

ASSOCIATION OF
ROTATIONAL MOLDERS

A M S

Belgium BV

Automation & Robomould Technology

Belfast June 09 - 12 / 2026

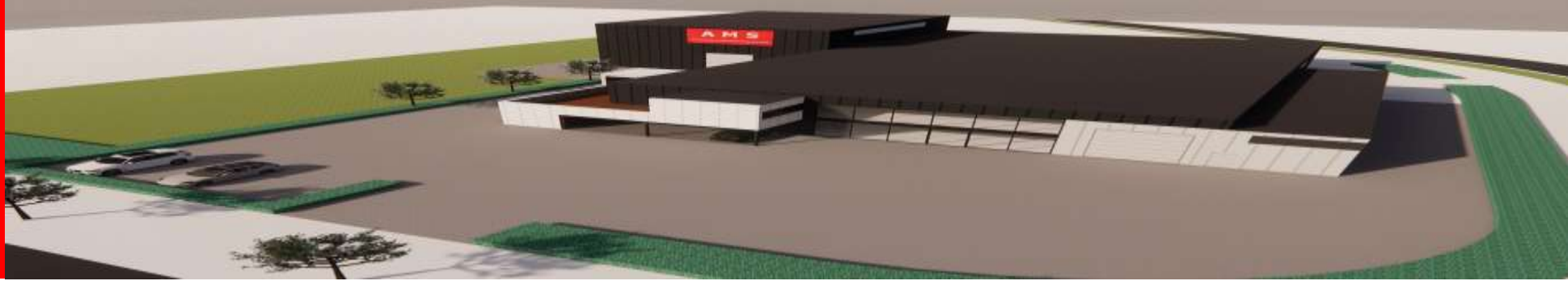


Flanders
State of the Art

AMS

Belgium BV

Automation & Robomould Technology



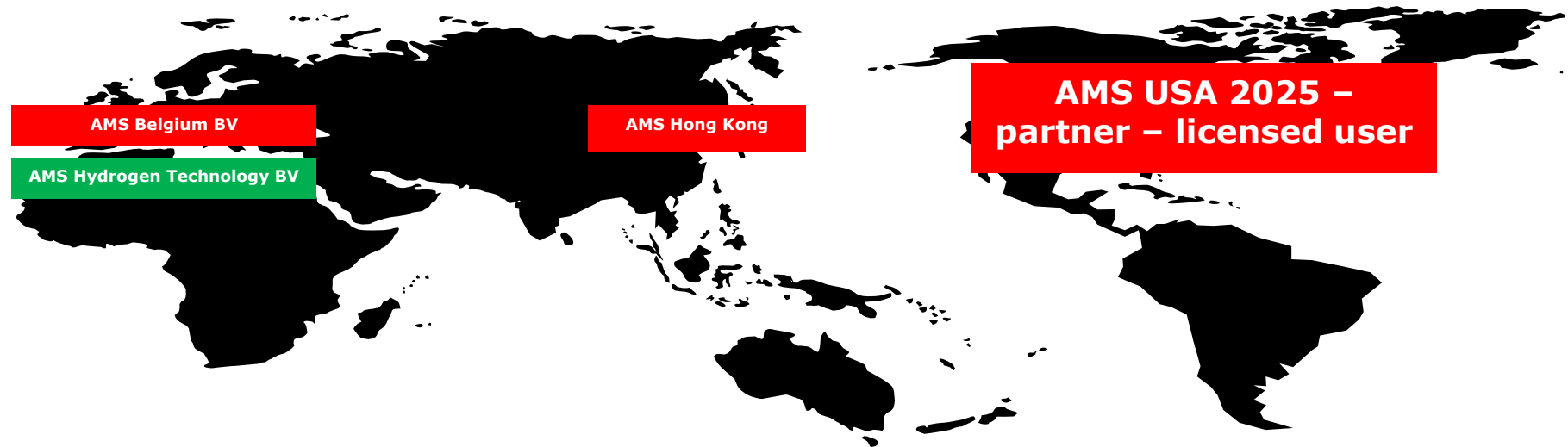
AMS

Hydrogen Tech BV

Hydrogen CPV Technology



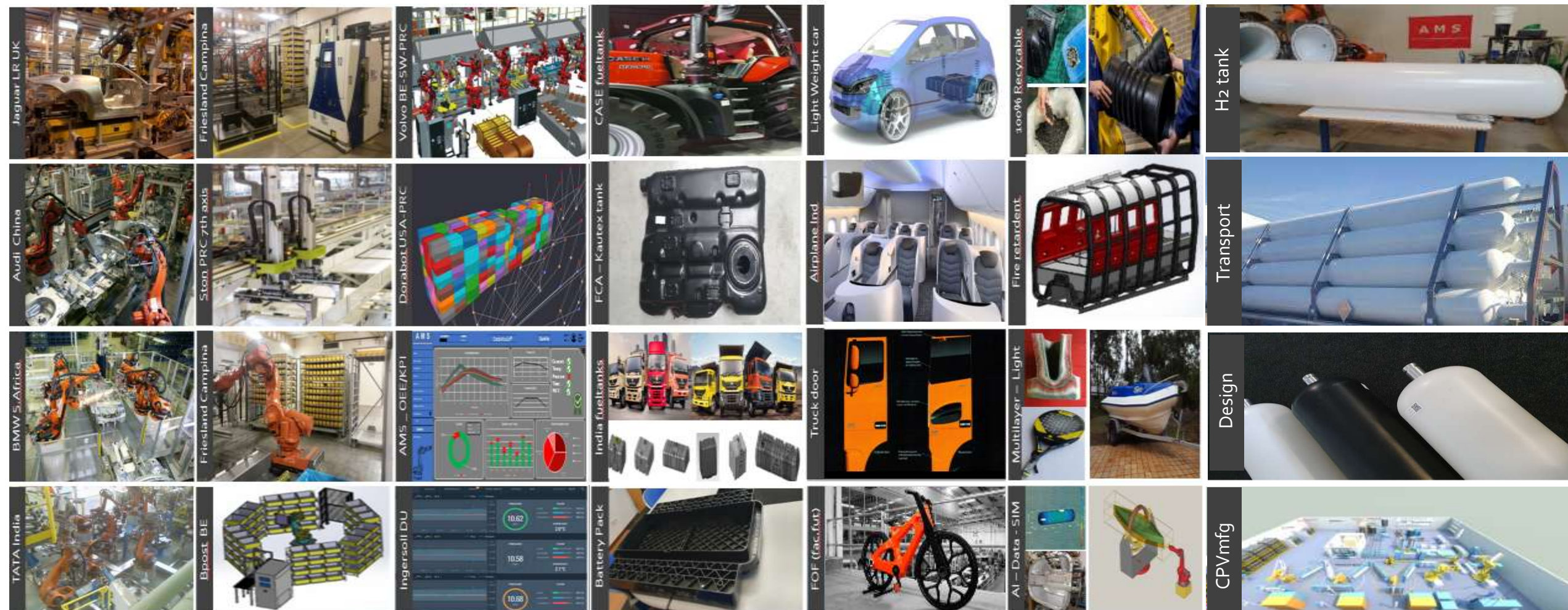
AMS Belgium BV & AMS Hydrogen Technology BV



AMS Automation & Manufacturing Services

AMS Robomould & Smartmould Technology

AMS Hydrogen CPV Technology



Software services
(large scale projects - robot & PLC software)

Turnkey automation Projects
(food, logistics, pharma, chemical...)

Factory of the Future 4.0
(simulate, big data, digitalization, OEE, ...)

