

MADE IN EUROPE 2026

ONLINE PITCHING

Presenter: Coline Fiquet
 IRT JULES VERNE - France

23 June 2026

IRT JULES VERNE

French non-profit R&D Institut in Manufacturing & Robotics



€27,6 M
activity in 2024

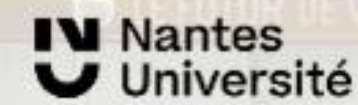
148
collaborators

77 Patents filed
since 2012

4 000 m²
Of industrial nefs



16 Academics & technical centers
stakeholders



100 Industrial partners
& customers

6 Key members



MANUFACTURING
THE FUTURE



IRT JULES VERNE

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MANUFACTURING THE FUTURE



MOBILITY



ENERGY



OTHERS



PRODUCTION RESOURCES & RAW MATERIALS



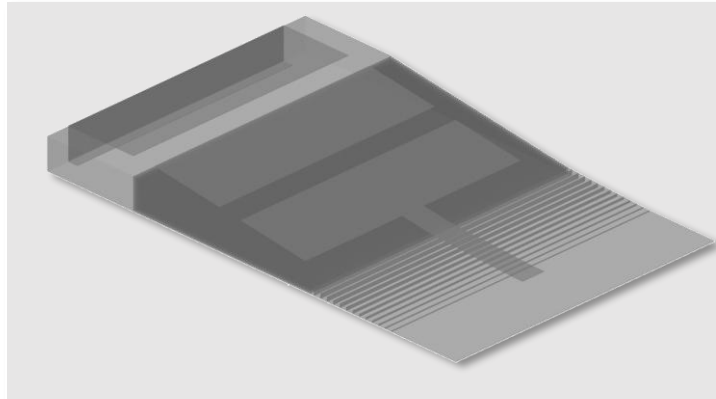
IRT JULES VERNE



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« 5 R&D Complementary Teams is our Strength »



MODELING & SIMULATION

17 engineers and technicians
+ **1** PhD student

- Materials & process modelling
- Manufacturing tool modeling.
- Stochastic modeling
- Model order reduction



COMPOSITE MATERIALS PROCESSES

21 engineers and technicians
+ **4** PhD students

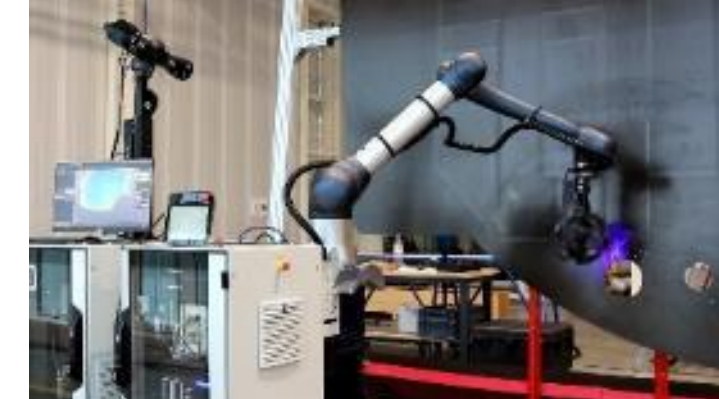
- High-speed complex preforms
- Forming processes
- Assembly and joining of structural parts
- Polymer additive manufacturing



METALLIC MATERIALS PROCESSES

7 engineers and technicians
+ **4** PhD students

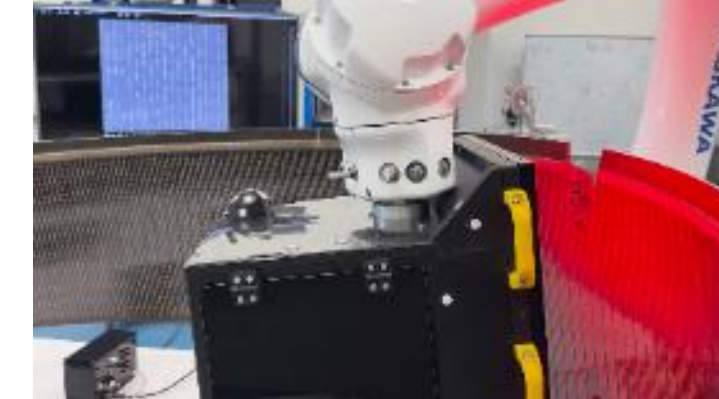
- Assembly and joining by welding (ARC, LASER, FSW)
- Wire additive manufacturing
- Repair automation
- Process hybridization



ROBOTICS & COBOTICS

20 engineers and technicians
+ **2** PhD students

- Mobility
- Perception
- Automatic programming
- Process-based control
- Interactions with the digital factory



MONITORING, INSPECTION & PROCESS CONTROL

12 engineers and technicians
+ **4** PhD students

- Monitoring of processes and structures
- Automation of non-destructive testing
- Advanced data analysis (AI, CV, etc.)



