



# CEO presentation

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Annual General Meeting  
May 21, 2025

**IMPACT**  
COATINGS



# Agenda

1

Recap of 2024

2

Company and strategy overview

3

Technology to meet the strategy

4

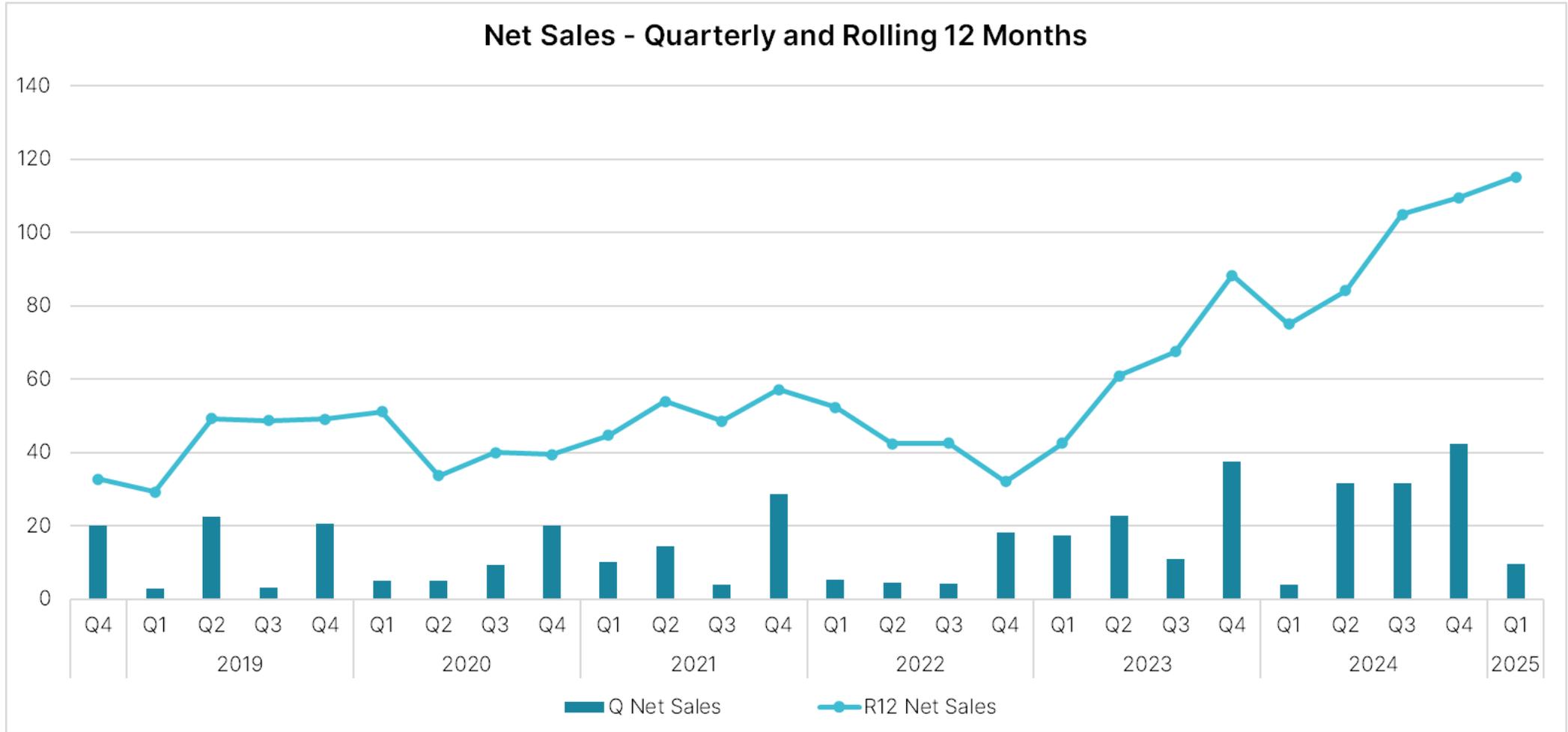
Summary

# Key Takeaways - 2024

- Strong growth despite market challenges
- China driving development
- Successful delivery strategy, IC2000 strengthens its position
- Scalable business model well suited for a developing market
- A stable organization and new facilities
- Foundation laid for profitable growth