Fueltanks (TRL7-9)
(EOL or preseries fueltanks, trucks & series)

Light weight mobility (TRL3-6)
(TTTBOBC = interior/exterior/battery pack)

Air, medical, sport... (TRL1-5)
(recyclable, multilayer, non-carbon)

CPV tanks & winding (TRL5-8)
(HYDROGEN tanks and factory)

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Belgium BV

**Automation &
Manufacturing
Services**



AMS Belgium BV - Automation & Services Technology



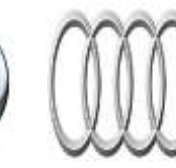
AMS Belgium BV – Robomould & Smartmould Technology



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AUTOMOTIVE automation, projects

AMS supports our customers global in automotive automation



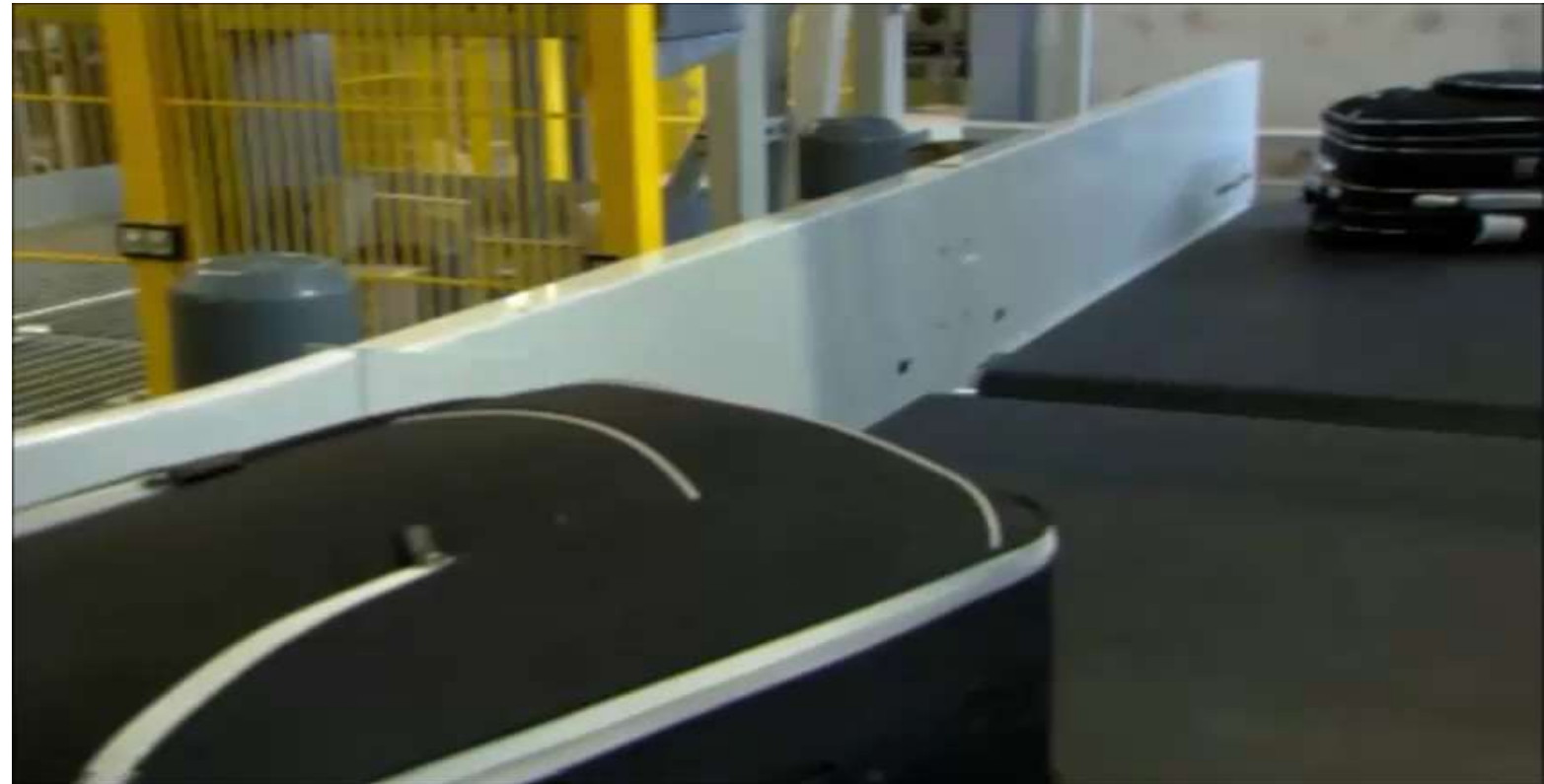


Friesland Campina – cheese manufacturing

- Robot & PLC progr. project
- Robots = 28, PLC = 8, AGV systems = 8
- Integration WMS/PMS, OEE table, time optimization

- Turnkey robot & PLC programming project
- Robots = 4, PLC = 3
- Integration WMS/PMS and OEE table (ind.4.0)

- Turnkey robot & plc biscuits handling
- Robots = 8, PLC = 2



INTRALOGISTICS and several automation projects – AIRPORT logistics

- Big data analysis
- Upfront calculation bin space and luggage sorting

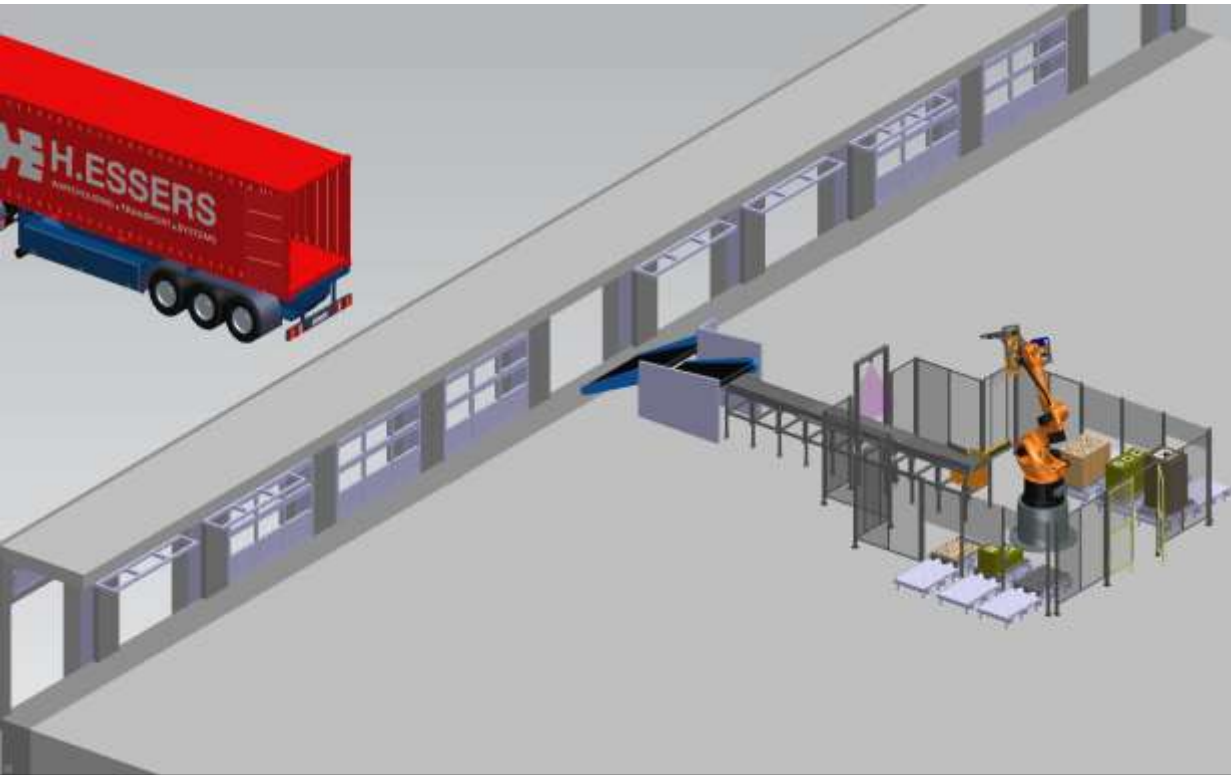
- 1Mio luggage's/cell/year
- 200 bags/hour
- 85 to 90% filling capacity



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LOGISTICS, palletizing

Logistics, warehousing, airport handling, sorting, SCADA applications



INTRALOGISTICS and MIXED Palletizing

- Big data analysis
- Your overnight shipment preparation for warehouses ... last mile logistic !!!

