



CASE STUDY

Expertise in pulses and maize

Concentrating expertise in pulses and maize at the new Bühler Food Application Centre

How will the future of food look like? How can we contribute to sustainability in the food business? What is the most innovative process technology to implement your business ideas in the most profitable way? These are all questions we will be answering at Bühler's new state-of-the-art Food Application Centre in Minneapolis, USA.

Consumers are getting more sophisticated and diverse in their food choices. Today's trend equation combines several challenges for food processors. Above all, people are looking for healthy products – those which additional to nourishing also have some health promoting function.

Allergens have to be considered as well as keeping track on the level of fat, sodium and sugar. Sustainability is also weighing more on consumer's choice. The food they buy has to come from ethical sources and also have the smallest environmental footprint as possible.

As a consequence, the plant-based market is emerging at very fast pace and foreseen to keep growing in the next decade. In addition, due to globalisation, as consumers we are getting more adventurous in trying new tastes and textures traditional to countries far beyond our own borders.

Considering the latter scenario, being a food producer hasn't been as challenging as it is today. This is why the new Food Application Centre of Bühler is tailored to help customers to test their business ideas and refine them until they are fully ready to be implemented profitably with the most suitable and state of the art process technology.

This new facility adds to the 25 already existent and globally located food application centres – and is a reaffirmation of Bühler's aim to be at the region for the region. The new Food Application Centre offers a state-of-the-art processing facility to add value to two promising grain alternatives that cater the previous mentioned consumer trends.

On the one hand, the site will showcase Bühler's innovative Prime Masa Nixtamal process for tortilla- and chips flour production, which enables to save up to 90 percent water, with a lower energy and steam requirement reaching the same finished product taste as in the conventional nixtamalisation process.

This process was deliberately integrated at the new lab facility in Minneapolis, considering the enormous market potential for the resulting products. Only in North and Central America, more than 13 million tonnes of corn are processed yearly in to nixtamal corn flour.

Furthermore, more than 1.3 million tonnes of tortilla chips are consumed worldwide. These products are conquering effectively the eating habits beyond their Central American origin region. They represent a versatile alternative to gluten-containing products and can be very versatile blended with other healthy grains to make them functional.

Additionally, the new Bühler Food Application Centre will deeply grapple one of the biggest challenges of the future – the protein gap - by offering a comprehensive testing infrastructure for pulses processing. Beans, chickpeas, lentils and peas have not only a very high amount of protein, but they are also rich in fibre and in several vital micronutrients.

Pulses are sustainable, as they grow in arid regions, enrich the soil they grow in and have a very low water requirement compared to traditional protein sources. They are readily available and

already represent a staple to many countries around the world. Still, there are several technological challenges on how to turn pulses into functional ingredients and further process them into convenient and delicious food.

Answering these questions will be the ultimate aim at the new Bühler Food Application Centre, rooted on the strong technology knowhow, portfolio and success stories that Bühler has already in the pulses processing industry.

At the new testing facility, we will be building strong knowhow around this emerging raw material to identify the most profitable ways to add value to it - cut to customer's individual needs.

Moreover, this new Food Application Centre will perfectly complement the existent Bühler pilot extrusion lab where, since 2010, customers have been able to successfully test new product ideas at food grade level and for direct consumer testing. With the expansion of process, Bühler will be offering a testing facility that bridges the gap between pure ingredients and high value ready to eat foods.

Finally, this state-of-the-art innovation compound will not just offer trial space, but also a consciously designed training programme around food safety and the latest processing technologies for all types of grains.



Supported by Bühler's extensive knowhow, technology experts and food scientist there will be the possibility to develop and host workshops cut to specific customer needs.

To sum up, the new Bühler Food Application Centre in Minneapolis will be a real playground for innovation. The ultimate aim of this new facility will be helping customers in finding an optimal blend between the proper ingredients, formulation and value adding processes which will be determinant to succeed in the food business. All in all, we will be shaping the future of food together with our customers.

pulses@buhlergroup.com
www.buhlergroup.com