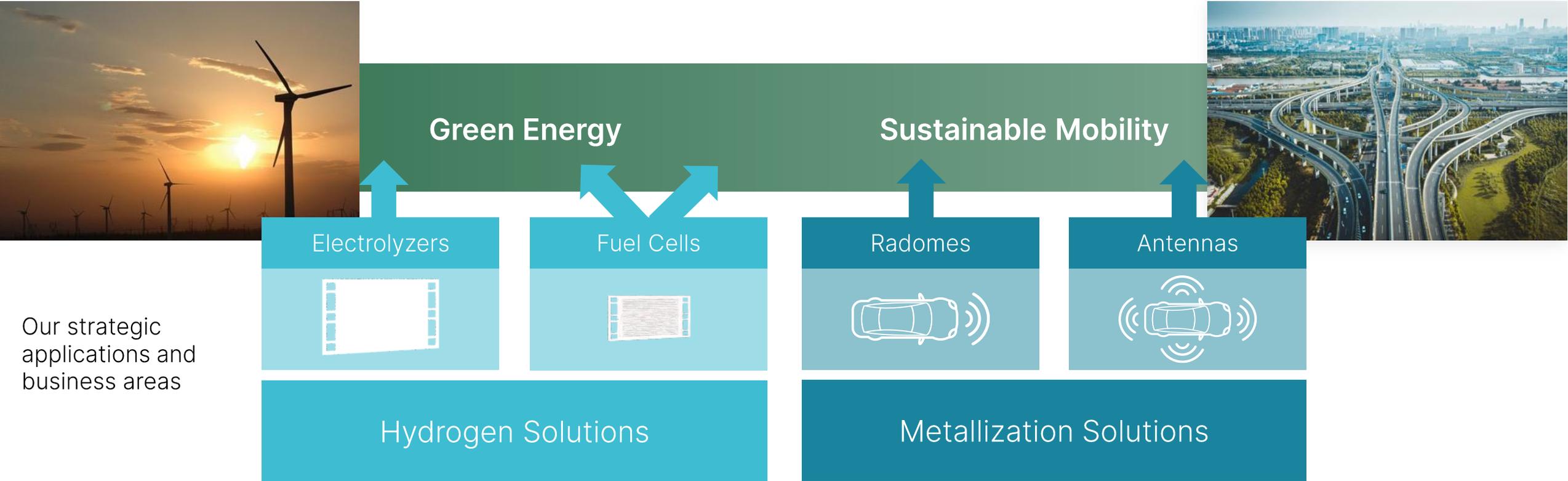


# Significant Growth Over Time, R12 Sales SEK 115 Million in Q1 2025



# Company and Strategy

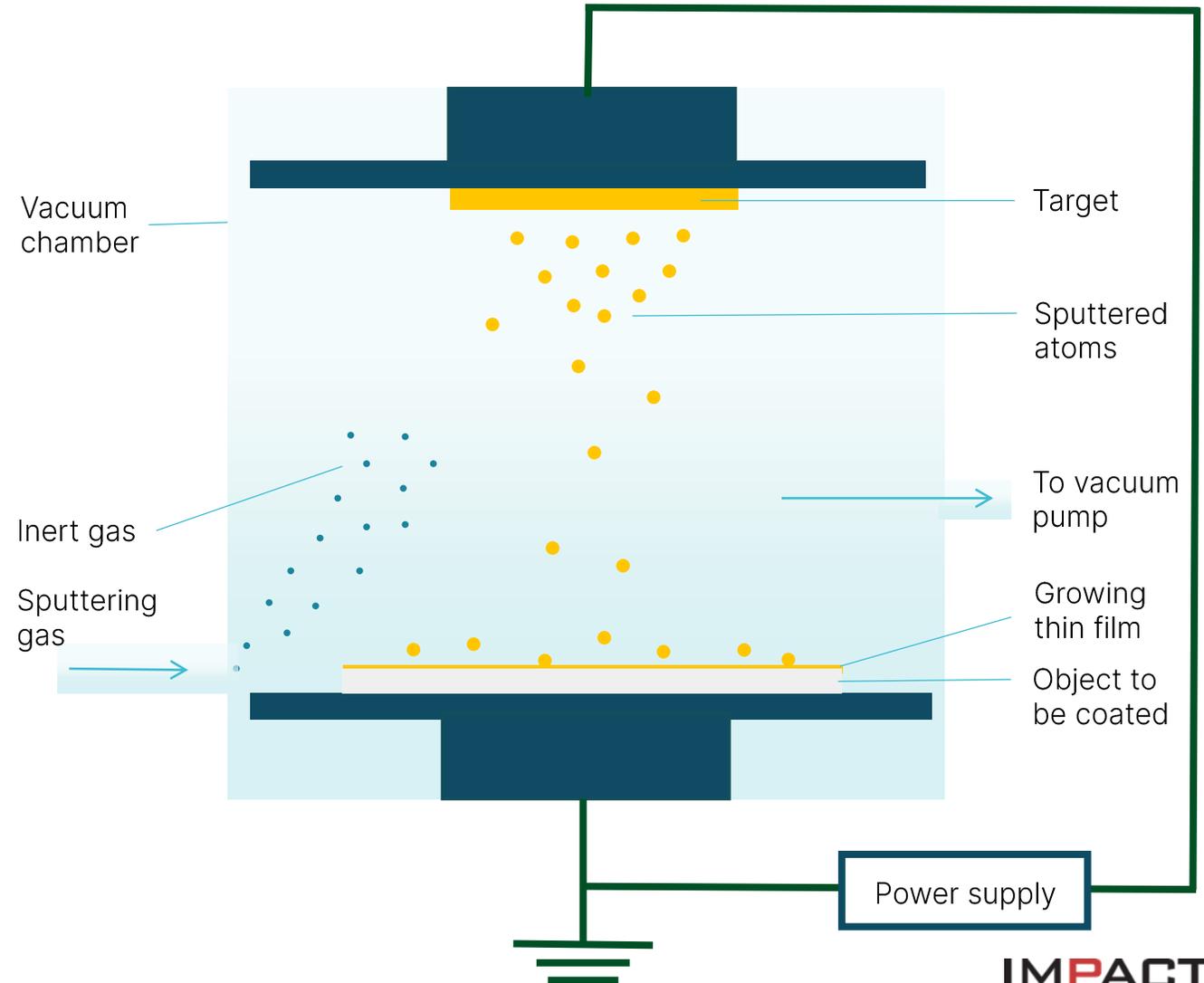
# Strategic Focus in Fast Growing Markets



PVD is a horizontal technology that can be found all around us. Impact Coatings has 25 years experience of PVD coating technology.

# PVD | Physical Vapor Deposition

- PVD take place in vacuum
- Solid material from the so-called target is vaporized by a plasma
- The vapor can be mixed with other gases to create new materials
- The new material will form a thin film on the object to coat