- Complete automated system
- Complete warehouse architecture
- Automated loading and packaging

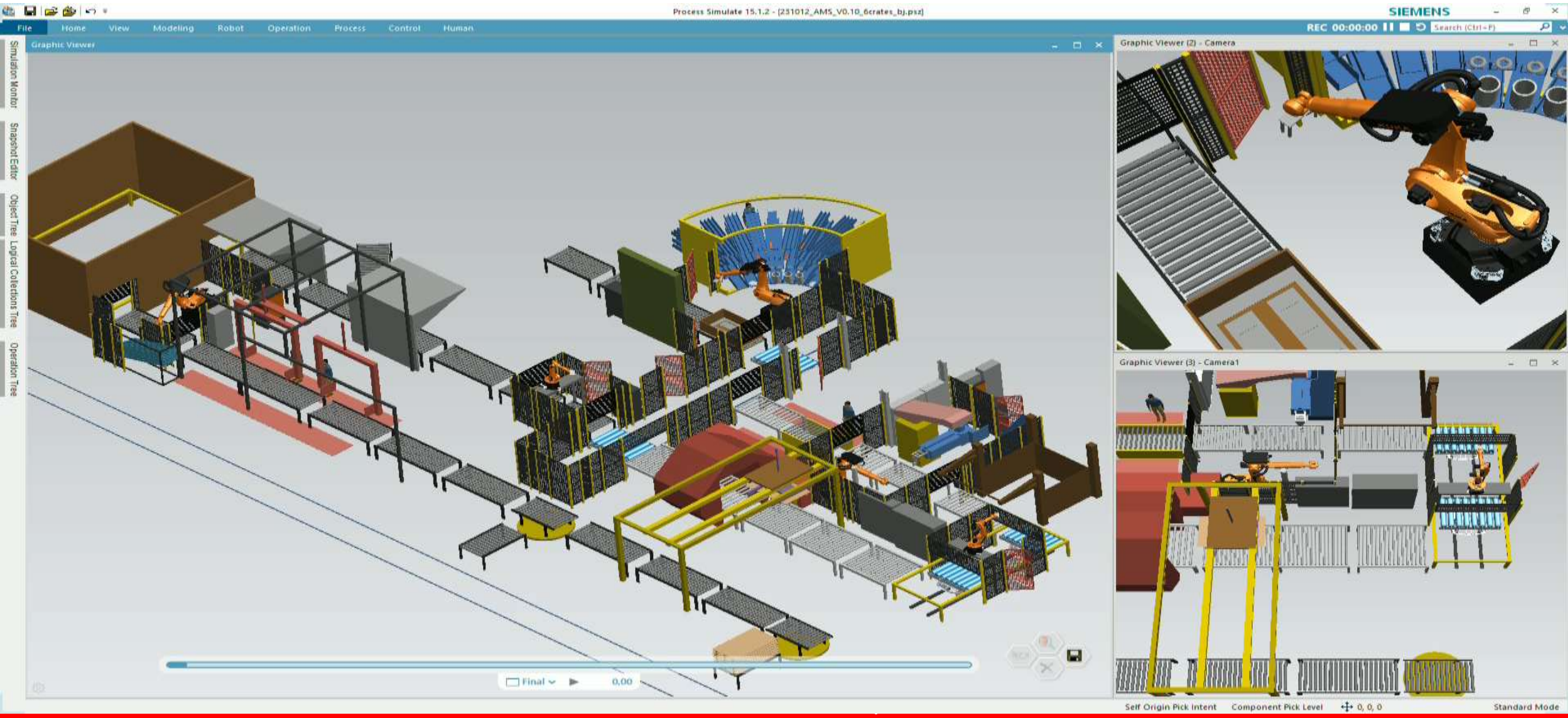
Mixed palletizing in cooperating with our German technology provider



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DIE CASTING automation

AMS Belgium – USA our global customers global



A M S
Hydrogen
Technology BV

CPV Hydrogen
Technology



AMS Hydrogen Technology – CPV design & testing





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AMS Hydrogen Technology

Products & references

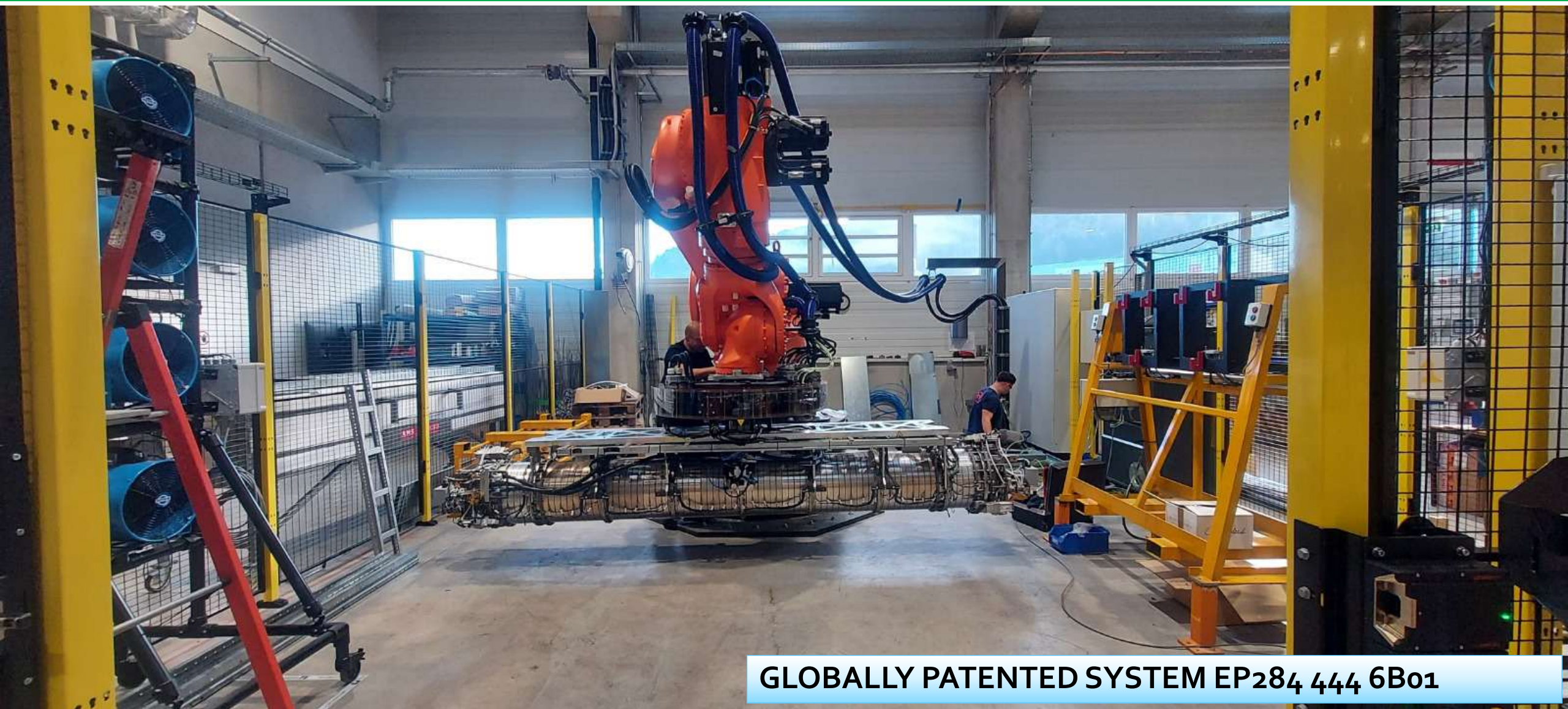




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AMS Hydrogen Tech – 3400mm

An Austria project and setup - certified 700 bar



GLOBALLY PATENTED SYSTEM EP284 444 6B01



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AMS Hydrogen Tech – liner Mfg

The Austrian project – 4 moulds from 084ltr to 400ltr



GLOBALLY PATENTED SYSTEM EP284 444 6B01



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AMS Hydrogen Tech - liner Mfg

The French project – MAN / AIR / GEO and now into PRC



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AMS Hydrogen Tech – Mfg

The German project @ AMS





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AMS Smartmould – H2 liner moulds

Mould Manufacturing – MADE IN LIMBURG !



