

CASE STUDY

PRODUCING HEALTHY YIELDS THROUGH EVERY SEASON

Durango Cannabis Company produces consistent, repeatable yields in its indoor cannabis cultivation facility in beautiful Durango, Colorado

ic Borst became interested in the cannabis industry after he broke his back during a kayaking competition. To avoid physically debilitating surgery and the pain and anxiety associated with recovery, he turned to cannabis. The medicinal value he saw in the plant sparked a passion that led him to start his own cultivation facility. Using his background as an organic farmer, he founded this new family business shortly after cannabis became legal in Colorado.

From the beginning he knew that to grow quality product he would need fine-grained control over every aspect of the cultivation environment, and to achieve that, he needed the most modern and efficient technology available. Borst wanted technology that would not only enable him to produce consistently high-quality crops but would also ensure that his grow rooms were contained so they didn't produce odors or lights that might disturb his neighbors.

With cold, dry winters, spring hail and summer heat, Colorado presented a challenging growing environment. Borst wanted to produce great product all year long, no matter the season. Once he started researching environmental systems, he found that most on the market were designed to work with traditional heating, ventilation and air conditioning setups and didn't offer the low ambient opportunities and other functionalities needed for successful cannabis cultivation. Another issue he encountered when prepping his site was that traditional HVAC systems presented significant challenges with redundancy. He wanted a system that would allow him to continue operations regardless of the status of any single room or piece of equipment. The last major challenge he faced was budget. His facility was a small, family-owned business, and he wanted to work with one environmental systems company that could provide the necessary engineering, infrastructure, plans and equipment, so he wouldn't have to deal with multiple vendors.



NIC BORST, OWNER, DURANGO CANNABIS COMPANY

QUARTERLY INCREASE IN HARVEST YIELDS

WATER RECLAMATION

MONTHLY WATER BILL

During the build-out process, Borst encountered a steep learning curve. Even with his experience as a small business owner and as a farmer, scaling to a larger capacity made him nervous. He found there was a significant lack of information for new cultivators about best practices for environmental control, water handling, pesticide use, and integrated pest management. However, he was still excited about the opportunity to chase his passion. At the same time, he recognized a trend in the cannabis market — similar to what's found in the craft beer market — of customers wanting the same product every time they make a purchase. To Borst, one customer's preference for a Fat Tire Ale was much the same as another's preference for a single, consistent strain of marijuana.

In 2015, while still searching for a company that could help him create the controlled, consistent and redundant growing environment he envisioned, Borst met Surna's co-founder, Brandy Keen, at a conference in Denver. Surna had the technologies to provide everything he was looking for, and he was impressed with Surna's knowledge base as well as Keen's ability to communicate from a scientific perspective.



After his initial meeting with Keen, Surna worked with him on plans for his facility's cultivation capacity. Surna designed a chilled water system for his facility, performing all the load calculations and equipment selections, and demonstrated how easy the equipment was to use. Surna laid out a full strategy for Durango Cannabis Company based on the projections for cultivation space in the building, number of plants, water schedule, and lighting type, quantity and schedule. Surna's plan included working with Borst's general contractors, completing the engineering, and commissioning the new system.

As most folks in the industry know, there are lots of hoops to jump through when undertaking a cannabis cultivation startup. Once the license is issued, there is a rush to do everything quickly because the rules and regulations are constantly changing. Borst believes that if Durango Cannabis Company had not connected with Surna, the journey to growing healthy plants and achieving a successful product would have taken significantly longer. "If we didn't have Surna and the support behind that," said Borst, "we would have made a lot more mistakes along the way, probably lost a lot more crops, and we wouldn't have been able to deliver as high a quality of crops as we've been able, as soon, to the market. That was really big for us."

Return on investment is also key. Borst says that by using Surna, Durango was able to get its product to market a lot sooner than would have been possible with a traditional HVAC system and the compatible growing technology. Durango has seen tremendous success in plant growth and overall quality, allowing the company to compete on a wholesale level with top-shelf producers in Colorado on both price point and quantity. Being able to maintain a competitive edge has been crucial as prices have declined

"Looking back and comparing apples to apples, and I've done a lot of that since our initial meetings," Borst recalled, "it's really cool to see equipment that's efficient and easily managed — and the maintenance is really easy too. I notice other grows that have technicians out all the time in the winter where they're probably struggling to have a consistent grow through some of the different seasons here in Colorado. But we can just sail right through, no matter what season it is, and keep going at our quality level."

Borst notes that the best thing about the Surna system for Durango is that it's multidimensional. For example, Durango is able to reclaim water from the dehumidification process, lowering the company's water bill. "It gives us controllability," he adds, "and it gives us redundancy, so that if one component needs service, all the other rooms continue. It gives us the ability to heat or cool our environment no matter what the temperature or climate is outside of the building."



Durango's founder is sold on Surna. "As for value, I don't think there's anything else out there that gives you as many potential benefits as a Surna environmental system — sort of an all-in-one package," he said. "I think you'll get a lot of different HVAC systems out there that will give you good options in one area or in one dimension, but Surna really gives you the best solutions for all the different areas you're looking for."

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