# Impact Coatings in Brief

## Global Sales and Coating Service Centers

### Company facts



Founded 1997



HQ: Linköping, Sweden



China & US Subsidiary



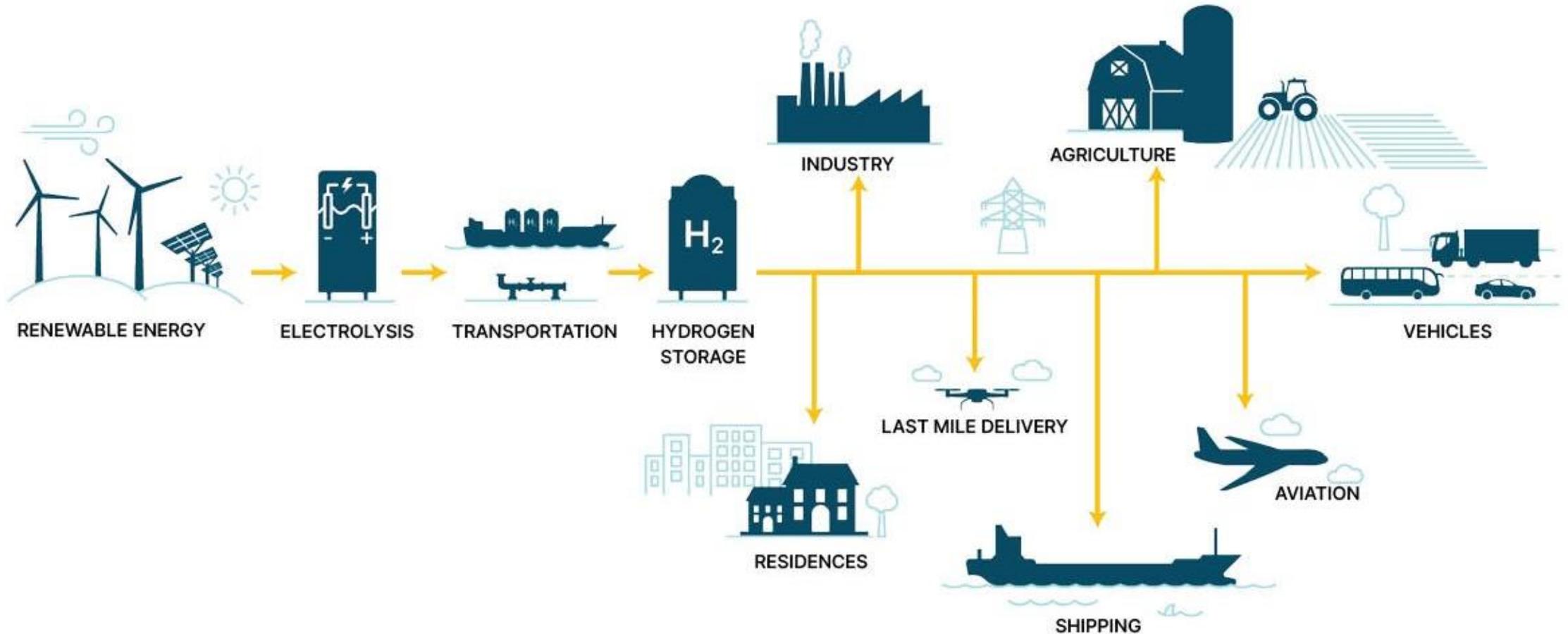
Global Sales Representation



Flexible & Scalable PVD Coating Solutions

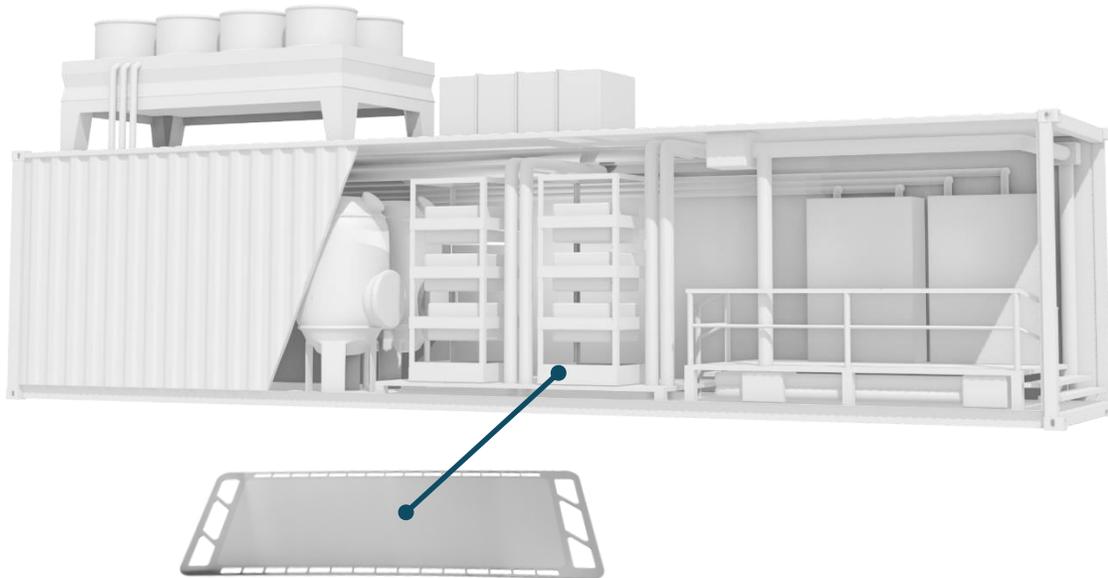


# The Hydrogen Society - an Emerging Market That Drives Expansion

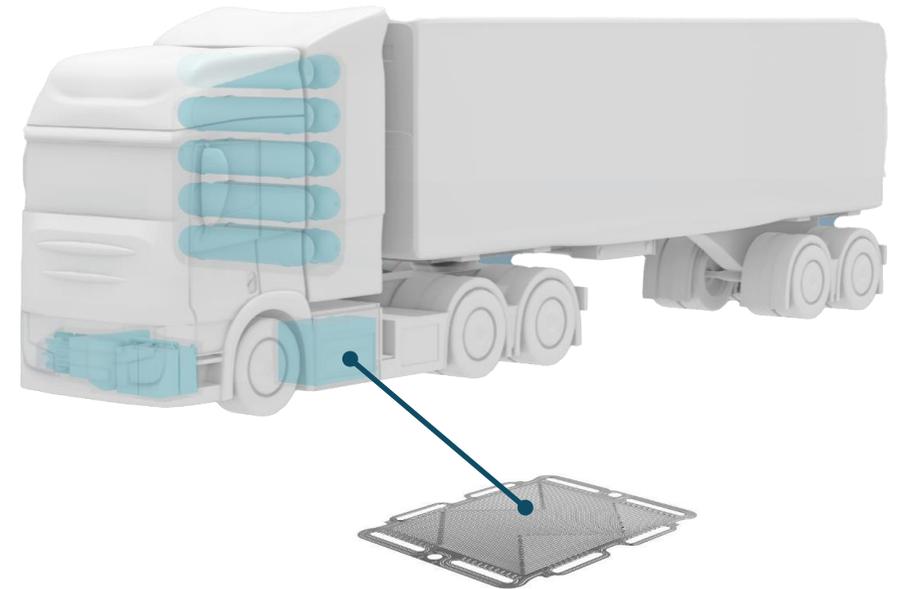


# PEM Electrolyzers and Fuel Cells Contain Metal Plates that Need Coatings

Electrolyzer: ⚡ →  $\text{H}_2$



Fuel Cell:  $\text{H}_2$  → ⚡



- Metal separator plates require high-performance coatings for good electrical properties and protection.
- You could say that the coating sets the performance of the complete system.

# IC2000 is the Core in Our Offering - both for Electrolyzers and Fuel Cells



# Flexible Delivery Models

Offering	Details	Location	Operator
 <b>Coating Services</b>	Flexible Coating Services performed in Impact Coatings' facilities		
 <b>Managed Services</b>	Manage at the customer's site with Impact Coatings' team	 Customer	
 <b>Machine Sales</b>	Coating performed in-house by the customer or a 3rd party	 Customer	 Customer

# Machines are Made in Sweden

- In-house assembly of the machines
- New facility in Linköping inaugurated in Q4 2024
- Initial capacity of one machine per month





