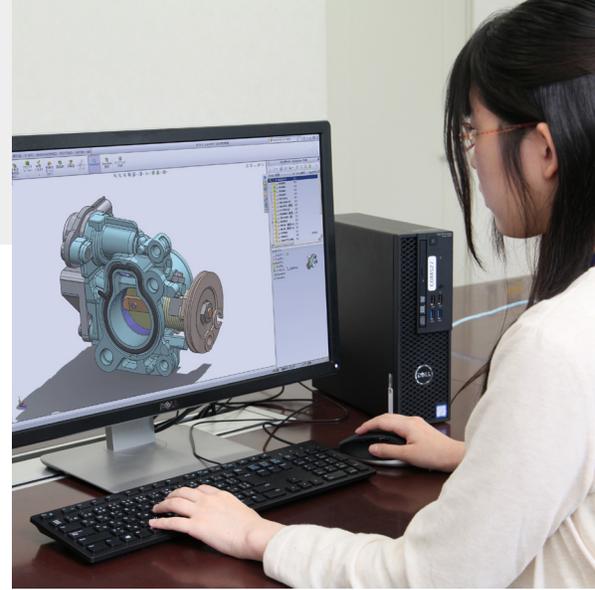




# Designing automobiles of the future

Mikuni drives automobile industry innovation by designing fuel-efficient engines using Dell Precision workstations



Manufacturing | Japan

## Business needs

To maintain its industry-leading status, Mikuni needs its designers to create best-of-breed engine components. The company sought powerful workstations that could help designers drive innovation in areas such as fuel efficiency and performance.

## Solutions at a glance

- Client Solutions
  - [Dell Precision Tower 3420 workstation with NVIDIA® Quadro® K1200 graphic cards](#)
- Enterprise Support
  - [ProSupport Client Suite](#)

## Business results

- 20% improvement in software performance on workstations
- Workstations are about 40% more compact, delivering significant space saving
- Boot times reduced to a few seconds instead of several minutes
- Mikuni promotes design innovation and maintains leading global position
- Optimized ISV software vendor support on workstations
- Reduced IT workloads with deployment services support

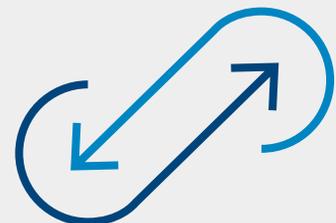
# 20%

improvement in software performance



# ~40%

more compact workstations



Mikuni is a world leader in the manufacturing of automobile engine components, including electronically controlled throttle bodies. Since it was founded in 1923, the Japanese company has also successfully built up a global reputation for the design, manufacture and sales of automotive components, especially air intake components for car and motorcycle engines.

In addition to that, Mikuni is constantly looking at ways to cut exhaust emissions; boost fuel efficiency; improve the mounting, layout and size of engine components; and harness the heat generated by engines. The company is well-known for the high quality of its technology and the ability of its designs to meet fuel efficiency and environmental goals.

## Improving software calls for better hardware

Designers at the company's offices in Odawara and Morioka, use computer-aided design (CAD) software to support their design work. Key applications include 3D CAD design software from SOLIDWORKS. Mikuni regularly refreshes its design workstations to help designers maintain their productivity and drive product development.

Yuji Hara, a general manager in the Technical Information Control Department, part of the Research and Development Headquarters at Mikuni, says, "When it comes to choosing workstations, we select the best solution for the company by considering many issues, including cost." Historically, the company has implemented units from multiple vendors, including Dell EMC.

## Works with a trusted IT partner

With workstations across its Odawara and Morioka offices coming to the end of their life cycles, Mikuni looked for a replacement. The NVIDIA® Quadro® K600 graphics cards in many of the existing workstations struggled at times to run the latest iterations of the SOLIDWORKS software. After reviewing multiple vendor proposals, Mikuni selected Dell Precision Tower 3420 workstations featuring NVIDIA Quadro K1200 cards.

Toshio Karasawa, a general manager at the Research and Development Headquarters at Mikuni, explains, "One of our clients is a company that leads the world in automotive manufacturing. We need outstanding performance from our workstations to meet our needs and that is what the Dell Precision Tower 3420 delivers."

Akira Saito, at the Technical Information Control Department of Research and Development Headquarters at Mikuni, says, "We liked the performance of the Dell Precision Tower 3420 workstations with NVIDIA Quadro K1200 cards."

