

Next-Gen GPU-Native CFD is **Here.**

M-Star CFD leverages next-gen GPU-based algorithms to help you build, model and solve more complex fluid flow problems faster. Here's what you can do with it.

1. **Build**

- Import existing geometries, including low-quality or imperfect files
- Leverage built-in parametric geometries
- Generate common mixing impellers and tanks, ASME heads and pipes



100M+

point meshes on a single computer



BILLIONS

of updates per second

2. **Run**

- Leverage advanced non-Newtonian fluids and custom user-defined fluid models
- Model transient, three-dimensional physics in real time with **BILLIONS** of lattice updates per second
- Enrich models with additional physics



IN REAL-TIME

Visualize your simulation in minutes of processing time

3. **Post-Process**

- Analyze data as it's generated in real-time by the solver
- Create photo-realistic renderings, backed by high-fidelity numerical solutions
- Calculate common items and output data into common formats



ABOUT M-STAR

M-Star CFD is computational fluid dynamics software that pairs modern lattice-Boltzmann algorithms with modern GPU architectures—allowing users to produce detailed, accurate process simulations in minutes.

The Future Is Predictable.