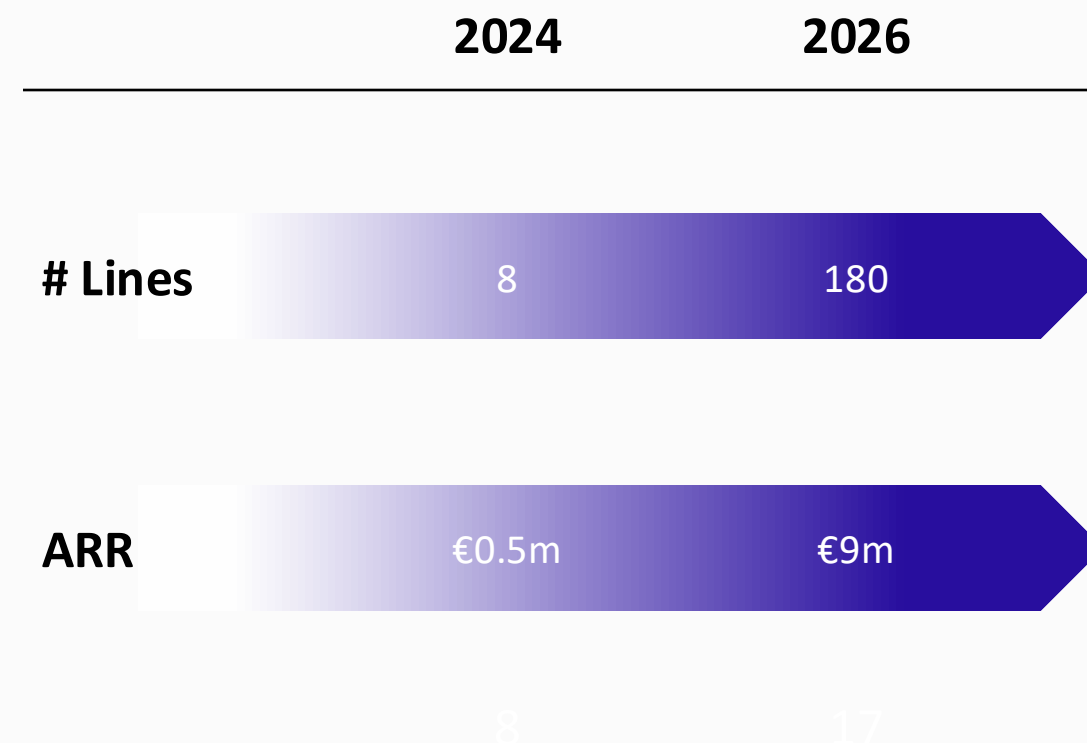
Scale-up operations and cut production costs by **5x**

***Including €4.3m already secured from EIC**

European
Innovation
Council



Deploying 180 lines by 2026 reaching €9m ARR





TiHive: the world first THz x AI sensing technology

Only industrial-grade quality control technology on the market measuring **100% of product** in mass production

Robot-as-a-Service platform combining **state of the art technology AI x ThZ** covered by **10+ patents** and **recognized by the EIC & EIB** as the best in the market

Industrial proven with early adopters turning from pilot to the deployment with 8 lines expected by EoY including **4 already deployed**

Fabless approach/ only final assembly at TiHive, 90% of hardware sourced in Europe, seamless integration within 1 hour

Ultra-scalable platform: a plan to deploy 180 lines by 2026 already in the pipe within the hygiene and textile industry with strong upsell potential

An **expert team** at the crossroads of **AI x Terahertz x Quality control**, enabling a perfect product market fit



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With 120 deals executed for €2bn in total over the last 10 years, Avolta is one of the most active Tech M&A advisors in Europe. Based on this expertise, Avolta's team of 20 people has maximised the value of each and every deal in terms of valuations and overall conditions – this due to its time-tested sectorial methodology and expert negotiating skills.

Dedicated team

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