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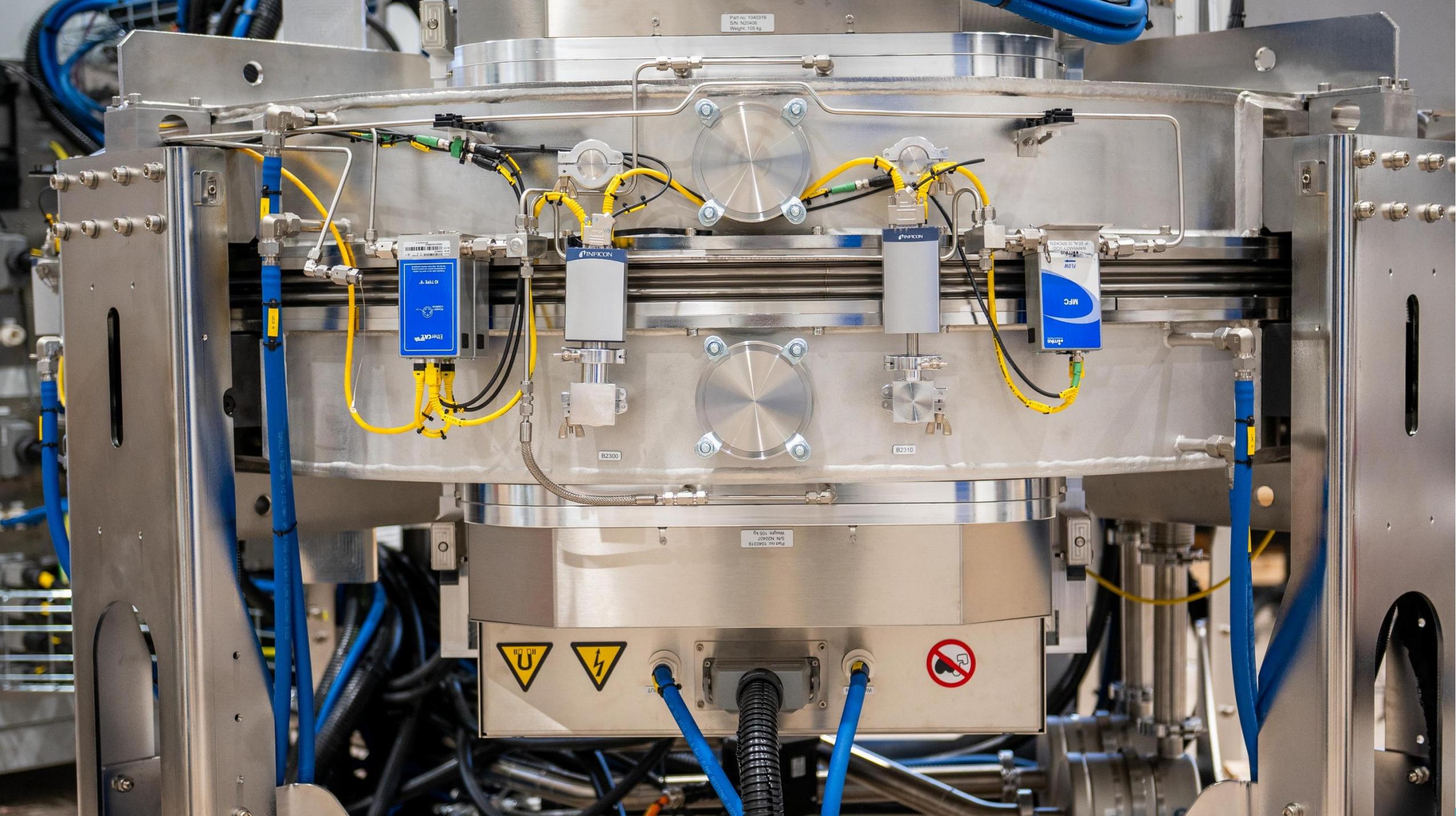
HYWEMA

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ZOOM







Part no: 1040319  
S/N: N20406  
Weight: 105 kg

ID TPC-9  
EPR CAT

INFINICON

INFINICON

MFC  
FLOW

B2300

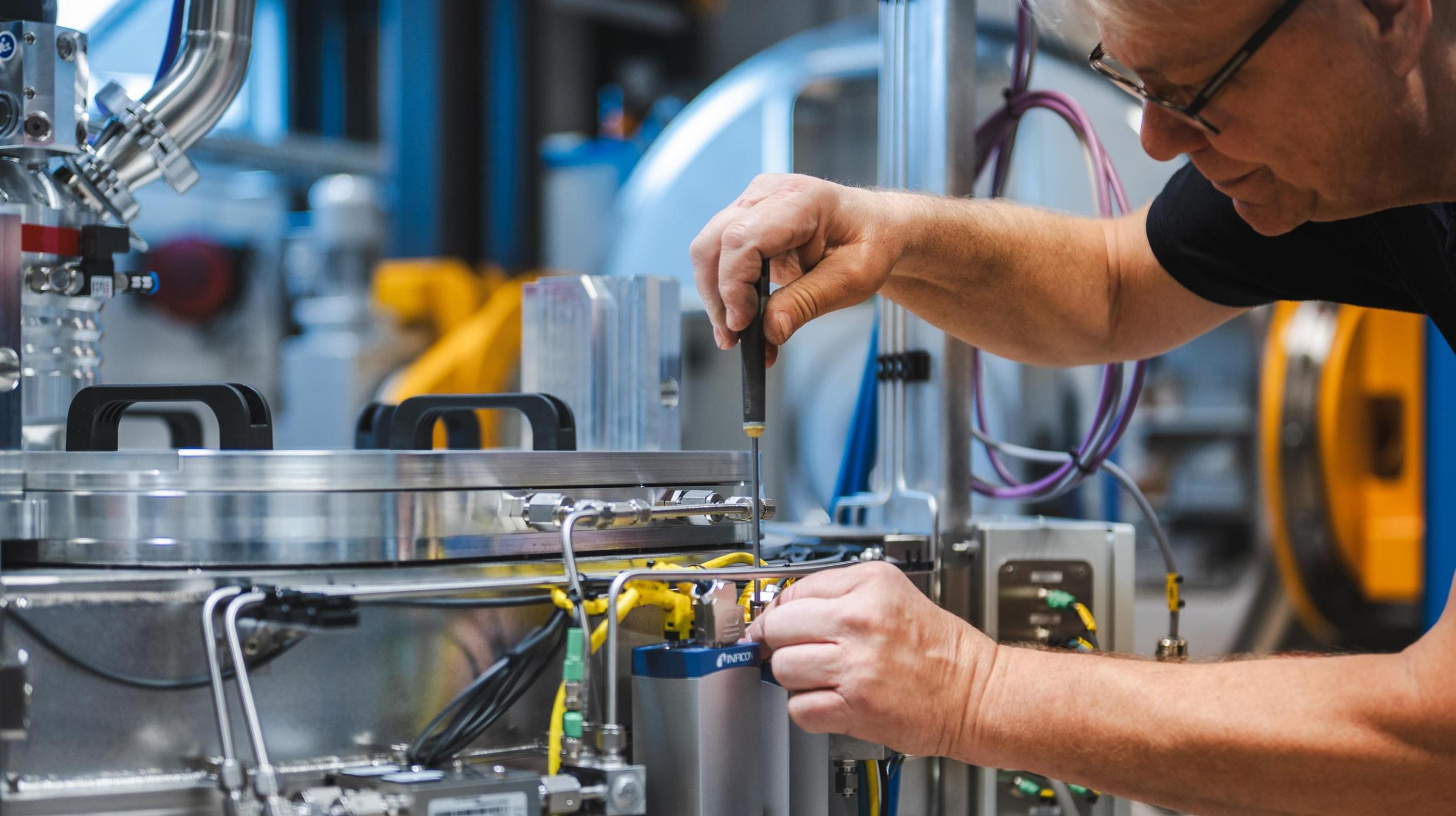
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Part no: 1040319  
S/N: N20407  
Weight: 105 kg



