

Artisan mixing plant for Australia

French inspired – Australian owned, that’s how the Laurent bakery in Melbourne describes itself. The company uses European plant technology to produce artisan breads in a new building.



++ Each stainless steel tank contains around 480 kg of dough

+ The French immigrant Laurent Boillon founded the Laurent Bakery in Melbourne, Australia, in 1993. At first it was only a shop producing and selling patisserie products and traditional French breads. The business grew steadily in the following years, and now has 15 sales outlets in Melbourne, Clayton and Sydney. Laurent Boillon opened up new markets in parallel with his own branches. For example, clients can now obtain French-style baked products in the wholesale or in the food service area nationally and internationally.

As the bakery says, it pioneered the use of sourdoughs in Australia, and the company developed its own series starters and sourdoughs. Laurent also advertises the fact that its bakers produce baked goods by traditional methods, for which the company also uses stone-plate baking ovens. Because Australians are convinced by the concept, Laurent Boillon’s production facility has now become too small. The entrepreneur will rely on plant technology from Europe in the new building.

New building

Following the bakery’s steady growth, a new production unit is now being built. For this, as DIOSNA’s Commercial Manager and Bakery Technology Division Manager Henrik Oevermann explains, the company is investing in what is probably the world’s biggest artisan mixing plant. The Laurent Bakery benefits from a change in the market and consumers in Australia. DIOSNA’s Asia Sales Director and industry expert Ralf Bohne reports that in Down Under, bread is often no longer used simply as something to put under topping or as a basis for a sandwich, and instead many consumers are

now asking for “real bread with sourdough”. The Laurent Bakery has focused on this trend. Customers are also willing to pay a significantly higher price for the products at the same time.

Therefore, Laurent Boillon opened his own production facility in 2013 to produce bread and bread rolls with an output capacity of 2.5 tons/hour. Due to reaching the capacity limit, a second production unit is now being opened in Melbourne with an initial capacity of 5.2 tons/hour for which, among other things, DIOSNA is supplying the mixers and IsernHäger the sponge dough plants. Esteve is responsible for metering and the silos in this turnkey project.



++ Henrik Oevermann (L), Commercial Manager and Bakery Technology Area Manager, with Asia Sales Director Ralf Bohne



© IZM

++ Mixing and kneading are carried out by a total of three type 600 wendel mixers within the line

Trend: high hourly output capacity

Henrik Oevermann is pleased with the business situation, and explains that business with IsernHäger products for sponge dough plants and biotechnology has almost doubled since the takeover by DIOSNA. The Group's export ratio is more than 70%. In this respect, the main growth area is in Europe, but Oevermann still sees growth opportunities in the USA and Asia. Business in Russia is also slowly picking up again. Customers ask in particular for mixers with high hourly capacities, for which the company offers various solutions. In the continuous mixer area, for example, there are plants with an output of two to eight tons/hour. For plants with bowls, today's hourly performance is up to seven tons. There is also a "back to the roots" trend involving bakeries depending on sponge doughs and sourdoughs, firstly to create more flavor in the baked products and secondly to reduce the use of baking agents. The aim is also to automate processes so as to guarantee the necessary process reliability in the production operation. The Group will present a new wendel mixer with a strictly hygienic design at the 2018 iba trade fair.

ADVERTISEMENT



++ Two robots carry a total of 36 stainless steel tanks to the mixers and into the resting positions in the mixing plant



++ A bowl tipper carries bowls to the cleaning station



++ As soon as a bowl is in the cleaning position, a cover folds down onto the bowl and automatic cleaning starts



++ The transport system's structure is linear, and transport to the individual kneading and resting stations is done by two robots



++ A bowl tipper made by DIOSNA feeds dough through a cone for further processing

Four 50-ton flour silos with flour cooling are installed in the new production unit. The make-up plant's flour dusters are also refillable automatically. There is also a fully automatic wheat sourdough plant with a capacity of several tons/day, for which the Laurent Bakery uses its own starter from Australia. The sourdough is then fermented in one of six maturing tanks, each with a volume of 6,000 liters. There is also provision for plant cleaning by CIP (Clean in Place) and WIP (Wash in Place). All the machines are networked together and centrally controllable. The data can also be analyzed.

Artisan mixing plant

There is also a DIOSNA dough mixing system with three type 600 wendel mixers, a linear transport system including two robots, and 36 stainless steel tanks. According to Henrik Oevermann, it's the biggest artisan plant in the world, or at least one of the biggest plants DIOSNA has ever built. Laurent Boillon also imposes particularly high hygiene demands. For example, most of the plant components are made of stainless steel and thus easy to clean. Fully automatic tank cleaning also operates in the system. Each stainless steel tank can be washed individually and fully automatically after it has been emptied. Ralf Bohne also explains that "It's also possible to

clean all the tanks at once by pushing a button, e.g. after production ends." This cycle, in which all 36 stainless steel tanks are cleaned, takes around 2.5 hours.

The mixing/kneading process starts after automatically metering in all the ingredients. Recycled dough is metered into one of the bowls together with the other raw materials such as flour, water, sponge dough and yeast. The first wendel mixer then follows. After kneading, a robot then carries the bowl to one of the system's dough resting stations. Other ingredients can now be added as necessary, depending on the recipe. After the dough rest period, a second robot takes over the bowl, and two more type 600 wendel mixers are ready to knead out the dough as required. There is about 480 kg of dough in each of the stainless steel bowls at this time. At the end of the kneading and dough resting process, a bowl tipper transfers the dough via an oilable cone for further processing on the other lines. There is an automatic bowl cleaning facility on the other side, i.e. opposite to the bowl tipper. Delivery of the Esteve, IsernHäger and DIOSNA plants is now ongoing to allow the Laurent Bakery's new production plant to start operation in the fall of 2017 with the motto "French inspired – Australian owned". +++