COMPANY Vent-A-Hood<sup>®</sup> Co., Ltd.

LOCATION Richardson, Texas

SOFTWARE

Autodesk® Inventor® Autodesk® Configurator 360™ Autodesk® Vault

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—Mike Sy

Head of Technology and Purchasing Vent-A-Hood

## Compelling Product Configuration Drives Efficiency and Leads

Vent-A-Hood streamlines the design and engineering of custom range hoods with Autodesk solutions for 3D modeling, engineering automation, and data management.



Image courtesy of Vent-A-Hood.

## Bridging the gap between the possible and the practical

Founded in 1933, Vent-A-Hood<sup>®</sup> Limited is the first manufacturer of home cooking ventilation and range hoods. The company earned its reputation with the uniquely designed Magic Lung<sup>®</sup> blower system, an unmatched concept that remains at the forefront of kitchen ventilation technology.

Today, Vent-A-Hood leads the premium residential ventilation market. Its highly skilled workforce achieves quality craftsmanship for products sold directly to consumers and through an extensive dealer-distributor network.

#### The Challenge

"We can make almost anything the customer wants within the physical constraints of the blower system," says Mike Sy, Head of Technology and Purchasing. "But what we really needed was a way to help them customize the hood without exceeding the limits of what we can produce in a timely manner, ensuring lead times don't get out of hand." Before engaging with Autodesk, Vent-A-Hood had to rely on tedious processes, such as handdrawn sketches, with distributors to determine customer needs and pricing. "It involved a lot of calls, handwritten notes, emails, and a scanned paperwork," Sy says. "It was a cumbersome process."

Consequently, every nuance in the design could trigger a round of feedback from the customer to the distributor to Vent-A-Hood and back again. This not only compromised the company's efficiency, but it also created conflicts between what sales needed to meet the customer's expectations and what engineering needed to design a high-quality product.

"Accurate drawings and quotes are critical for our custom business," Sy says. "Customers are in a hurry but they also have very particular needs for decorative pieces, vertical bands, lip treatments, hood overlays and more. They need to be able to visualize the final product accurately."



# Autodesk Inventor helps Vent-a-Hood design configurable products and win more bids

#### The Solution

"Our products are not just one part of the kitchen," Sy says. "They are often the focal point of the room and the biggest decorative ornament the customer plans to purchase. Previously, we couldn't quickly deliver a truly accurate representation to our customers to make sure it was what they had in mind. Inventor is key in this regard."

Vent-A-Hood's team uses Autodesk<sup>®</sup> Inventor<sup>®</sup> to design and manufacture products, using the software's rules-based engineering capabilities to capture and reuse existing range hood features instead of designing every custom product from scratch.

"Autodesk Inventor enables us to create designs as well as see what the finished product will look like," Sy says. "Without Inventor, we wouldn't be able to translate the customer's desires into a workable design as quickly and easily. Now our quotes and drawings are much more accurate."

### Online configurator delivers a superior customer experience

The company uses Configurator 360<sup>™</sup>, a cloud service that enables engineers and customers to access 3D product configurations in a custom-branded web or mobile environment.

The "Build-A-Hood" portal simplifies customization, guiding customers through the steps to design the ideal range hood — always staying within the parameters established by the engineering models in Inventor. The result is a 3D visual rendering that includes all physical specifications and pricing details. Nearly the entire Vent-A-Hood portfolio is available to customize through the portal.

"The Autodesk team was critical in making Build-A-Hood a reality," Sy says. "And Configurator 360 is cloud-based, so I don't have to worry about maintenance."

To manage engineering and CAD data, Vent-A-Hood uses Autodesk<sup>®</sup> Vault. The software helps the company's engineers organize design data, manage documentation, and track revisions for both standard and custom range hoods — which comes in handy when customers change their minds.

## Boosting engineering efficiency and customer satisfaction

The time required to create a complete model for a custom range hood dropped from a month to just a couple of hours in many cases. Being able to deliver a standardized quoting system built around Configurator 360 was the key.

"Our team is inundated with custom quotes every day," says Sy. "By streamlining that process, we have freed up more engineering time for product development. The time savings have been invaluable."

Customers are taking notice as well. Sessions on the Build-A-Hood site have gone up 28 percent compared to the company's previous online customization tool, which was relatively limited in scope. The number of users has increased 24 percent and is expected to grow further when advertising for Build-A-Hood begins in 2017. Page views have declined 15 percent because customers do not have to visit a separate page for every feature they select. Most important, new sessions are up 10 percent and requests for quotes are on the rise.

"Increasing our number of RFQs is important for us," says Blake Woodall, Senior VP of Marketing. "After customers request a quote, we send them a link to a review page that shows the model they configured and lets them download a complete spec sheet. This has greatly improved the quoting accuracy and reduced the back-and-forth involved in that process."

Vent-A-Hood's RFQs through Build-A-Hood have increased while those submitted manually have greatly decreased.

Looking forward, Vent-A-Hood is working with Autodesk to provide Building Information Modeling (BIM) data directly from manufacturing models developed in Inventor. 14 percent of Vent-A-Hood's Configurator 360 models have been made BIM compliant with plans on exposing that functionality to the public soon.

"BIM content on demand will be huge," Sy says. "We get at least a dozen calls a month from architects and designers asking for BIM data. By delivering BIM models directly from our online product configurator, we expect to win more business." We've seen an immediate impact with Configurator 360. Two-dimensional customization just wasn't cutting it. Now we can give customers a much more realistic experience.

#### —Mike Sy

Head of Technology and Purchasing Vent-A-Hood

#### For more information

To learn more about how Autodesk applications are helping companies save time and money, visit <u>autodesk.com/inventor</u>.



Image courtesy of Vent-a-Hood.