LT

WT



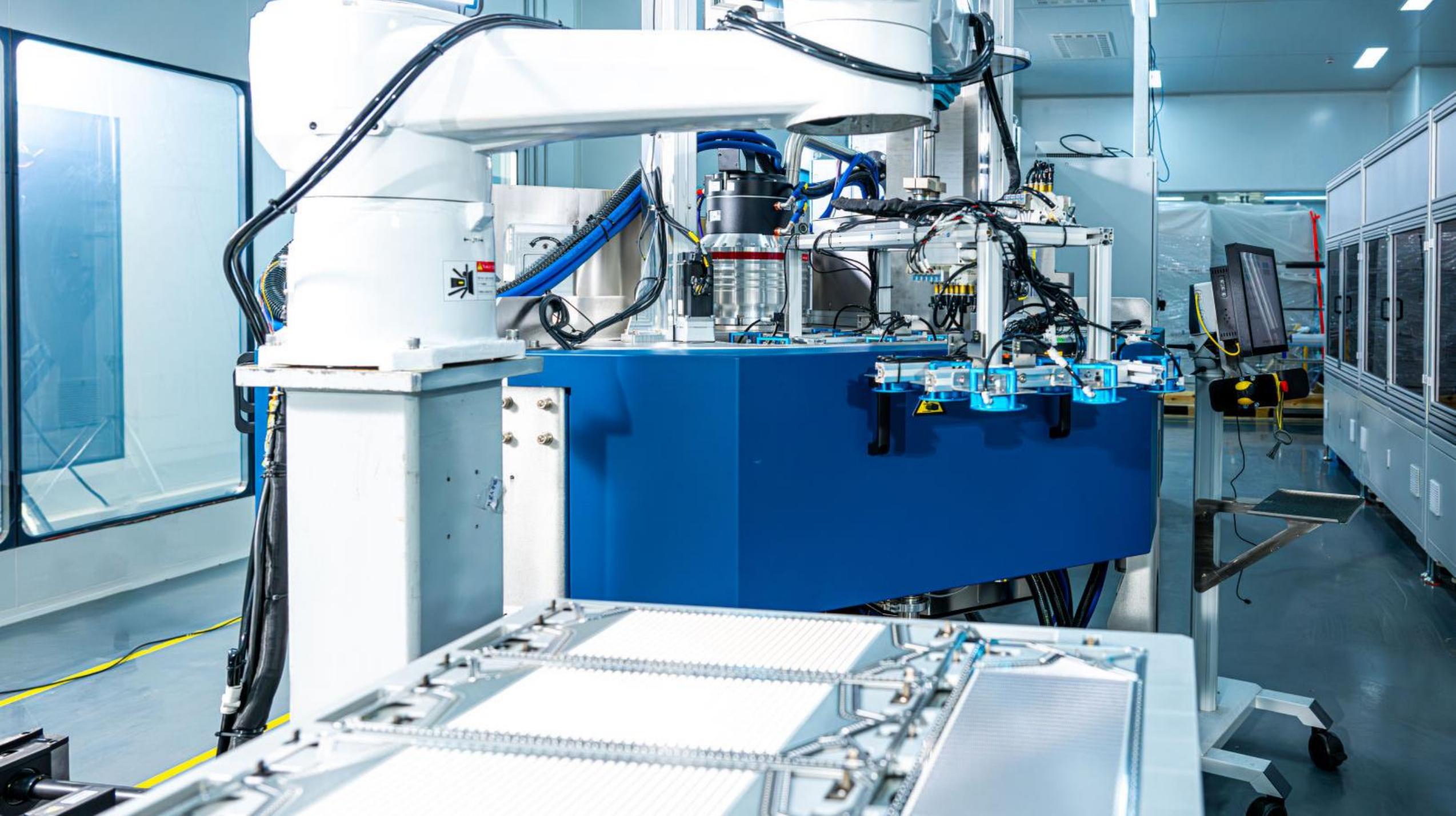
# Coating Services in Sweden and China

- Coating services in Linköping (Sweden) and Shanghai (China) to support local markets
- Sweden focuses on customer samples
- Shanghai focuses on fuel cell series production
- Ready to set up coating service center in US



