FBA Food & Beverage Asia

OCTOBER / NOVEMBER 2021
www.foodbeverageasia.com

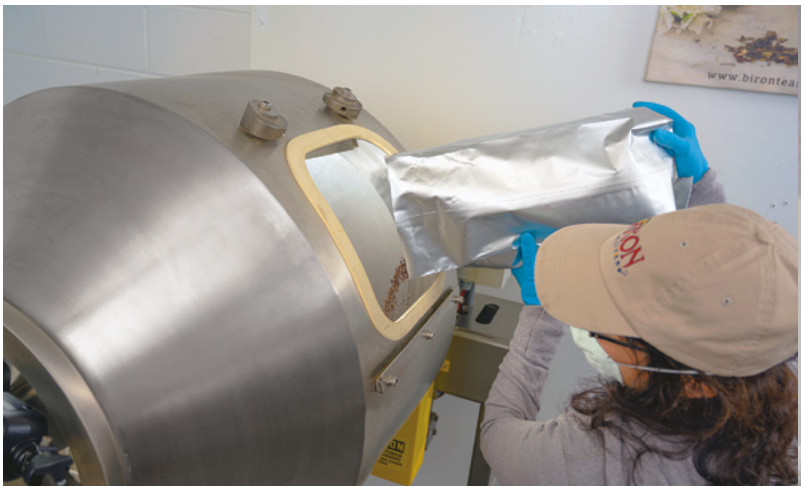
Photo courtesy of Roquette

Prebiotics market taps into current demands

Serac's ESL Combox delivers three-way packaging solution

How product inspection facilitates the flexibility and product safety that co-packers need to deliver

PABLO



Blending in-house: Biron Teas' 85 litre-capacity Rotary Batch Mini Mixer blends teas with or without liquid additions in three minutes with no shear or damage to delicate ingredients

Biron Teas brings blending in-house with Rotary Batch Mixer

Founded in 2015, Biron Teas sells organic artisanal teas through retail epicurean grocers, the hospitality industry, and e-commerce. Owners Andi and Roland Biron first relied on a Seattle-based co-packer to blend their tea varieties. But with cross country shipping fees, delays, and growing demand, the company needed to expand capacity and bring blending in-house.

"Mixing teas requires gentle handling. Because our co-packer used a V-cone mixer, I looked at this equipment first," said Andi Biron.

The V-cone mixer's swinging operation, however, consumed too much floor space.

Thus, Biron ultimately specified a Rotary Batch MX-3-SS Mini Mixer from Munson Machinery for its smaller footprint and ability to produce uniform blends without product degradation or cross-contamination.

TEA INGREDIENTS REQUIRE GENTLE MIXING ACTION, SHORT CYCLES

Premium tea blends require special handling at each phase. The first step is to screen dust, twigs and foreign matter from the ingredients.

"With chrysanthemum flowers, we want the blossoms but must remove the pebble-hard buds," said Andi Biron. "Ginger root also requires a thorough cleaning."

Proprietary combinations of herbs, florals, fruits and spices are loaded into the 85 litre-mixer, which is comprised of a stainless steel, horizontal drum having no internal shaft or shaft seals. Internal mixing flights impart a four-way mixing action that tumbles, folds, cuts and turns the material, causing particles to recombine 288 times per minute, with no shear or heat generation.

Natural oils and liquid flavours are metered through an integral stainless steel spray line and pumped from a pressure pot on a scale for accurate liquid additions by weight.

Andi Biron shared that the mixer blends 32 to 36kg batches of tea blends with or without liquid additions uniformly in three minutes.

"Organic artisanal teas, especially blends with herbs, wildflowers, oils and berries, can't be crushed or pulverised," explained Andi Biron. "The mixer gently tumbles and turns a delicate – and sometimes sticky – tea mix into a uniform blend without pulverising or powdering."

The blending action prevents segregation of materials, regardless of size, shape or bulk density.

Andi Biron, added: "Chamomile and ginger can be especially difficult to mix but the mixer does the job, which is essential for uniform flavour."

The mixer's internal flights also serve to elevate and direct blended material through a discharge gate, with no residual or product waste. In fact, according to Andi Biron, the mixer can be cleaned rapidly between blends.

Also, because certain tea mixes incorporate natural flavours, oils and other ingredients that cling, selecting a mixer with a large drum access door for interior access was important.

ORGANIC AND BIO-CERTIFIED PACKAGING SUPPORTS SUSTAINABILITY

Biron Teas produces both traditional and unique artisanal tea blends. The organic certification of each ingredient and lot numbers are tracked and managed.

After blending, each special tea mix is scooped into a tea bagging machine, yielding about 20,000 bags per batch.

Biron tea bags are pyramid-shaped sachets made of Soilon® woven mesh fibre made from corn starch that is certified as biodegradable. Biron Teas also selected recyclable biodegradable packaging for its hospitality product lines

"Our teas are organic and the overwraps are made from compostable biomaterial certified as bio-preferred by the US Department of Agriculture," said Andi Biron. "We're concerned about the planet and so are our customers."

In addition, the company's online products are packaged in decorative tins.

"They have a greater lifecycle than paper since they can be recycled and reused over and over," she said.

MINI MIXER AIDS IN BUSINESS EXPANSION

Thanks to booming sales and newfound mixing capacity, Biron Teas has expanded into co-packing and mixing for other tea purveyors.

"When you are blending 32 to 36kg of tea, there is no way that can be done in a commercial kitchen with stainless steel mixing bowls," said Andi Biron. "I love the idea that we can help other artisan tea makers grow, too." **FBA**

The mixer's tumble-turn-cut-fold action achieves uniformity in three minutes with no product degradation

Blends are evacuated with no residual or segregation of ingredients regardless of size, shape or bulk density