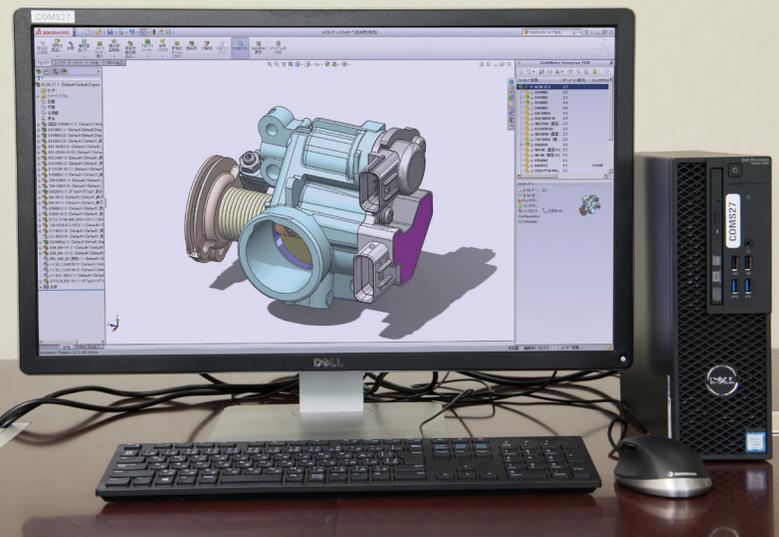
## Simplified installation with services support

Mikuni rolled out the workstations across the Japanese offices. To streamline implementation, Mikuni had its CAD software pre-installed at the Dell factory using Dell Custom Factory Integration Service, so that when the workstations arrived onsite, they were ready for use. In Morioka, there is no permanent IT team, so Mikuni also used Dell Deployment Services to help with the installation. Saito says, "In about five hours, the Dell team managed

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Toshio Karasawa, General Manager, Technical Information Control Department, Research and Development Headquarters, Mikuni





*“Now that the installation is complete, we find the office neater and much less cluttered thanks to the new Dell Precision workstations.”*

Yuji Hara, General Manager, Technical Information Control Department, Research and Development Headquarters, Mikuni

to remove the existing 17 terminals in Morioka, install the new workstations and get them CAD-ready. Other vendors offered some similar-sounding services but there would always be a service provider between us and the vendor. Dell's solution meant it supplied the hardware and the service, helping us reduce costs.”

## 20 percent better performance driving innovation

Mikuni continues to build excellent engine components by using the Dell Precision workstations. The company's designers are receiving the support they need to develop high-quality designs. Compared with its previous stock of workstations, Mikuni has seen a 20 percent performance increase of key SOLIDWORKS software thanks to the Dell Precision Tower 3420 workstations.

## An approximately 40 percent more compact solution

The design teams also have more space in which to work because the Dell Precision Tower 3420 is significantly smaller than the previous workstation model. Hara says, “Now that the installation is complete, we find the office neater and much less cluttered thanks to the new Dell Precision workstations. The Dell Precision Tower 3420 workstations are approximately 40 percent smaller than the small form factor units we installed two and a half years ago.”

## Boots up in seconds

Designers are maximizing their productivity from the moment they launch their machines. The boot time for their workstations has fallen significantly as a result of the performance of the Dell Precision Tower 3420. Now, when the designers sign in on their machines, it takes just a few seconds to launch the SOLIDWORKS software application, when before it took several minutes. According to Saito, CAD images resolve faster, saving precious time and reducing frustration on the part of the designers.

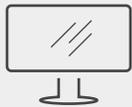


## Enhanced environment through automation

Mikuni uses Dell Precision Optimizer software to enhance the performance of its workstations. The software increases application performance while automating system management. Once the Dell Precision Optimizer profiles are enabled, the customer chooses the right workstation profile for the software. Saito says, “We saw a number of Dell case studies where Dell Precision Optimizer had improved workstation performance significantly. So you can understand why we were very eager to try this out once the installation had been completed.”

## Maximum return on investment

The company expects to gain more out of its workstations over their life cycles by working with Dell ProSupport. Although the performance of the client solution has been excellent, the company wants peace of mind that if a workstation needs fixing, support will there quickly. Comments Saito, “We have always found the response time following an inquiry is fast from Dell ProSupport. It’s great to have Dell ProSupport behind us at this exciting moment in the development of our business.” Looking ahead, Mikuni could soon be expanding its workstation platform and even move to a virtual desktop infrastructure to boost efficiency. Saito says, “We know that we have a trusted partner in Dell to meet our IT requirements in the future.”



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