



▲ Specifying the new blender (right) was simple because it would be handling the same materials as another of the company's blenders (left).

📷 Courtesy of Stratum Nutrition

DIETARY SUPPLEMENT MANUFACTURER STRENGTHENS BLENDING CAPACITY

Stratum Nutrition sticks with a winning formulation when increasing the blending capacity at its Missouri manufacturing plant.

By Nate Todd, Senior Editor

Dietary supplement consumption has been growing steadily due to changing lifestyles and increasing consumer awareness about health and well-being. According to a recent study by Up Market Research, the global dietary supplements market was valued at \$140.33 billion in 2020 and is expected to grow at a compound annual rate of 8.6% between 2021 and 2028, with North America making up the largest share (35.7%) of the market.¹

Stratum Nutrition is a bulk dietary supplement and ingredient manufacturer based in Carthage, Missouri, and has been steadily increasing its manufacturing capacity in recent years to meet growing demand. In the fall of 2020, the company decided to add a new blender at its food-grade, GMP-certified facility. Stratum had already been using multiple ribbon blenders from Charles Ross and Son Company for many years with excellent results, so the supplier was the logical choice for the new blender. Ross is a specialty mixing and blending equipment supplier headquartered in Hauppauge, New York.

“We knew that, to maintain product uniformity, we needed the same equipment,” said Kyle Haws, Stratum’s regional operations manager. “Having worked with Ross mixers in the past, we knew they were the right company. Their expertise and experience were the deciding factors in our choice.”



▲ The new blender has allowed Stratum to keep up with growing production demands and meet changing process needs. 📷 *Courtesy of Stratum Nutrition*

◀ The blender features a solid double-ribbon agitator for thorough blending and an internal spray bar for adding liquids during processing. 📷 *Courtesy of Ross Mixers*

A proven solution

Stratum uses the blenders to process multiple product lines, which consist of dry powders and a liquid mixture addition during the blending process. Specifying the new blender was simple because it would be handling the same materials as the company's current blender.

"Since we had an existing Ross blender, we used the specs of our original blender as the basis of achieving the material spec we needed," said Haws. "It was much easier to design the process around known variables."

Ross provided a 13-cubic foot ribbon blender with a maximum working capacity of 10 cubic feet. The blender features a stainless steel trough that is jacketed to allow for heated or cooled operation and has an FDA-compliant silicone cover gasket.

The blender is fitted with a stainless steel, solid double-ribbon agitator driven by a 7.5-horsepower variable frequency drive motor with a top speed of approximately 56 rpm. For the liquid addition during mixing, the blender has a stainless steel internal spray bar with four 90-degree spray nozzles.

The blender discharges manually via a centrally located stainless steel 4-inch flush-bottom ball valve, with 36 inches of clearance between the bottom of the valve and the floor below.

While specifying the blender was easy, the purchase was occurring during a global pandemic, and supply materials were starting to take longer than usual. "Ross was great to work with and provided great communication," said Haws. "Lead times were extended due to COVID-19, but our sales representative was great about letting us know in advance of delays or changes to the delivery date."

Meeting growing demand

The new blender has allowed Stratum to keep up with the increasing production demands and meet changing process needs. "Everything worked as designed," said Haws. "We currently do multiple blends throughout the day. We are also developing a continuous processing line that would start with our Ross blenders."

Haws sees potential opportunities to work with the supplier again as the company continues to grow. "Ross' team of engineers, sales and logistics personnel was outstanding," he said. "The sales representative that helped us with the purchase and specifications was very knowledgeable and always responded in a timely manner." 📷

References

1. www.upmarketresearch.com/report/dietary-supplements-market-global-industry-analysis.

Ross Mixers
www.mixers.com