IM ACT COATINGS  
真空镀膜车间  
Coating Workshop







IMPACT COATINGS IMPACT COATINGS  
毅湃(上海)真空镀膜技术有限公司 毅湃(上海)真空镀膜技术有限公司

警告/WARNING  
手不可触碰转动部位  
DO NOT TOUCH MOVING PARTS

18:36  
10月12日 星期四



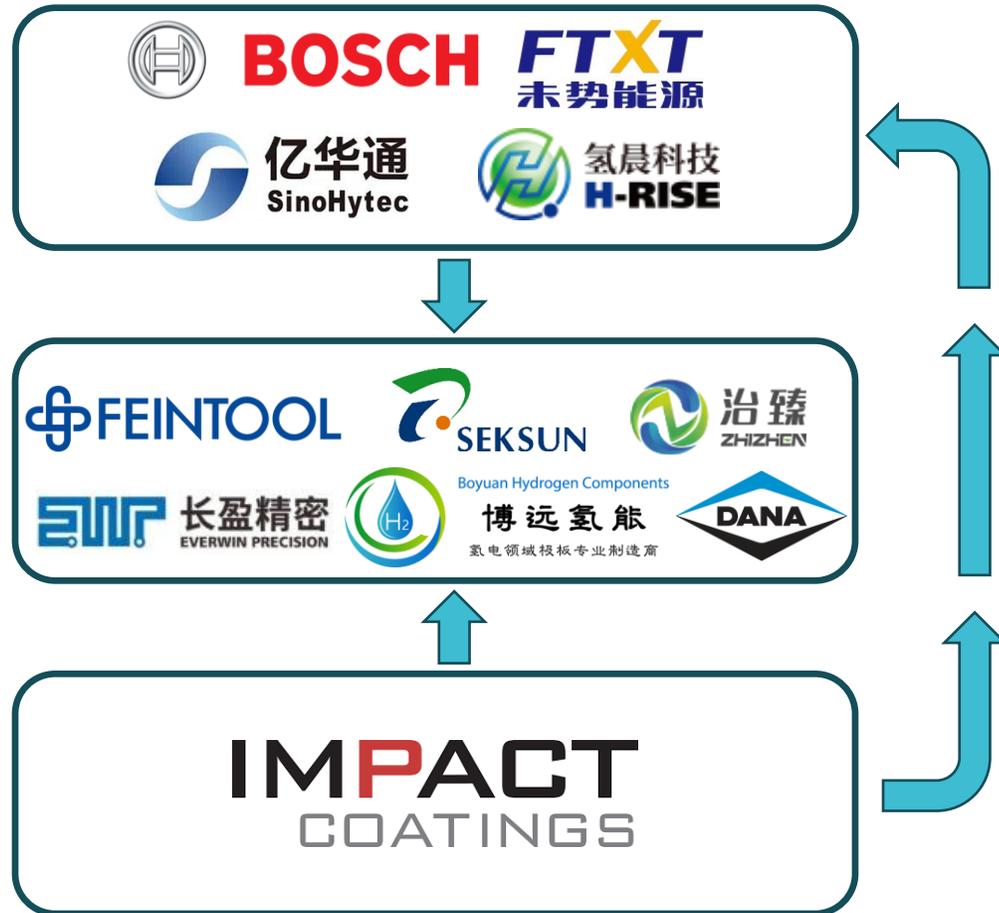






# Strategy

# The Push-Pull Strategy



- The Push-Pull strategy is one of the strongest to drive sales and maintain premium pricing
- But for the strategy to work it requires that you are relevant higher up in the value chain
- CMP, Premium FC and other advanced fuel cell coatings, are qualified by the customer's customer
- SOFC/SOEC coatings are advanced coatings relevant to the complete value chain
- Iridium consumption is relevant for the customer's customer

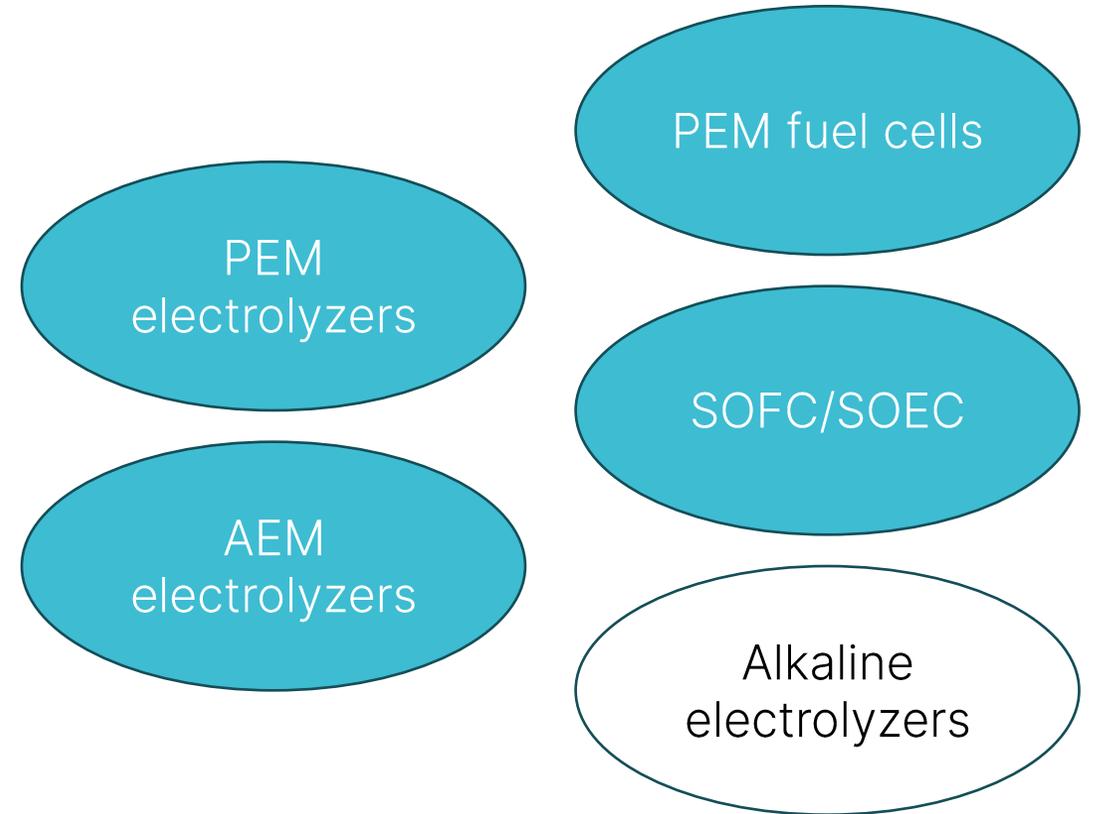
Logos are just examples of players in the Chinese fuel cell ecosystem

# Push and Pull with One of the Big Players - FTXT a Subsidiary to Great Wall Motors



# We Strive to Become Market Leader in the Hydrogen Coatings Market

- Electrolyzers and Fuel Cells
- Must be relevant to the end-user
- Technologies that makes us relevant
  - Advanced multi-layer fuel cell coatings
  - Advanced SOFC/SOEC coatings
  - Iridium oxide based catalytic coatings

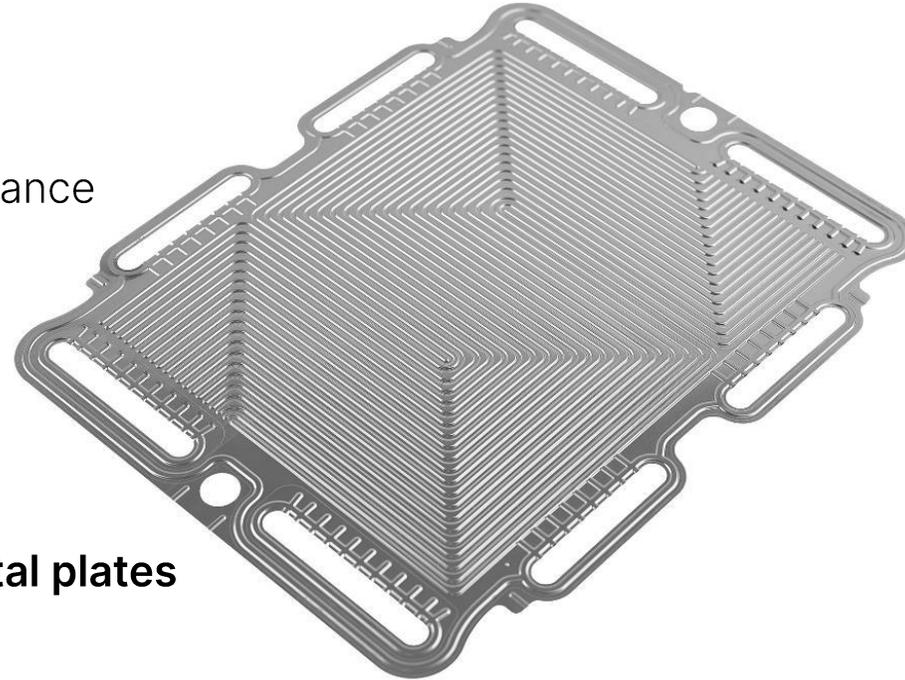


# Technology to Meet the Strategy

# Ceramic MAXPHASE™

For mid-end PEM fuel cell applications

- Good corrosion resistance
- Low interfacial contact resistance
- Competitive cost
- >10 000 hours durability



