

## UNIVERSAL AIR FILTER COMPANY

→ CASE STUDY

HELPING CUSTOMERS ACCELERATE TIME-TO-MARKET WITH 3D PARTSTREAM.NET



By implementing 3D PartStream.NET, UAF has realized a 16 percent increase in high-quality leads while reducing sales support costs by 25 percent.

Universal Air Filter (UAF) Company designs and manufactures custom electronics cooling air filters. UAF's filters prevent electronics system failure related to contamination by removing tiny dust particles and other debris blown through electronics cooling systems. The company's products are highly configurable. In the past, UAF customers required more than one air filter prototype for testing, fit checks, and tolerance stack-ups, before choosing a final configuration. Recently, the company's customers began requesting 3D CAD models of air filter assemblies to compress their development cycles.

UAF design engineers had experience downloading CAD models of components they commonly use for in-house manufacturing automation, such as electric motors and cylinders, from 3D ContentCentral<sup>SM</sup> – a free online directory from SolidWorks Corporation that makes it easy for design engineers to locate parts, download component CAD models, and order components via the Internet. According to Dan Krupp, director of sales & engineering, the company realized it could respond to customer demand for 3D CAD models by providing configurable air filter assembly models for download from its website.

Explains Krupp, "Instead of having our engineers spend a lot of time working with customers individually to configure and produce several air filter assembly prototypes, we believed 3D PartStream.NET<sup>®</sup> from SolidWorks Corporation would allow our customers to configure and download assembly models themselves, freeing up our engineers to work with more customers and to expand our product lines."

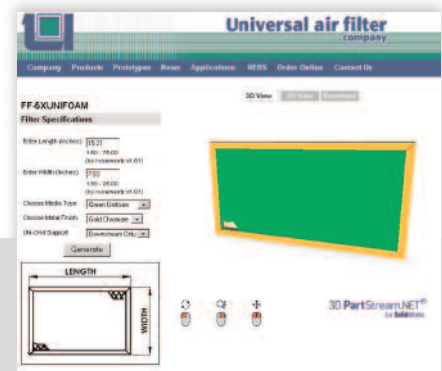
The company evaluated another download service – the Thomas Register's PartSpec offering – but chose 3D PartStream.NET because it does not require rebuilding SolidWorks<sup>®</sup> models, takes advantage of SolidWorks configuration capabilities, gives UAF complete control over its models, and reinforces UAF's filter design engineering image.

### Fully configurable assemblies

The UAF product line involves millions of possible configurations, which is why company engineers had to create and send a series of actual prototypes to customers in the past. With 3D PartStream.NET and SolidWorks configuration capabilities, customers can create, download, and iterate on air filter assembly models themselves – requesting a final prototype only at the end of the process.

"When customers come to our website, they answer a series of questions related to sizing, media, and product line," Krupp explains. "By answering these questions, they are actually accessing our working design tables in SolidWorks software to build and configure air filter assemblies on the fly. They can download as many configurations as needed until they have the best configuration for the job. Before we implemented

Customers can configure and download assembly models on the UAF website by choosing the size, media, and product line for their specific application.



## 3D PartStream.NET<sup>®</sup>

- Increased web traffic by 30 percent
- Realized a 16 percent increase in high-quality leads
- Reduced sales support costs by 25 percent
- Decreased design-cycle time for customers by as much as 60 days

- Universal Air Filter designs and manufactures custom electronics cooling air filters. Historically, the company provided a series of sample prototypes to its customers to support design iterations and testing needs. Recently, the company's customers began requesting 3D CAD models of air filter assemblies to compress their development cycles.
  
- To support model downloads, UAF selected the 3D PartStream.NET service from SolidWorks Corporation because it does not require rebuilding SolidWorks models, takes advantage of SolidWorks configuration capabilities, gives UAF complete control over its models, and reinforces UAF's filter design engineering image. By implementing 3D PartStream.NET, UAF increased web traffic by 30 percent, realized a 16 percent increase in high-quality leads, reduced sales support costs by 25 percent, and decreased design-cycle time for customers by as much as 60 days.

3D PartStream.NET, our customers had to request several physical samples, each with a five-day lead time, to achieve the same thing. By providing fully configurable assembly models for download, we are helping our customers save time and compress design cycles."

#### More leads, fewer prototypes

Since implementing 3D PartStream.NET in December 2004, UAF has realized a 30 percent jump in traffic to its website, as well as a 16 percent increase in high-quality leads. At the same time, the company has seen preliminary prototype and other sales support costs drop by at least 25 percent.

"Whether the people who download models from our site are prospects or existing customers, 3D PartStream.NET helps them to reduce the number of physical prototype iterations," Krupp notes. "The iterations are done in software, so we are not incurring the cost of unacceptable prototypes. And because we see the assemblies that our customers configure when they request a final prototype, we stay attuned to the creativity and innovation taking place in the field."

#### Downloading models speeds time-to-market

Customer reaction to UAF's model download service is extremely positive, with some customers reporting design-cycle decreases of as much as 60 days because they have reduced the number of custom sample iterations required.

"These air filter assemblies are not your traditional catalog item and truly are custom designs," says David Lima, a design engineer at Juniper Networks, a leading Internet router manufacturer in Sunnyvale, California. "While the requirements for electronics air filtration have not changed, the amount and power of air pushed through a cooling system is changing constantly, requiring more air channeled through smaller areas."

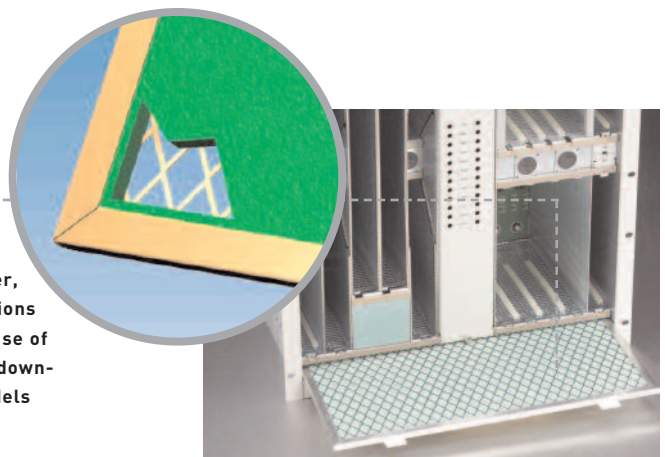
"The ability to configure and download filter models is helping us compress design cycles and speed time-to-market," Lima adds. "I can iterate three times in a half-hour by downloading models. It could potentially take as long as a month to do that using physical prototypes."



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Juniper Networks, a leading Internet router manufacturer, reports design-cycle reductions of as much as 60 days because of the ability to configure and download air filter assembly models from the UAF website.



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