



**"PENGUIN'S EXPERTISE IN HPC AND LS-DYNA®
MAKE CRASH SIMULATIONS AN EASY
AND COST-EFFECTIVE SOLUTION."**

ENGINEERING MANAGER NICK AWABDY AT IMMI



IMMI and Penguin Computing on Demand combine to speed time to results.

Summary:

Challenge

Burst Capabilities – Short term need to run large complex models

Solution

Penguin Computing On-Demand (POD)

Results

Reduced the time between design iterations without adding in-house computer resources

IMMI® is the industry leader in the design, testing and manufacturing of advanced safety systems found on commercial, industrial, military and emergency response vehicles, as well as on school buses, motor coaches and child restraints. As company engineers work through the design process, it is common for them to apply computer analysis to evaluate initial concepts and optimize designs. Along with other CAE tools, IMMI regularly uses LS-Dyna® for this stage of the design process.

To meet the demands of a significant project workload and compress the design cycle, IMMI found it necessary to run larger, more complex models in a shorter period of time. When in-house computer resources couldn't meet design time-frames, the company evaluated upgrades to in-house hardware as well as the potential of involving outside resources to acquire the computer capabilities.

"Penguin Computing's POD is a good fit for our design project," said Engineering Manager Nick Awabdy.

"Penguin has the experience with the application we run and anticipates our needs and questions while setting up the infrastructure. Their expertise in high performance computing systems and LS-Dyna made this an easy and cost effective solution."

Because of Penguin's flexible on-demand infrastructure and access to LS-Dyna, IMMI selected Penguin Computing's POD (Penguin Computing on Demand™) to run design models.

IMMI was able to run complex computer models and reduce the time between design iterations without adding in-house computer resources. Penguin's POD was a good fit for IMMI commercial applications because the company only paid for needed computer resources, improving IMMI's bottom line as well as speed to market.

About IMMI

For more than 50 years, IMMI®, based in Westfield, Ind., has been an industry leader in the design, testing and manufacturing of advanced safety systems. With the vision of a safer future for every child and adult riding in a vehicle, IMMI produces hundreds of innovative products for various sectors. IMMI products are found on commercial, industrial, military and emergency response vehicles, as well as on school buses, motorcoaches and child restraints. A well-established global presence with facilities in North America, Asia and Europe, IMMI brings safety to people throughout the world.

About Penguin Computing

Penguin Computing is a global leader in high-performance computing (HPC), delivering complete, integrated HPC solutions, from the workstation to the cloud. With a focus on cutting-edge technology, ease-of-use and exceptional customer service, Penguin cost-effectively meets the needs of the world's most demanding HPC users, including Caterpillar, Lockheed Martin, the U.S. Air Force, and the U.S. Navy. Today, Penguin delivers a range of solutions, from massive Linux clusters to Penguin Computing on Demand™ (POD), a new service that provides a complete HPC solution in the cloud. Penguin has been an innovator in HPC solutions for over a decade, and the company's founder Donald Becker is recognized as the "Father of Linux Clustering." For more information about Penguin Computing and Penguin products please go to www.penguincomputing.com.