GLOBALLY PATENTED SYSTEM EP284 444 6B01

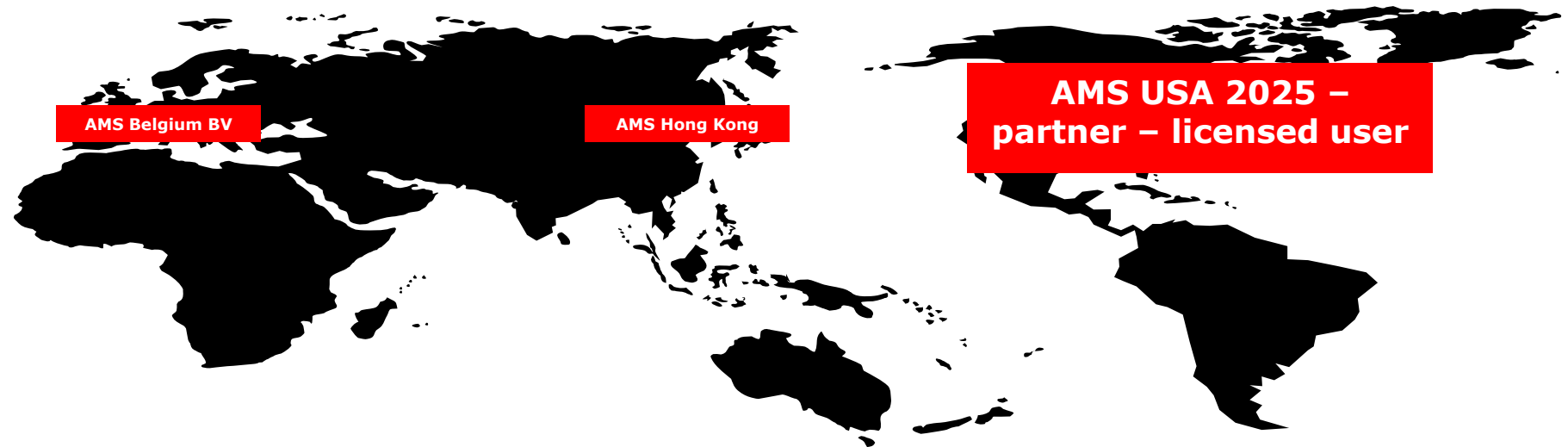
AMS Hydrogen Technology

AMS
Belgium BV

**Robomould &
Smartmould
Technology**



AMS Belgium BV – Robomould & Smartmould Technology





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Robomould – Turnkey project

Turnkey customer solutions 2014



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Robomould – Turnkey project

Turnkey customer solutions 2016



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Robomould – Turnkey project

Turnkey customer solutions 2018



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Robomould – Turnkey project

Turnkey customer solutions 2021



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Robomould – Turnkey project

Turnkey customer solutions 2023



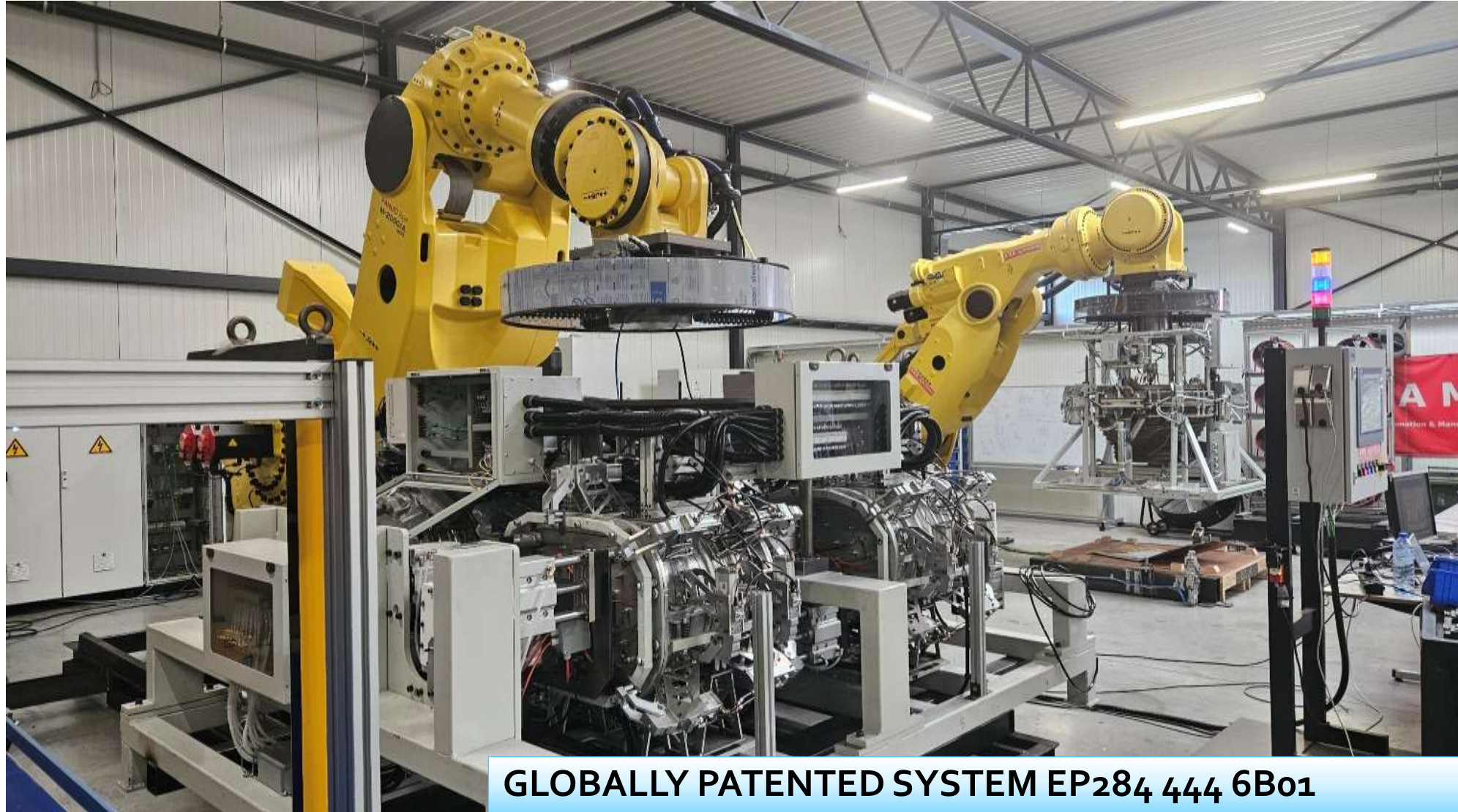
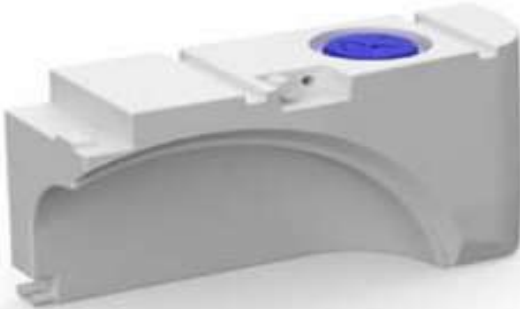
GLOBALY PATENTED SYSTEM EP284 444 6B01