## PEMFC mono- and bipolar metal plates

Substrate: Stainless steel 316L

Thickness: Up to 0.2 μm



### CONTACT RESISTANCE

BPP's must have low contact resistance to maximize conductivity



### DURABILITY

BPP's need to operate in corrosive conditions lasting for the fuel cell lifetime



### WEIGHT

BPP's should be lightweight



### COST

Low cost

# Premium FC Coating

For heavy duty PEM fuel cell applications

- Extreme corrosion resistance  
Reversal tolerant, 1.6 V for more than 10 hours
- Low interfacial contact resistance  
~5 mΩcm<sup>2</sup> at 0.6 MPa
- Premium durability

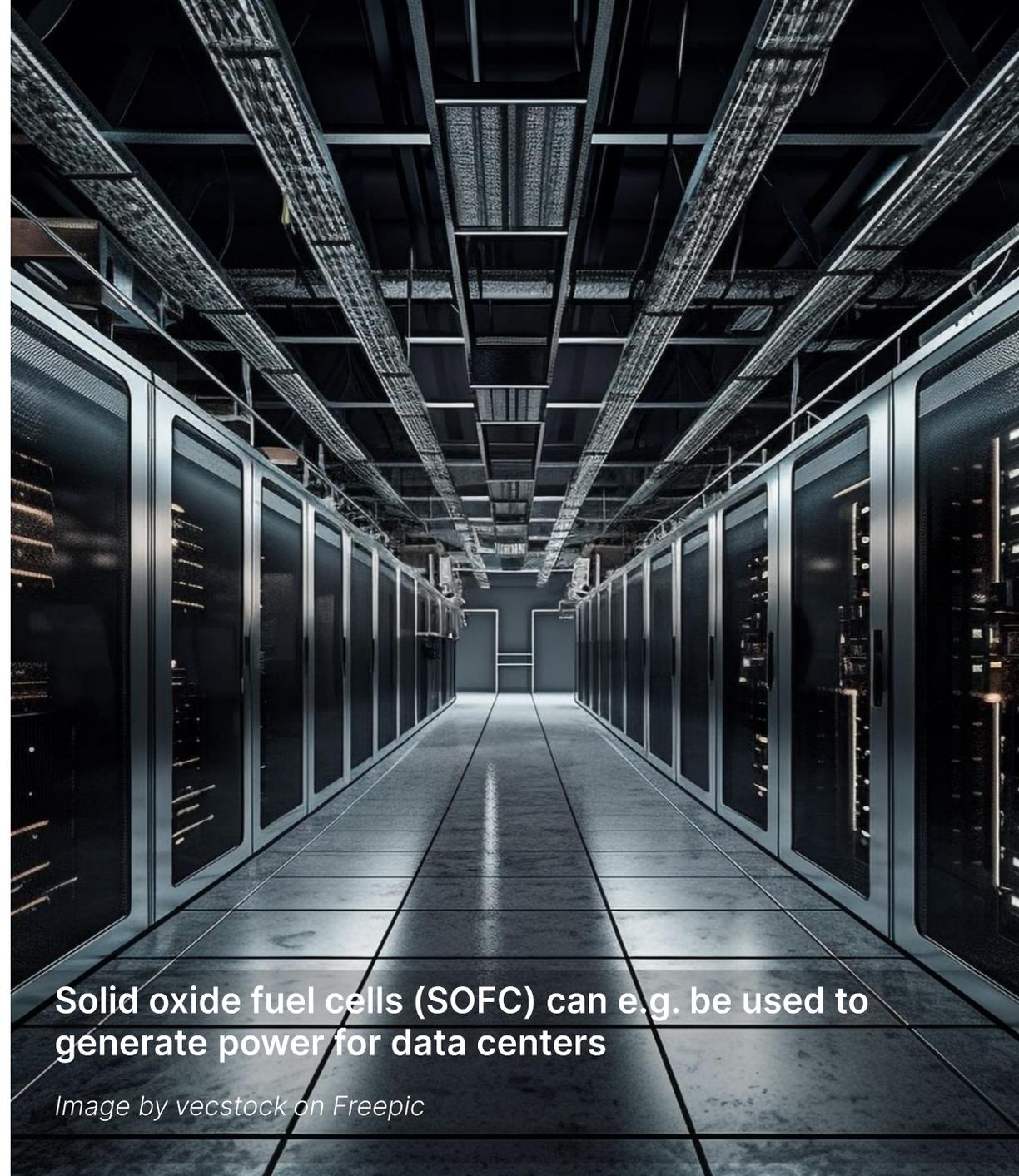
## PEMFC mono- and bipolar metal plates

Substrate: Stainless steel 316L

Thickness: Up to 0.2 μm

# Encouraging Results With Solid Oxide Applications

- Expanding our offering to SOFC (solid oxide fuel cell) and SOEC (solid oxide electrolyzer cell)
- SOFC/SOEC is suitable for stationary applications.
- Test results have proven coating performance
- Extends technology portfolio beyond PEM (proton exchange membrane) applications



