



CASE STUDY /

Ansys + Astec

Democratizing Usage and Lowering Barriers with Ansys Cloud

"20 years ago, a CFD license might be perceived as costly even for a large company. It was often a giant undertaking to justify the cost of adopting CFD. With elastic licensing and Ansys Cloud, we can take the initial cost out of the equation and provide users with access on an as-needed basis. We also don't need to worry about local hardware as Ansys Cloud can be accessed with a browser."

Andrew Hobbs

Head of Simulation and Modeling / Astec

Astec Industries, Inc. is a global OEM with a portfolio of brands serving the asphalt, concrete, forestry, and mining industries. Astec manufactures more than 100 products including chippers and grinders; rock crushing and screening plants to hot mix asphalt (HMA) facilities, concrete plants, milling machines, asphalt pavers, and material transfer vehicles. With a global footprint Astec has design teams in many different countries and time zones. To make simulation available to all these engineers, Astec was looking for a flexible licensing solution that would be easy to use and affordable. With Ansys Cloud, they were able to break down licensing barriers for local engineering teams.

/ CHALLENGES

With a central corporate team focused on simulation, Astec wanted to leverage their OneASTEC approach to extend access to simulation across the enterprise. They needed a solution to democratize license usage to help and empower local engineering teams to effectively use the Ansys portfolio.

/ TECHNOLOGY USED

- Ansys Cloud

/ ENGINEERING SOLUTION

Previously, Astec would rely on licensed users with powerful computers to run computational fluid dynamics (CFD) simulations to design products used in the mining and road building industries (from “Rock to Road”). On-boarding new simulation users would require a dedicated license, training, and suitable hardware. But buying individual licenses and hardware for every engineer is expensive. Astec solved this problem by combining Ansys Elastic Units and Ansys Cloud to remove the computing hardware barrier. This new combination is providing access to Ansys software to more of Astec’s engineers so they can benefit from on-demand, cloud-based computing resources and training.

“Last year, Microsoft Azure launched HBv3 VMs based on the 3rd generation of AMD EPYC processors, which have high frequency, high cache per core and high memory bandwidth. We noticed that these features are particularly beneficial for our CFD applications that require a lot of memory capacity.”

- **Andrew Hobbs, Head of Simulation**

Astec Industries is running Ansys Cloud on an HBv3 Virtual Machine of Microsoft Azure featuring up to 120 AMD EPYC™ 7003-series CPU cores.

/ BENEFITS

- Local engineering teams can be upskilled faster with access to Ansys tools and support anywhere, at anytime
- Ansys Cloud frees up the simulation team’s time to focus on more complex requests that can’t be solved locally.
- The Astec simulation team can analyze usage and tool popularity, which helps with decision-making and budgeting.
- Ansys Cloud provides unlimited capacity and flexibility, offering a cost-effective way to respond to peak demand and high-priority jobs.

/ COMPANY DESCRIPTION

Since 1972, Astec has been connecting communities by providing innovative solutions from Rock to Road® for their customers. United by their purpose -Built to Connect -Astec is a leading global manufacturer of specialized equipment for asphalt road building, aggregate processing, and concrete production.

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