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Robomould – Turnkey project

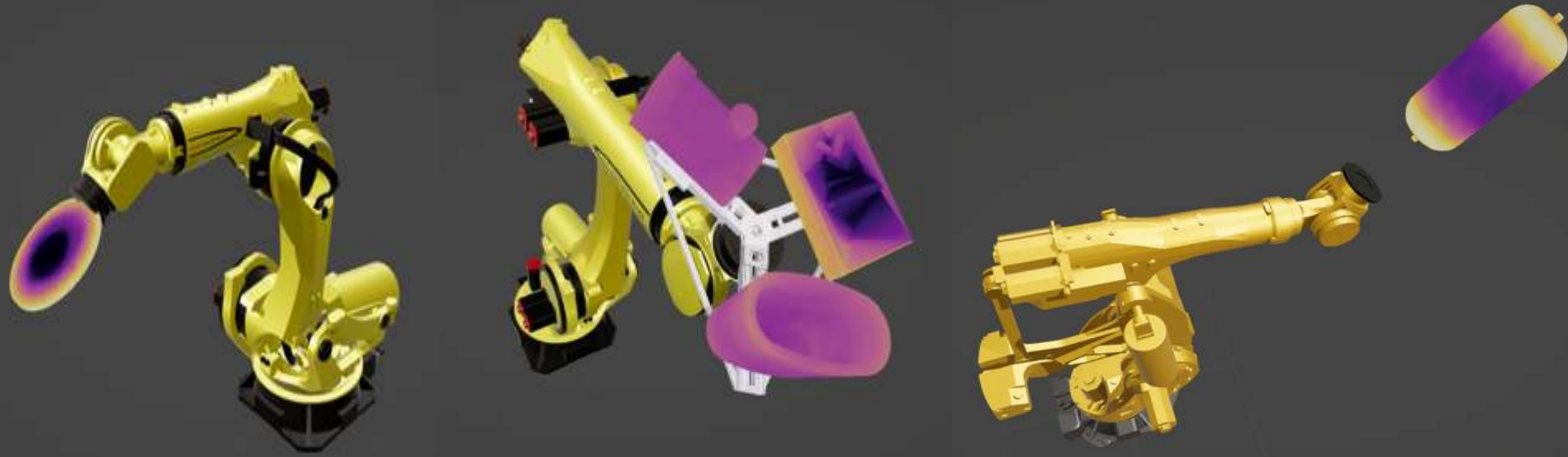
Turnkey customer solutions – New order 2024



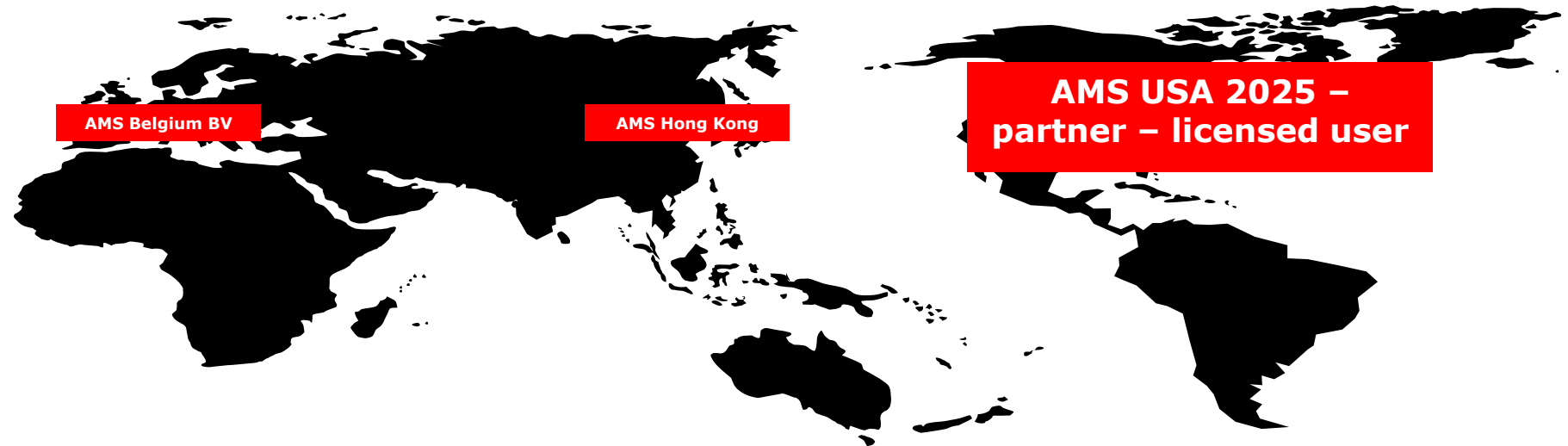
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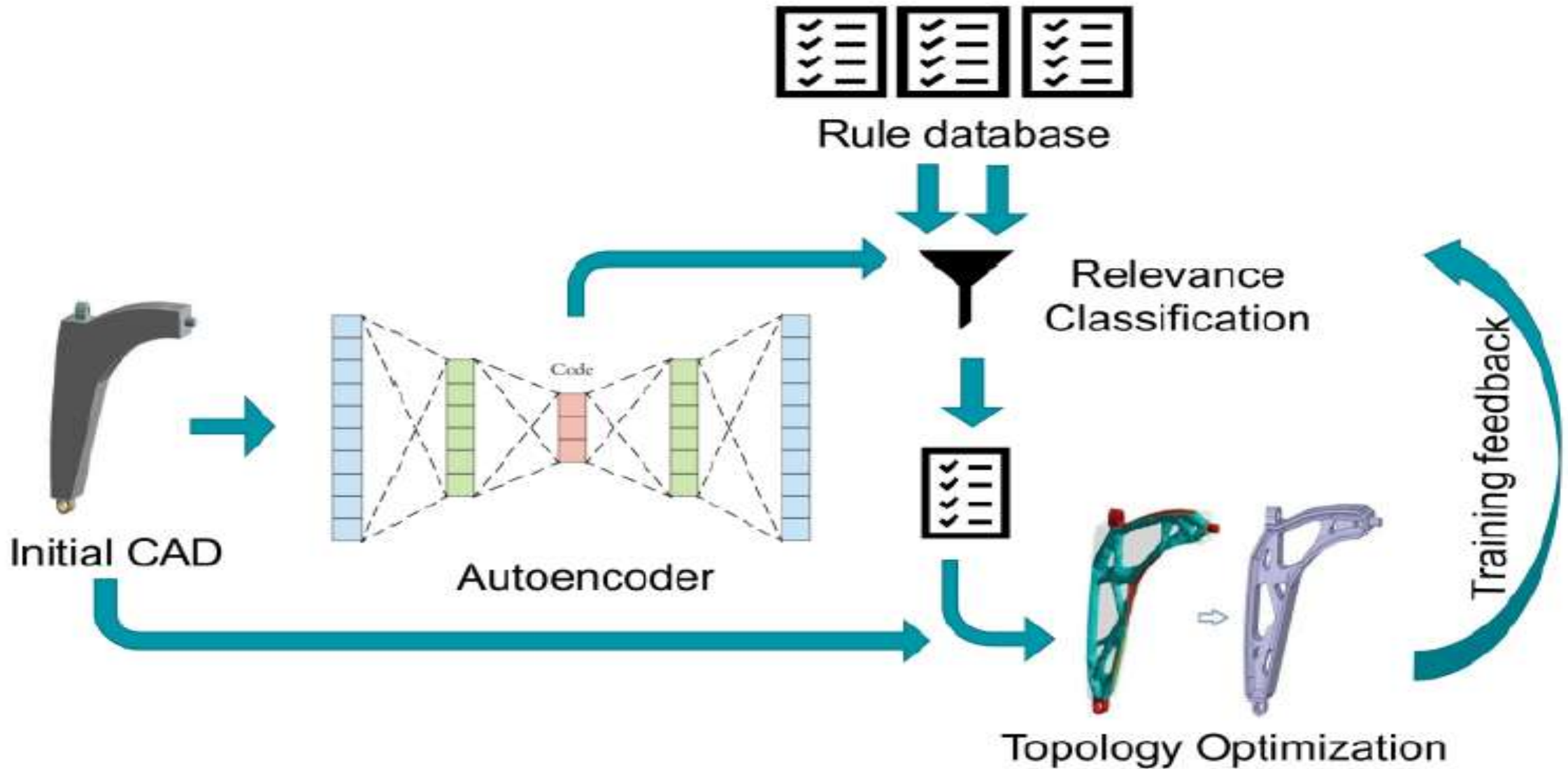
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Belgium BV