**Solid oxide fuel cells (SOFC) can e.g. be used to generate power for data centers**

*Image by vecstock on Freepic*

# Focused R&D on Iridium Oxide

## Background

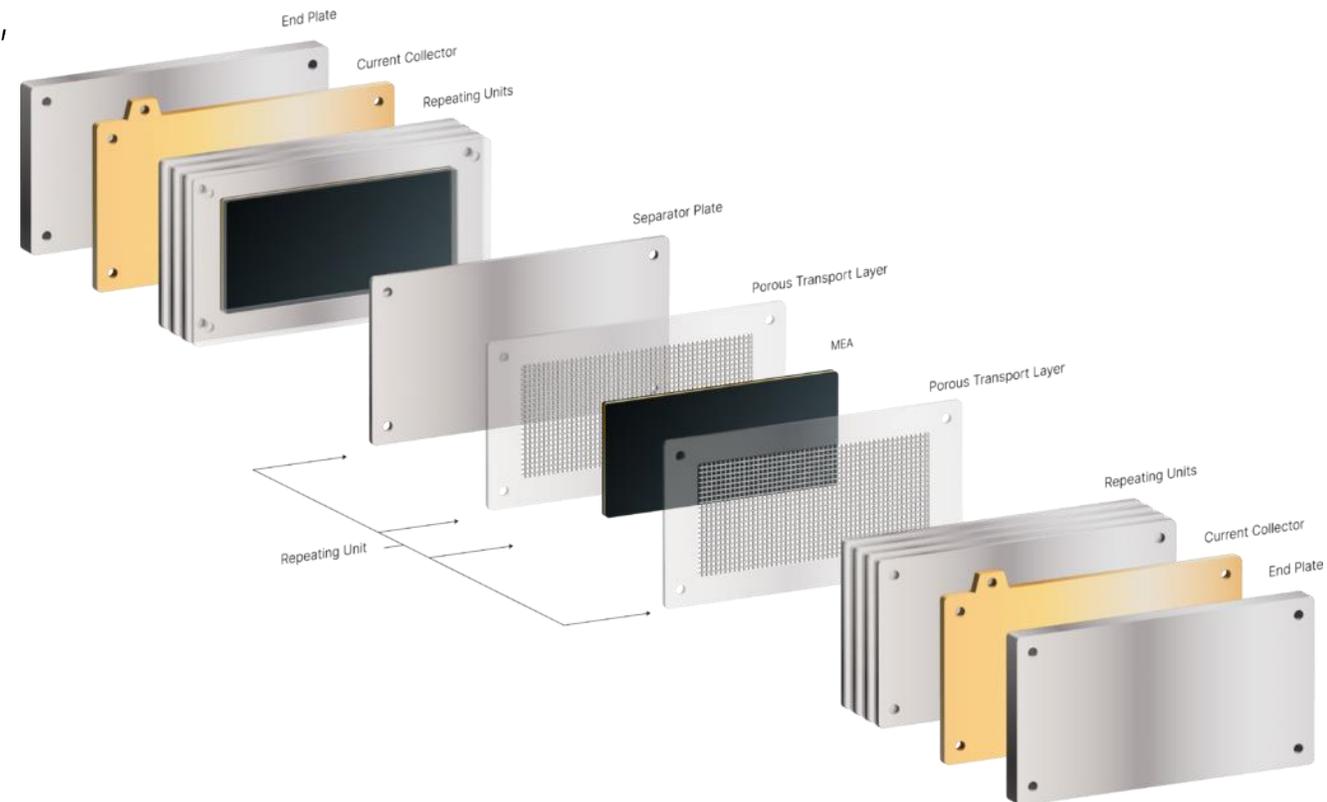
- We are already coating so called PTLs with platinum
- By adding the catalytic iridium oxide layer to our offering, we expand our market

## Why is iridium interesting?

- The world production of iridium is only 7000 to 9000 kg per year
- To make a standard 1MW PEM electrolyzer stack you need about 0.5kg of iridium
- Today that iridium cost about 75kUSD
- But what about tomorrow?

## Our solution

- Move the iridium from the membrane to the PTL
- Reduce the consumption by a factor of 10

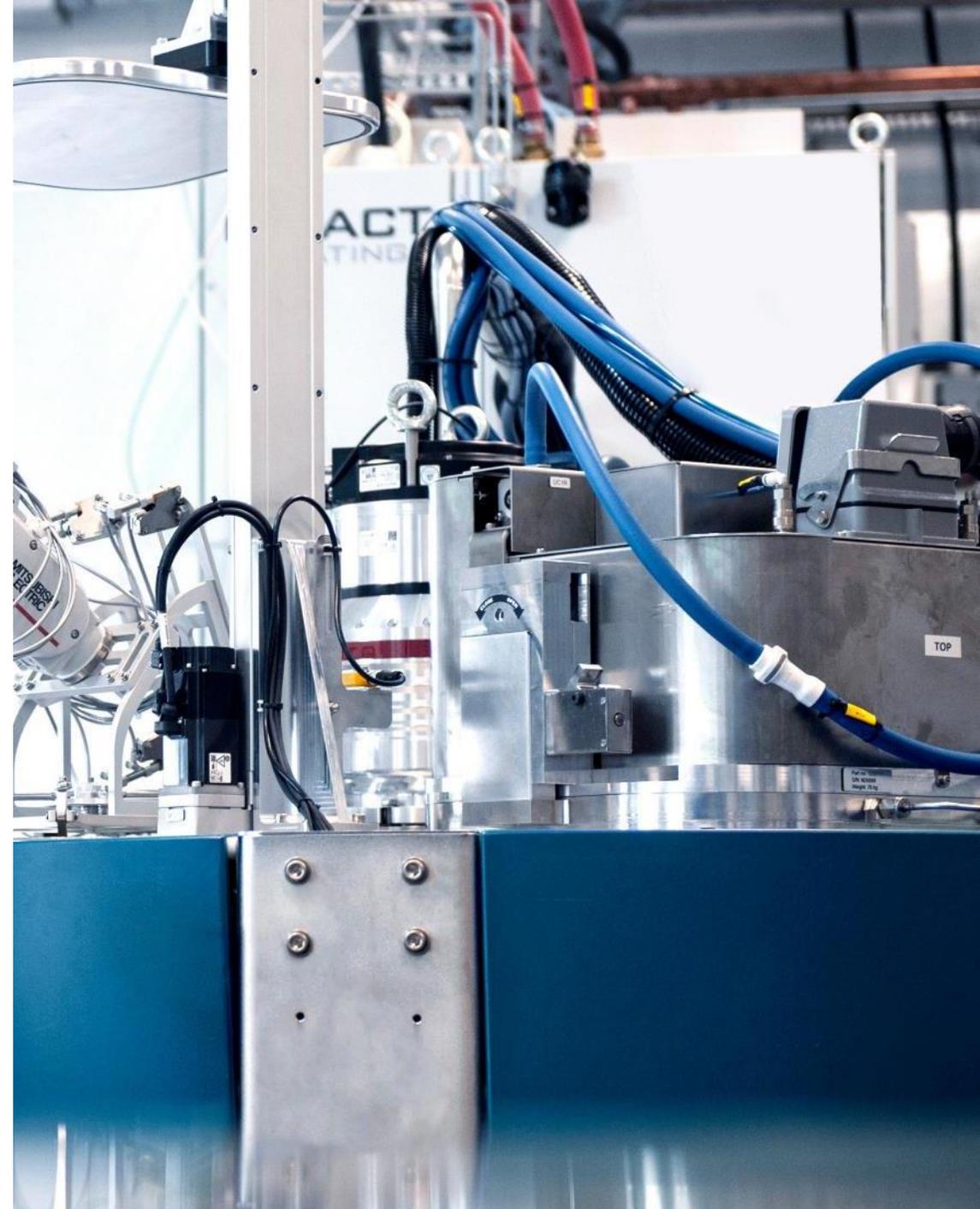


PEM electrolyzer stack

# Summary

# Summary

- Our products and services are easy to buy
- We address key challenges in the hydrogen market
- Good company-market fit
- Technology leadership in advanced coatings



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