A custom design and manufacturing company specializing in injection molded plastics, pad printing, and assembly.

CUSTOMER
A custom molder in the Pacific Northwest prides itself on engineering excellence in plastics and its modern facility. When it came to the resin drying process, the lack of portability of large desiccant units and their energy-sucking design lacked the high standards they set for themselves. It was time for a better solution.

CHALLENGE
The company’s drying equipment required three people to move around the manufacturing floor, used a substantial amount of energy, and wasn’t very user-friendly.

SOLUTION
After looking at several desiccant dryer solutions, the company settled on NGX Desiccant Bed Dryer from Sterling for its portability, energy efficiency, and state-of-the-art controls.

RESULTS
After installation of a new NGX P-150, the company has a versatile drying solution that’s easy to move around the shop floor, uses less energy, and is user-friendly for operators.

"The unit doesn’t just save energy. More important to us, it’s saving material."
-Production Manager
After an assessment of their needs and current industrial drying process and challenges, the Sterling team delivered an NGX-P-150, an innovative desiccant bed dryer that:

- Offered best-in-class drying performance for a consistent dew point below -40° degrees in most resins and operating conditions throughout the drying cycle
- Could help reduce operating costs with a desiccant bed and regeneration cycle design that lowers energy consumption by 27 percent when compared to wheel drying technology
- Optimizes floor space and increases portability with a flexible configuration that makes it easy to integrate into any factory footprint
- Makes drying easy with advanced color touch screen controls that displays all the information operators need to dry materials efficiently and troubleshoot issues

One of the first benefits operators appreciated about the NGX was the smart integrated technology that solved the “cooking” issue: “The nice thing about this dryer is when it is in energy saver mode, once it sees the dew point and the outlet temperature raised to an extent, it cuts itself back.” said the Production Manager. “So right now if we’re running 180, it’ll cut itself back to 160 degrees until it starts seeing a rise in dew point. Then it will raise it back up. So, it just keeps my material from sitting in there cooking. The unit doesn’t just save energy. As important to us, it’s saving material.”

The NGX series offers plenty of options so you can configure your industrial desiccant dryer to meet your unique needs. It even has the ability to adjust for the dryer throughput using a bolt-on aftercooler for high-temperature configurations.

“The aftercooler made all the difference in the world, even running at 180 degrees, the aftercooler keeps your return air temperature consistently low. The blower on the dryer works extremely well. So, your return air gets quite hot – over 150 degrees – because the blower works so well. So, when you put the aftercooler on it, it helps you control your return air temperature down around 120 degrees.”

Another vital feature that the team appreciates is the advanced and intuitive controls that make operating the dryer and monitoring performance easy. The high-resolution 7” touch screen offers data logging, trend charts showing critical performance parameters, and vital maintenance information. Plant managers can even remotely control the dryer from any phone, tablet, or computer using a built-in VNC server.

“The interface for the operator is the control screen, and the NGX is the easiest one to use,” says the Production Manager. “The main control screen answers the material handler’s questions and makes it easy to perform maintenance and troubleshoot. Is the material too wet? Is the dew point optimal? What’s the air temperature? What maintenance does it need? It tells you what it’s doing right there on the screen. And it has the visual flow diagram. It’s so advanced, I’m actually using this dryer to train material handlers on how a dryer works.”
Although the company has yet to quantify the current and potential energy savings from integrating the NGX Desiccant Bed Dryer in their operation, there’s high confidence that there will be significant money saved. Also, the revenues saved by avoiding “overcooking” and discarded ruined materials will add to the company’s bottom line.

“My guys are fighting over who gets to use the NGX,” says the Production Manager. “I would recommend this desiccant dryer over any other.”

“I damn sure recommend it, and I’ll definitely stick with this dryer.”
-Production Manager

Sterling can help you determine how your company can dry materials much more efficiently and save on energy costs by using our advanced NGX Desiccant Bed Dryer solutions.

For more information visit https://www.sterlco.com/product/ngx-series-dryers/

To arrange a free on site consultation, you can reach us by email at marketing@acscorporate.com

Benefits by the Numbers

- Reduced start-up scrap on new jobs from 30 to 3 parts
- Reduced reject rate from 3% to less than 1%
- Cut desiccant changing time by 50% - from 4 hours to 2

ABOUT STERLING

Sterling is the frontrunner in temperature control units for plastics and industrial applications. For more than 100 years, Sterling and the Sterlco® brands have been synonymous with dependable temperature control for applications in plastics, food and beverage, pharmaceutical, and many other industries.

Sterling has grown to be a market leader across a broad range auxiliary equipment for the plastics industry, leading the way in chillers and process cooling, material handling, and granulators.

Sterling brings a century of experience, providing our customers with premium value and quality.

For more information, visit www.sterlco.com or call 262-641-8600