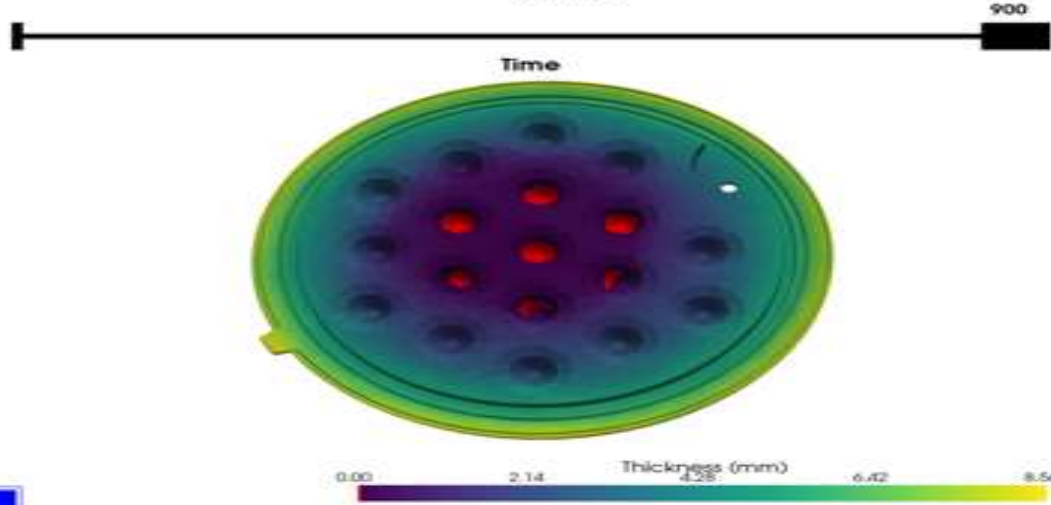
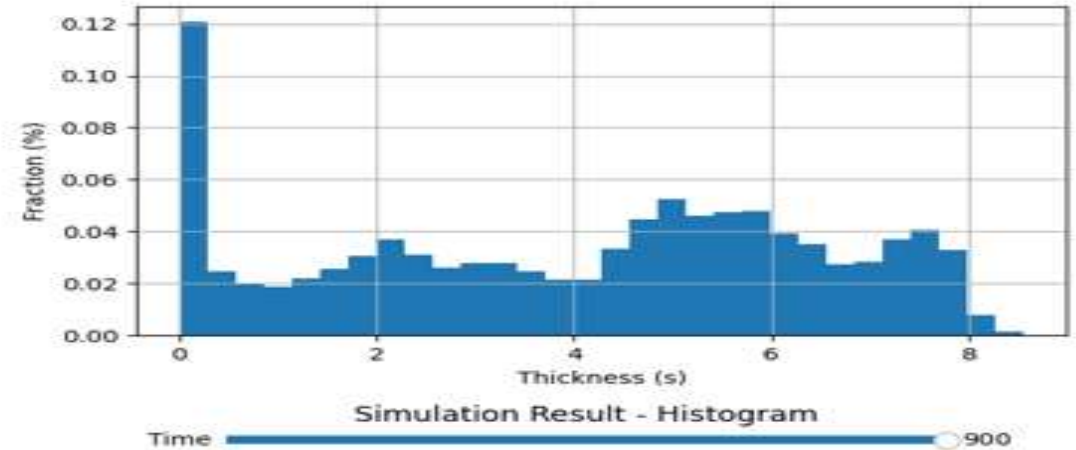
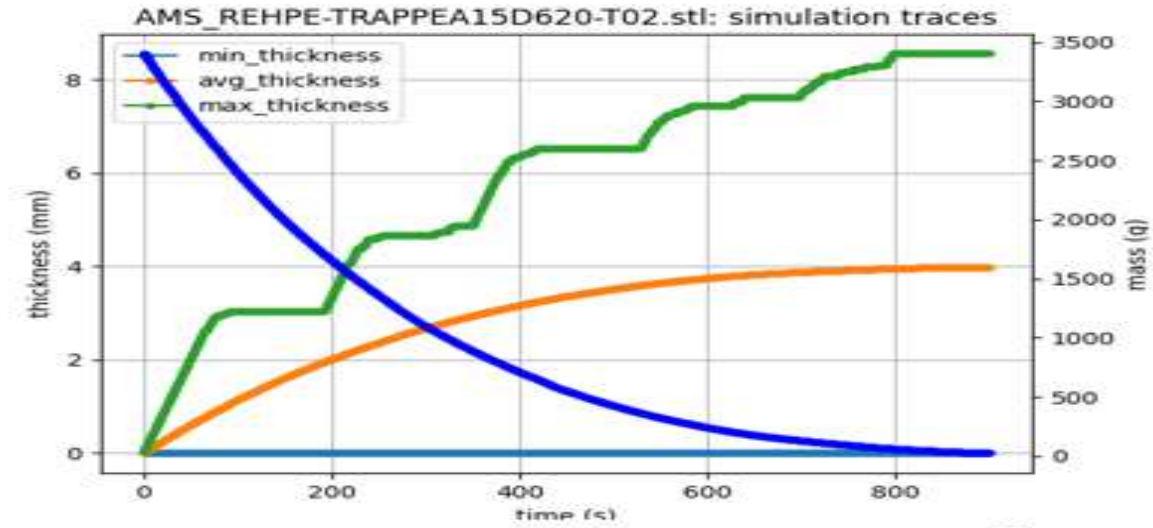
**Robomould &
Smartmould
Technology**



AMS Belgium BV – Software applications & digital twin





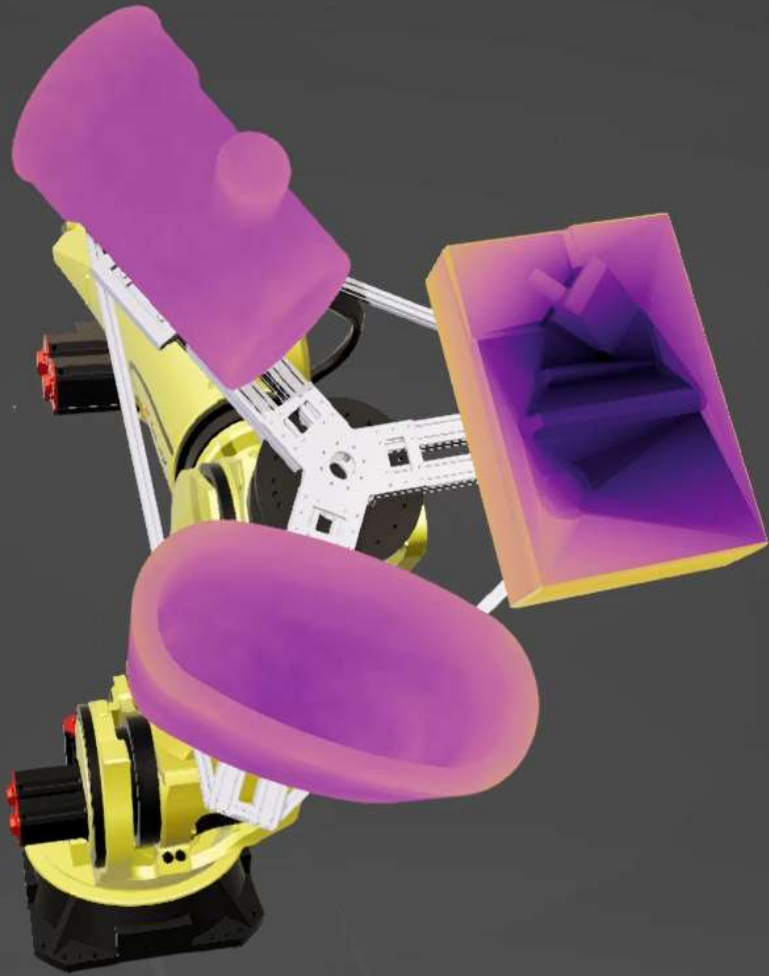




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RoboSIM – thickness estimator software