Simulation & process development

Control part conformity

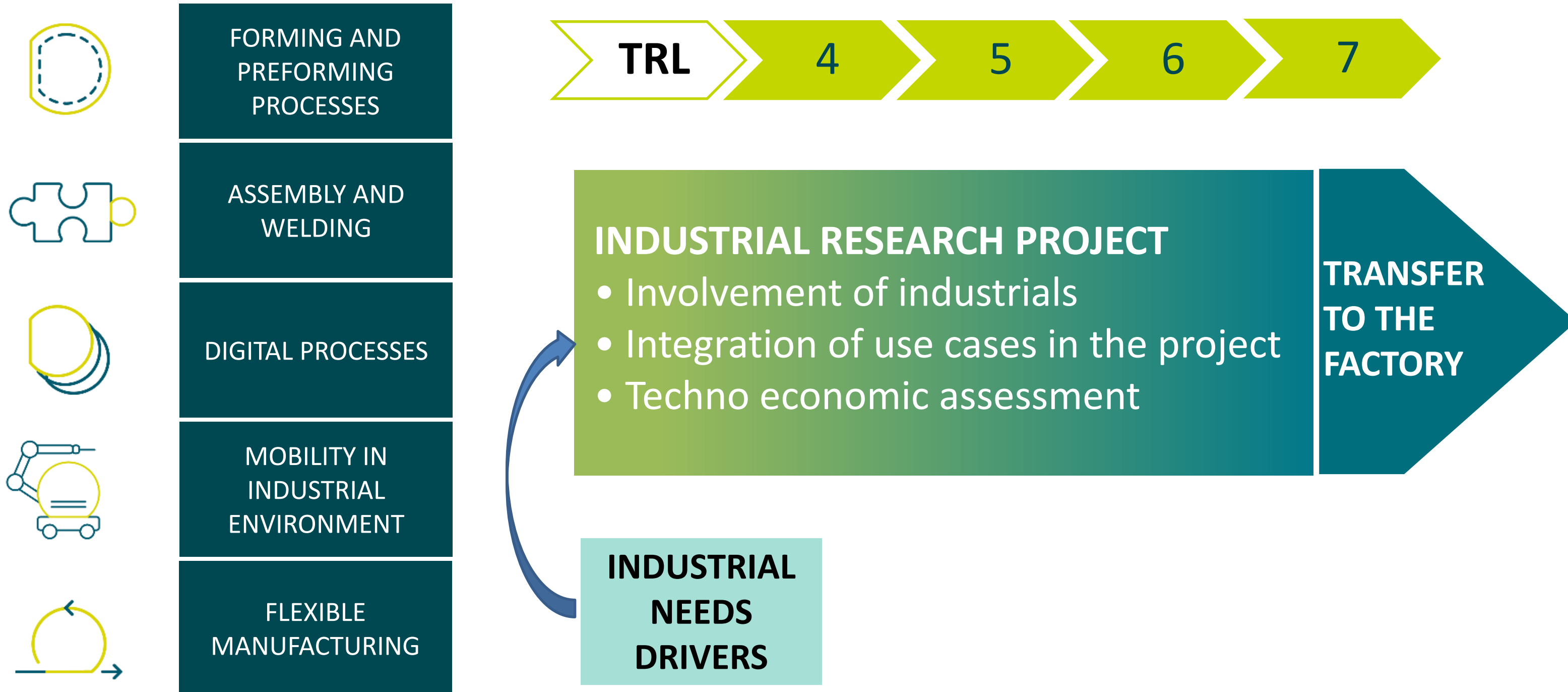
Assembly

Health control material in service

End of life dismantling & deconstruction

TECHNOLOGY TRANSFER

SERVICES
PRODUCTS



CALL TOPIC: HORIZON-CL4-2027-01-MATERIALS-PRODUCTION-02: Advanced manufacturing for key products (IA)



IRTJV is looking for joining a consortium as leading partner in:

- Advanced joining technologies – Composites and Automated complex welding;
- Polymer composite manufacturing – state of the art assets for simulation and validation;
- Concept, Mold design and Manufacturing of composite components with lightweight circular materials;
- In-line automated testing (inc. Digital Twin) and Robotized NDT – metal and composites

IRTJV can offer:

- State of the art simulation tools and assembly technologies and manufacturing assets (composites and metal), automated process control and inspection (Digital twin, AI, and Machine Learning)
- Rich background with track record of EU and French projects
- Manufacturing and Robotics Workshop for development validation up to TRL7
- French partners as end-users (we have a large industrial partnership in France)
- *Follow-up project SUSPENS (just finished) – coordinated by IRTJV (2 use cases available)*

IRT Jules Verne can be a lead partner for project preparation, SoA, WP leader, and bring end-user

CALL TOPIC: HORIZON-CL4-2027-01-MATERIALS-PRODUCTION-06: Circular innovative advanced materials: facilitating the transition from design to markets (RIA)



IRTJV is looking for joining a consortium as leading partner in:

- Advanced joining technologies – Composites and Automated complex welding;
- Development of manufacturing process window, setup, fabrication and validation of composite parts using bio-sourced resins and/or recycled fibers;
- Manufacturing of components with lightweight materials;
- In-line automated testing (inc. Digital Twin) and Robotized NDT – metal and composites

