

# CASE STUDIES

*Companies consistently deliver better product development results faster with Rescale*

## Trek Bicycle

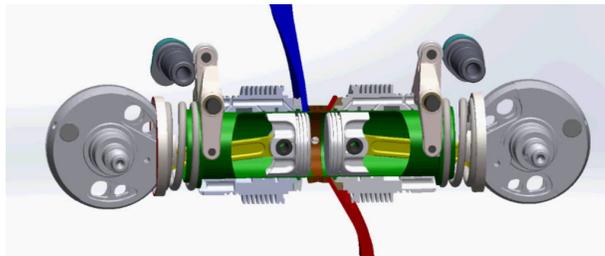
For leading bicycle designer, Trek, the mission has always been simple: build the best bikes in the world. For complex coupled analyses, Trek turns to Rescale to:

- Run coupled, complex Star-CCM+ / HEEDS optimization analysis leveraging existing software licenses for reduced cost
- Significantly reduce simulation runtime by using the latest HPC resources available in Rescale's 30+ advanced, global data centers
- Fully explore the experiment design space to make informed decisions about drafting techniques related to competitive bicycling



Star-CCM+ volume rendering of drafting bicycle rider simulation

## Pinnacle Engines



Four-stroke engine model simulation by Pinnacle Engines

## Pinnacle Engines

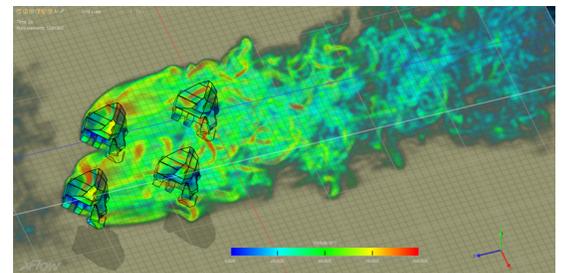
Pinnacle Engines is a game-changing engine company developing and commercializing an ultra-efficient engine architecture. To instantly burst beyond their internal resources, Pinnacle Engines leverages Rescale's cloud simulation platform to:

- Instantly executed 240+ customized HPC simulations in parallel to analyze internal combustion engine
- Reduced time to results by 80% and cost savings by more than 73%
- "Running jobs on Rescale allows us to reduce capital expenses while still running the simulations needed to design industry-leading engines." - Monty Cleeves, Pinnacle Engines CTO

## TEN TECH LLC

As an ITAR certified company, TEN TECH LLC frequently services the highly confidential and secure sector of military and government organizations. Using Rescale's industry-leading security environment, TEN TECH LLC:

- Executes flow analysis using on-demand XFlow simulation software and Rescale's security-leading cloud environment
- Reduce runtime by over 90% and instantly scale ITAR HPC resources to suit varying simulation need
- "Thanks to Rescale's HPC cloud platform, we are now able to run very complex multi-physics analysis with unprecedented high fidelity models. What takes several hours on Rescale's cluster would take a week on our workgroup analysis server." -William Villers, TEN TECH LLC Director of Engineering



Fluid-structure interaction model of large telescope array using XFlow