Turnkey customer solutions – New 2025-26

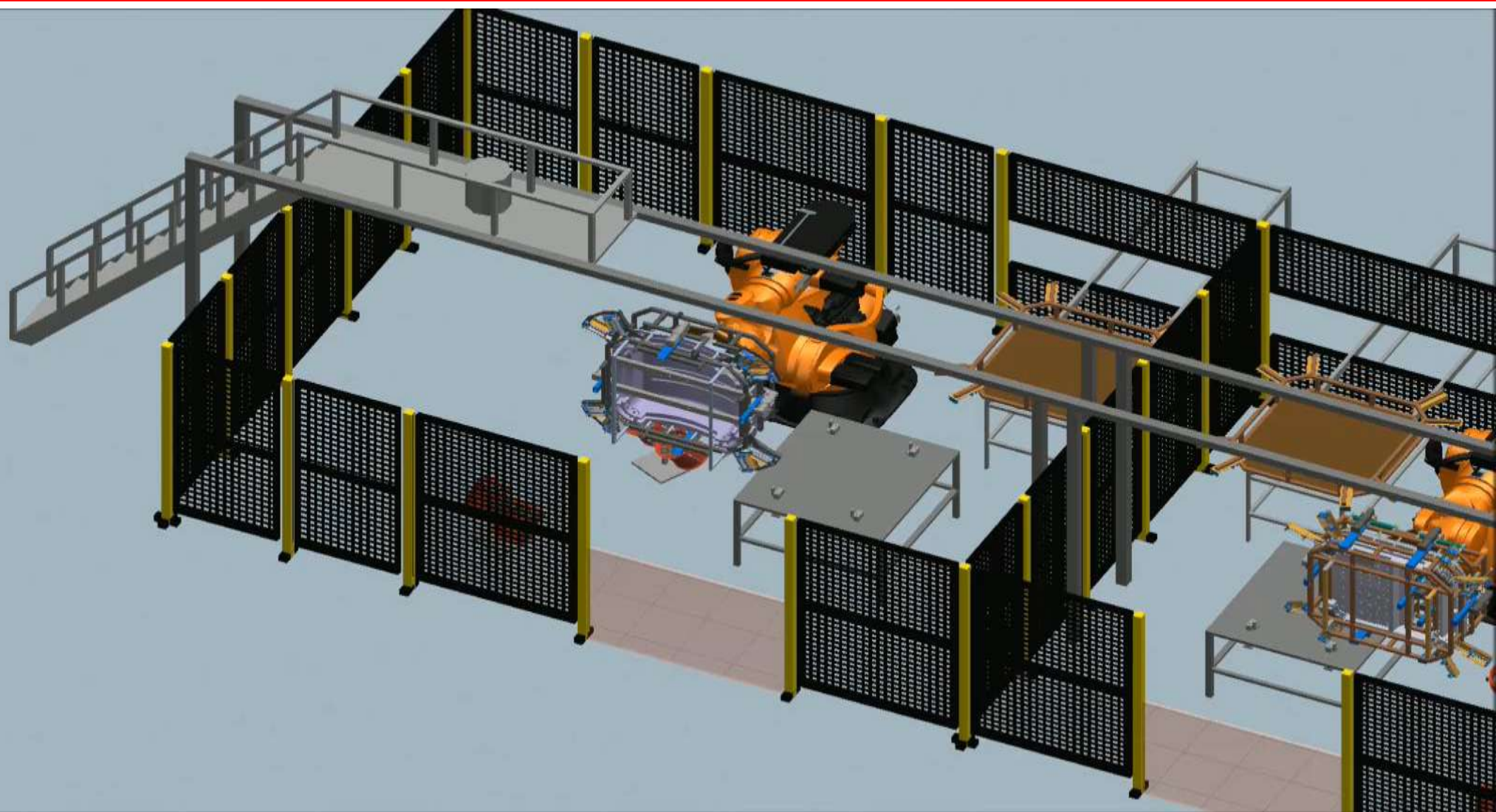




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RoboPRO – Process Simulate Software

Digital Twin – Process simulate





DGX

Dashboards > Comparison Dashboard

tenant.dgx@shoonya.co
Tenant administrator

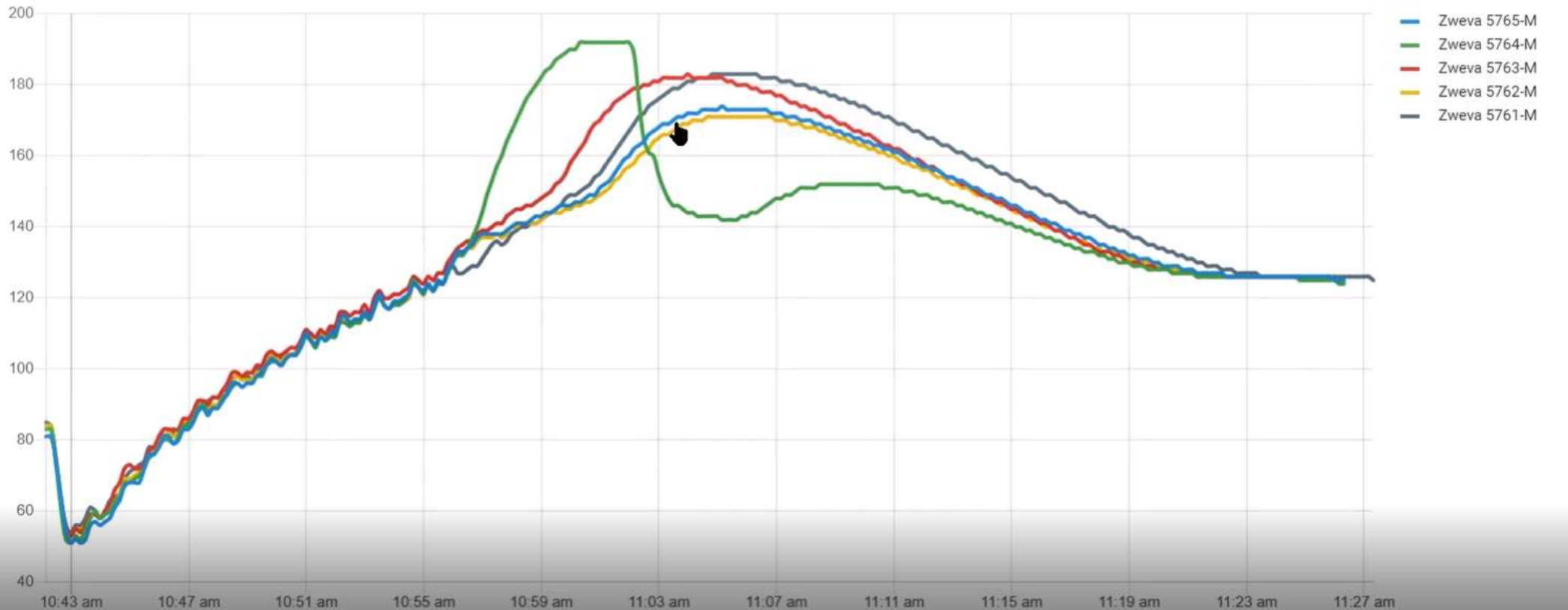
- Home
- Rule chains
- Customers
- Assets
- Devices
- Device profiles
- Entity Views
- Widgets Library
- Dashboards
- Audit Logs
- Api Usage

