



## Mobile clinical workstation solutions specifically for the health care industry.

In recent years, demand for Flo Healthcare's mobile workstation solutions has surged—but since no two hospitals have the same requirements, nearly 70% of Flo Healthcare's customer orders require custom designs.

### 20/20 Foresight with Digital Prototyping

With Inventor, Flo Healthcare is able to successfully meet these design and manufacturing challenges and rapidly produce highly customized versions of its product line that match the specific needs of its customers.

Inventor allows Flo Healthcare to create digital prototypes, which lets the company create, validate, and simulate their models before moving into manufacturing. Specifically, Flo Healthcare can test each individual component of the integrated workstation—from monitors and wheels to cables and power supplies—and make sure that the customisations are viable before any time and money is spent on costly physical prototypes. Inventor helps us check the product quality of a new design before it ever hits the manufacturing floor," said Janoschka. "As a result, we're able to bring products to market much faster than our competitors can."

Digital prototyping does more than streamline Flo Healthcare's design and manufacturing operations—it helps ensure that there are no surprises for the customer when a new, customised product is being developed.

### 2D and 3D

"Autodesk was pretty savvy to bundle AutoCAD Mechanical and Inventor together," said Janoschka.

"There are some very real differences between the people who think in 2D versus 3D. Electrical engineers tend to think in terms of layouts first, whereas mechanical people tend to think in terms of solid objects first. So, by having both 2D and 3D, we can let our mechanical people think like mechanical engineers and our electrical engineers think like electrical engineers."

Furthermore, switching between 2D and 3D is seam-less. Through the DWG® TrueConnect feature, Inventor gives designers the ability to easily share both AutoCAD DWG™ files and 3D design data with other Autodesk manufacturing applications and their users.

"We can use AutoCAD to export 2D data into Inventor, and then reverse the process by using Inventor to export 3D data into AutoCAD," said Janoschka. "2D and 3D are both necessary to design a fully realized product, and Autodesk Inventor gives us that total solution."

### Doing More with Less

With digital prototypes and enhanced data management, Flo Healthcare has been able to nimbly respond to marketplace demands for custom-ized workstations. This speed and adaptability is reflected in the company's sales numbers, where nearly three quarters of their revenue comes from custom design work. "To give the customer what they want, we need the ability to rapidly to explore multiple iterations of a product," said Janoschka. "That's precisely what Inventor allows us to do. And because we have such an efficient design loop, we can bring in the same amount of revenue on

*"Customers want to 'touch and feel' prior to purchase," said Janoschka. "They need a demo or robust modeling to know that the customized workstation we're producing for them will work when they take it out of the box. With detailed digital prototypes, we can show a customer not only what the product's going to look like but how it's going to operate—which is a big peace-of-mind for customers."*