

# MultiPhysX Consulting – MPX

## Newsletter n°1

### January 2026



#### **MultiPhysX Consulting – MPX is committed to innovation and performance**

This new year marks an important milestone for **MultiPhysX Consulting – MPX**, which is strengthening its development through the use of **Ansys** solutions, with the support of **4CAD Group**. The objective is clear: to fully leverage these simulation tools **to carry out advanced multiphysics analyses** on thermoplastic, composite, and metallic materials.

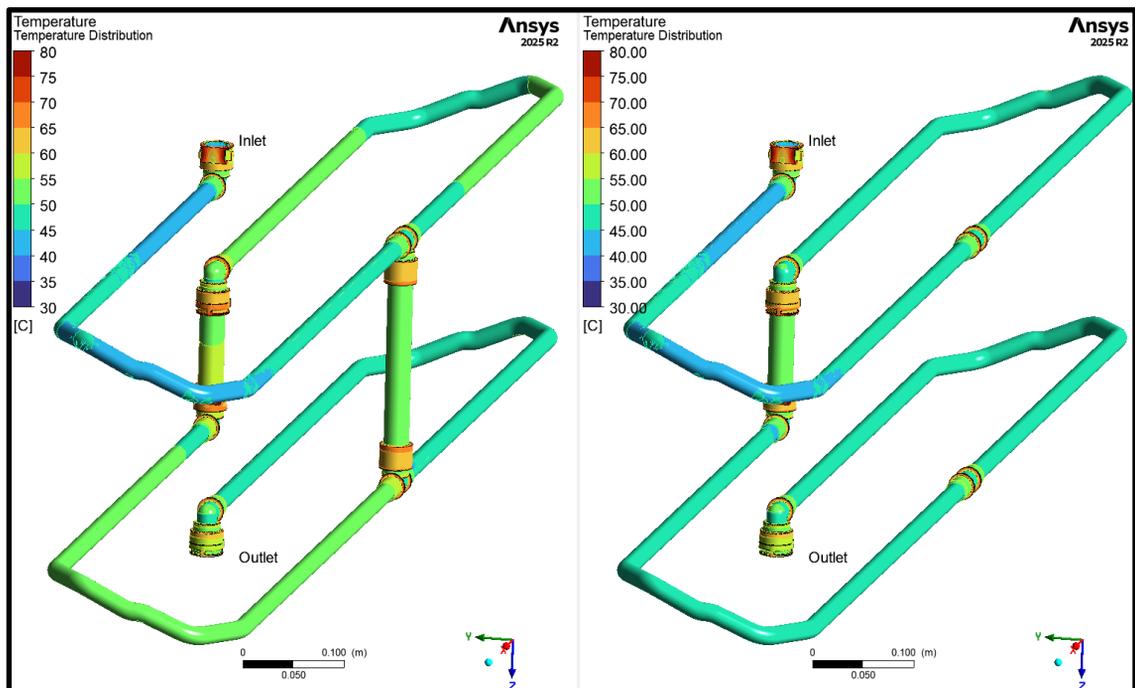


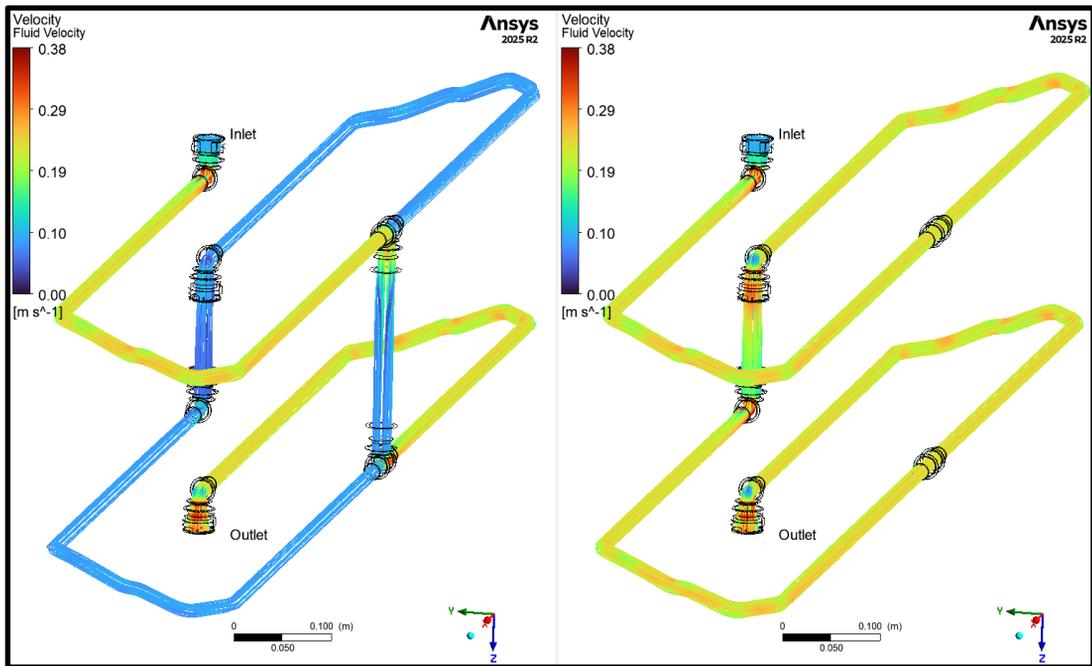
#### **Tools that meet the demands of your challenging projects**

To address the challenges of the most ambitious projects, MultiPhysX Consulting relies on the **Structure & Fluids Enterprise module**, as well as 3 HPC (High-Performance Computing) packs. Why? Because our clients have two priorities: saving time and innovating on complex projects. Having the right software is not a luxury, but a necessity to ensure the success of your high-end projects and provide you with a decisive technological advantage over the competition.

#### **Process optimization through CFD**

A concrete example: analysing cooling lines using numerical simulation (CFD). Consider a **5meter line** with a fluid at **30°C** and a mass flow rate of **3 liters/min**, in an external environment at **80°C**, subjected to an airflow of **7.5 m/s**. Our simulations enable us to assess the impact of design, technical specifications, and material choices on the overall performance of your parts.





### Optimize the choice of your materials for your cooling lines

Choosing a material for your cooling line based solely on a **maximum temperature of 80°C** may lead you to select a **more technical and more expensive** solution than necessary. In reality, the effective temperature on the plastic **will not exceed 60°C**. A detailed analysis of your needs therefore allows you to optimize your costs without compromising performance.

### Acknowledgments

A big thank you to the **4CAD** team (Jean-Philippe Quintin and David Mibord) as well as the **Ansys** team for their support and guidance.

### Need support or expertise?

Do you have a project, questions, or would you like to benefit from the expertise of a Multiphysics Simulation specialist? **Contact me.**

And if, like me, you are passionate about **Multiphysics Simulation**, subscribe to **MultiPhysX Consulting – MPX** to stay updated on our latest news and innovations.

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