Comparison Dashboard

Comparison Dashboard ▾ Entities Realtime - last minute

Comparison Dashboard

History - from 2014-01-01 08:19:00 to 2021-01-19 08:19:11



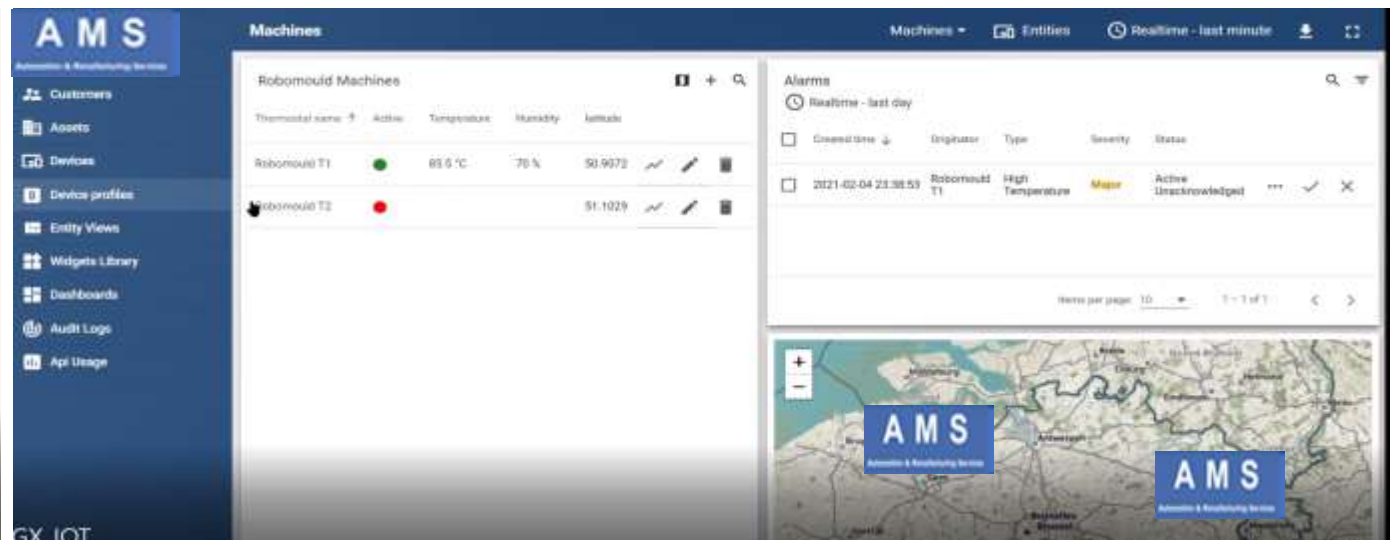
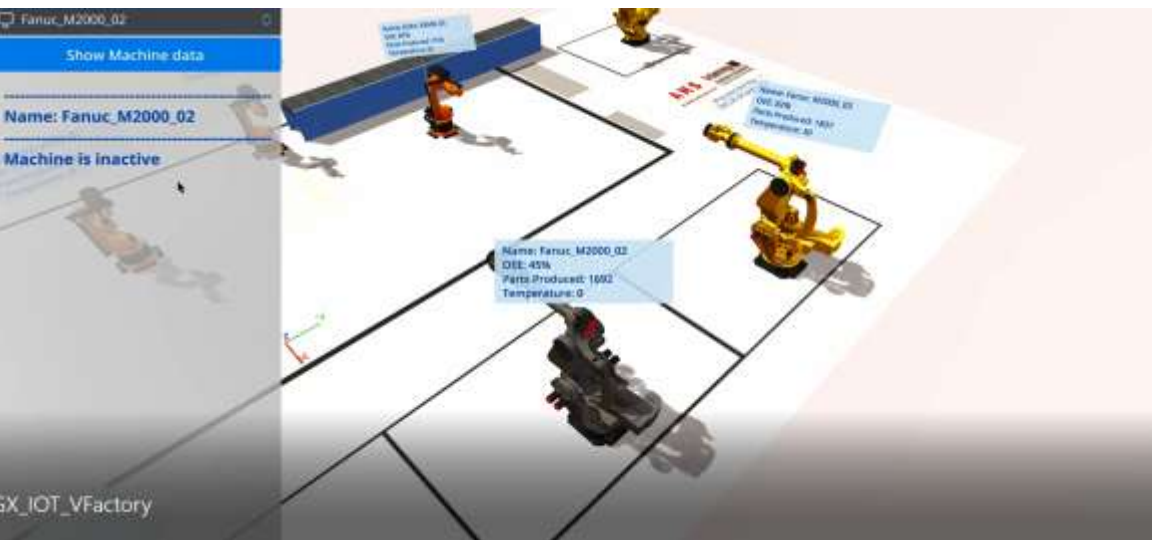
GX_IOT



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RoboMFG – OEE mfg software & AI

Turnkey customer solutions – New 2025-26

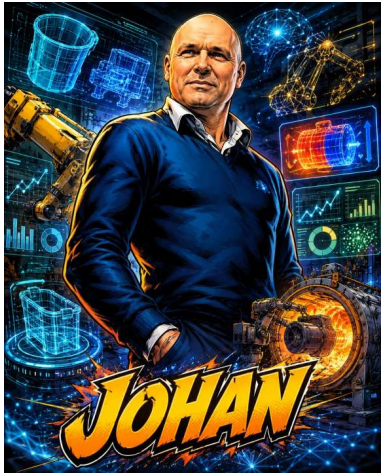




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Robomould – Software & AI

Digital Twin – Improvements & Future applications



Continuity (nextgen)
Growth (global)
Partnering (global)
Licensed models (global)



based upon

Electrical green technology and full automated
manufacturing

so

Turnkey projects in rotomoulding & automation

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ADVANTAGES ROBOMOULD TECHNOLOGY

green future proof sustainable manufacturing,
CO₂ free (0% CO₂)
fully automated, less people (-90%),
higher quality (x3)
higher output (x2)
faster manufacturing (x2),
less energy (/10),
less maintenance (-65%) on moulds
less maintenance on machines (-75%)
less material (-20%),
less quality costs,
higher OEE,
less administration costs,
less production disturbances

WHY should you not join?

SPE Polymers



RESEARCH ARTICLE **OPEN ACCESS**

Simplified Movement Model to Predict the Thickness Distribution of Products Made by Robomould®

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Keywords: experimental validation | kinematic simulation | polymer processing | powder contact time | robotic rotational molding | thickness distribution | type IV hydrogen liner

ABSTRACT

Robotic rotational molding represents a major advancement over conventional techniques by integrating automation, electric heating, and advanced cooling. This process enables cost-effective production of stress-free hollow polymer parts with improved quality. A key development is the Robomould system, which uses a robotic arm to control mold movement and electrically heated molds instead of a traditional oven, allowing for superior control over the layer-thickness distribution. Although the Robomould concept targets a wide range of product geometries, the experimental validation in this work focuses on a single axisymmetric 82L liner without internal features. Typically, a rock-and-roll movement is applied, but current practice still relies on trial and error to define suitable movement and heating parameters, often causing long set-up phases. To address this, a simple and computationally inexpensive movement model is proposed to estimate thickness distribution for given parameters. The model considers only product geometry and movement, neglecting thermal effects and dynamic powder effects. A volumetric mesh of the product is used to simulate powder distribution, and the powder–mold contact time of each element is translated into local thickness distribution estimation. Despite its simplicity, experimental validation demonstrates strong predictive value, supporting faster process set-up by reducing reliance on trial and error.

AMS Robomould 4.0 Circular Manufacturing Economy



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10x faster



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