

# HEATTEK INC.

## SUPPORTING 2D HEAT TREATMENT DESIGN NEEDS WHILE MOVING TO 3D TO SUPPORT GROWTH WITH DRAFTSIGHT PROFESSIONAL

### Case Study



After moving from AutoCAD 2D design to SOLIDWORKS 3D design to shorten design cycles and lead times for its heat treatment systems—such as the car bottom furnace shown here—HeatTek has been able to more quickly and cost-effectively handle its 2D design needs using DraftSight software, which is compatible with both AutoCAD and SOLIDWORKS data.

### Challenge:

Cost-effectively support 2D design needs while transitioning to 3D design.

### Solution:

Replace AutoCAD with DraftSight Professional 2D design software as part of the move to SOLIDWORKS 3D design.

### Results:

- Shortened product development cycles
- Compressed customer delivery lead times
- Reduced cost of 2D design accessibility
- Supported growth associated with tripling of revenue

Some of the brightest minds in the oven and heat-treating industry—with hundreds of years of combined heat treat experience—came together in 2000 to form HeatTek, Inc. The company provides high-quality heat treatment equipment, superior customer service, and on-site support. With a commitment to research and development, HeatTek has grown to become a pioneer in the heat treatment industry, helping its manufacturing customers remain as profitable and efficient as possible.

Initially, the company exclusively used AutoCAD® 2D drawing software to create its oven, furnace, and heat treatment equipment designs. When HeatTek's management decided to move to SOLIDWORKS® 3D design software in 2014, the goal was to satisfy customer demand for shorter lead times by increasing efficiency and throughput. However, the company discovered that it still needed a 2D design tool for handling simple layouts and schematics; accessing its legacy of AutoCAD designs and data; and supporting functions outside of engineering and design, according to Project Engineer II Mike Galligan.

"Everyone we spoke with recommended SOLIDWORKS 3D design over Autodesk Inventor. However, we still needed an AutoCAD-compatible 2D solution for a couple reasons," Galligan recalls. "There are other departments and personnel who don't necessarily need a 3D CAD license but still need access to design information as we often review our legacy designs when beginning a similar project. Also, our fabricators need DWG files to manufacture components and assemblies. While we can create those in SOLIDWORKS, others often need to access them. We learned about DraftSight software from our SOLIDWORKS reseller and implemented it as part of our SOLIDWORKS transition."



**"The combined SOLIDWORKS 3D/ DraftSight 2D solution provides the definite advantage of efficiency, whether we're using SOLIDWORKS to design a furnace or DraftSight to document wiring runs."**

— Mike Galligan, Project Engineer II

HeatTek purchased about 50 licenses of DraftSight Professional software to meet its 2D needs. "Our DraftSight Professional subscription costs significantly less than AutoCAD," Galligan explains. "Plus, DraftSight is fully interoperable with SOLIDWORKS, allowing our employees to go back and forth between the two applications. DraftSight meets all our 2D needs with less cost, which is why we've purchased enough licenses to have 50 people use it at any one time."

### **FASTER DESIGN WITH 3D, GREATER ACCESS TO DATA WITH 2D**

While the transition to SOLIDWORKS 3D design has enabled HeatTek engineers to work faster, not harder, resulting in shorter product development cycles, the addition of DraftSight Professional 2D design software has provided greater access to design drawings and data among other departments, allowing them to further contribute to the company's productivity gains. "Our management was proactive in moving to 3D design but recognized that we couldn't purchase a SOLIDWORKS license for everyone who may need access to drawings," Galligan points out.

"For example, our Field Service team members all have laptops and can access drawings using DraftSight when they are at a customer's site installing or servicing equipment," Galligan continues. "Our Sales and Applications Department is saving a lot of time using DraftSight, which our Spare Parts, Production Control, and Purchasing groups also use. Our shop personnel all have eDrawings® Viewers, which give them the ability to see our equipment in 3D. In short, Engineering uses SOLIDWORKS 3D, and everyone else accesses drawings and information using DraftSight."

### **ELECTRICAL AND PIPING SCHEMATICS**

Although the HeatTek Engineering group typically uses SOLIDWORKS 3D software for design, even they have 2D needs for which DraftSight is the preferred solution. "While most of our designs are done with SOLIDWORKS, we still use DraftSight to create electrical, air, gas and water schematics," Galligan notes.

“Those schematics tend to be basic, so it is a lot easier and faster to create our schematics with DraftSight,” Galligan adds. “The combined SOLIDWORKS 3D/DraftSight 2D solution provides the definite advantage of efficiency, whether we’re using SOLIDWORKS to design a furnace or DraftSight to document wiring runs.”

**TRIPLING REVENUE WHILE SHORTENING CUSTOMER LEAD TIMES**

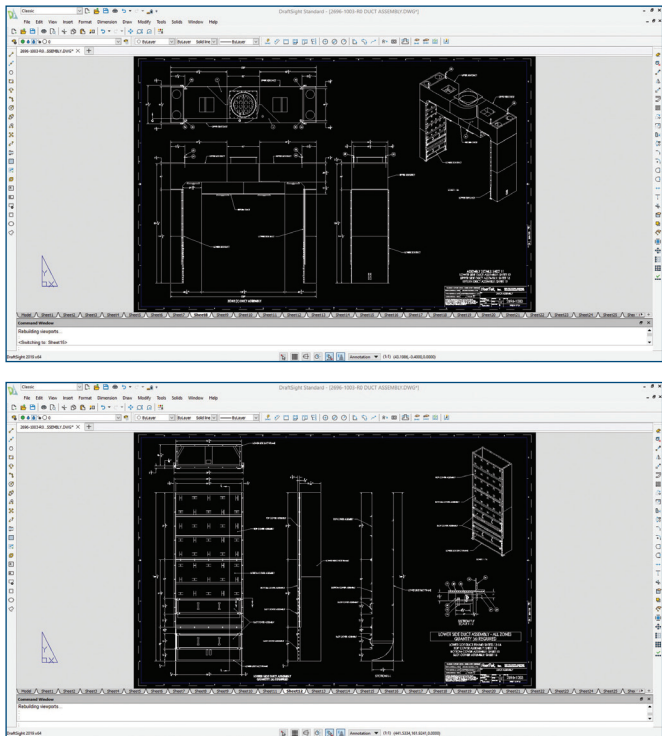
Since implementing SOLIDWORKS and DraftSight software, HeatTek has been able to support a rapid increase in demand that has resulted in a tripling of revenue. “Using SOLIDWORKS and DraftSight software has really helped us improve product development throughput during a period of unprecedented growth for HeatTek,” Galligan stresses.

“That’s critically important because during the COVID-19 pandemic, our two biggest markets—electric motor processing related to the electric vehicle (EV) boom and aluminum can processing for the beverage industry—both skyrocketed, resulting in so much business that we couldn’t design and produce fast enough,” Galligan says. “We had so much work that we had to expand and acquire two more warehouse buildings. With SOLIDWORKS and DraftSight, our Engineering Department has been able to keep up with the increased demand and will continue to do so, largely due to these support tools.”

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With DraftSight 2D software, HeatTek personnel outside of Engineering who need access to product information—such as Field Service, Sales and Applications, Spare Parts, Production Control, Purchasing and Shop Floor team members—can use DraftSight to more efficiently and cost-effectively access the information that they need, including AutoCAD legacy data, without the need for a more costly 3D CAD system.

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