IRTJV can offer:

- State of the art simulation tools and assembly technologies and manufacturing assets (composites and metal), automated process control and inspection (Digital twin, AI, and Machine Learning)
- Rich background with track record of EU and French projects
- French partners as end-users (we have a large industrial partnership in France)
- *Follow-up project SUSPENS (just finished) – material development partners identified*

IRT Jules Verne can be a lead partner for project preparation, SoA, WP leader, and bring end-user

CALL TOPIC: HORIZON-CL4-2027-01-MATERIALS-PRODUCTION-22: Innovative advanced materials and new production processes reducing dependencies on Critical and Strategic Raw Materials (IA)



IRTJV is looking for joining a consortium as leading partner in:

- WAAM manufacturing or cladding for manufacturing and/or repair using wire produced from Titanium scrap and *Scan&Plan* automated robot trajectory generation
- Manufacturing process instrumentation, monitoring and control with Digital and AI for doing right first time

IRTJV can offer:

- Expertise in manufacturing process (metal and composites): simulation, manufacturing, monitoring and control, robotization, molding design, WAAM and welding
- Workshop part production for manufacturing validation to TRL7
- French partners as end-users (we have a large industrial partnership in France)

IRT Jules Verne can be a lead partner for project preparation, SoA, WP leader, and bring end-user

Calls of Interest in 2027



EU Call	IRTJV Potential Participation
HORIZON-CL4-2027-01-MAT-PROD-02:Advanced manufacturing for key products (IA)	Contributing advanced manufacturing solutions, automated preforming, process hybridization (e.g., WAAM + welding), and manufacturing optimization for high-performance key products.
HORIZON-CL4-2027-01-MAT-PROD-03:Factory processes and automation for de- and re-manufacturing (RIA)	Deploying robotics/cobotics for automated de-manufacturing, production flow diagnosis, and Non-Destructive Testing (NDT) systems for structural health assessment during remanufacturing.
HORIZON-CL4-2027-01-MAT-PROD-06:Circular innovative advanced materials: facilitating the transition from design to markets (RIA)	Applying technical-economic evaluations of composite/metallic processes, lightweight structure design, and life-cycle structural health monitoring for circular business models.
HORIZON-CL4-2027-01-MAT-PROD-22:Innovative advanced materials and new production processes – reducing dependencies on Critical and Strategic Raw Materials (IA)	Developing alternative manufacturing/welding paths, optimized WAAM structures to minimize raw material waste, and composite alternatives to replace rare critical metals. Adaptation processes manufacturing to IAMs.
<i>HORIZON-CL4-2027-01-MAT-PROD-61:Fast Track to Research and Innovation for breakthroughs in industrial technologies (RIA) 8x 2.5M</i>	<i>This is an open topic, intended to cover breakthrough innovations (up to TRL 4) - Leveraging core breakthroughs in automated composite manufacturing (stamping/overmolding), and metal additive manufacturing (WAAM).</i>
HORIZON-CL4-2027-02-DIGITAL-EMERGING-52-two-stage:New approaches for Human/AI collaboration for the workforce of the future (RIA)	Developing collaborative mobile robot solutions (navigation/localization), visual servoing, and intelligent AI-driven inspection data analysis to assist human operators in diagnostics.
HORIZON-CL4-2027-04-DIGITAL-EMERGING-05:Apply AI: AI-Driven Robotics for Industry: Enabling System Integration and Adoption (IA)	Implementing automated robot trajectory programming, intelligent navigation for mobile robots, human-robot interactions.
HORIZON-CL4-2026-04-DIGITAL-EMERGING-08:Apply AI: Robotics for Manufacturing: Advancing Core Skills through Technical Challenges (RIA)	bring AI-driven robotics to scale, ex. automated path planning, advanced visual servo control system architectures.
HORIZON-CL5-2027-02-D3-09:Innovative technologies and solutions to improve wave and tidal energy systems	Designing and manufacturing durable composite or metal components for marine renewable energy, and integrating in-situ structural health monitoring for harsh ocean environments.
HORIZON-CL5-2027-03-D5-08:Sustainable aircraft circular design and additive manufacturing, towards a climate neutral aviation	Utilizing expertise tailored for aeronautics members: additive manufacturing, lightweight composite structure design, circular design of individual components, joining technologies, real-time condition monitoring and inspection methods (smart repair).
HORIZON-CL5-2027-05-D4-05:On-site robotic and automated techniques for building renovation and new construction	Adapting customized parallel cabled robots (excellent for large-scale architectural volumes), mobile robot navigation, and automated trajectory tracking for construction environments.
HORIZON-CL5-2027-07-D3-11:Demonstration of hydropower technologies for efficient and forward-looking refurbishment of existing hydropower plants	Utilizing WAAM and advanced welding for repairing/refurbishing heavy metal components, alongside NDT systems for evaluating aged structural health.



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THANK YOU

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