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REPRINT | CONCRETE PIPES AND MANHOLES

Frankston Concrete Products successfully
operating the drycast market in Australia



Chances are good.

Working with AFINITAS, Frankston team finds quick success in drycast manufacturing.

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Frankston Concrete Products successfully operating the drycast market in Australia

Frankston Concrete Products located in Melbourne, Australia, has been in operation more than 50 years and is one of Melbourne's top precast concrete suppliers. Its owner, Peter Zigouras, purchased the company in 1971 having almost zero precast industry knowledge but an abundance of business chops that served him well in making Frankston a success. Now his sons, Nick and Ben, have taken the reins and some cues from their father on making bold business decisions that are yielding excellent results.

If you see a chance. Take it.

In many ways this is a story about the rewards of risk taking. It illustrates how a chance business opportunity, a chance meeting with a sales rep, and the chance two sons took to build more business collided to make Frankston Concrete Products the success it is today.

It all starts in the early 1970s in Melbourne where a young Peter Zigouras was working as an accountant but dreamed of being an entrepreneur. His chance came when Frankston, a small wetcast producer specializing in gardening products, was for sale. "He had no knowledge of precast concrete," said Ben Zigouras, Peter's son. "He just knew he wanted to run a business." With financing from his mother, Stavroula, and his wife, Kay, Peter purchased the company completely blind to what it entailed. At the time, the business centered around cheaper, high-volume, low-margin wetcast products.



Frankston tradewaste interceptor.

It helped that Peter was a very "creative" accountant with a sharp business mind who quickly recognized the need for the business to expand into more commercial and industrial pursuits. One of which was wholesaling plastic pipe, commonly used in Australian stormwater systems, and the other was products used in tradewaste (liquid waste generated by commercial and industrial businesses) applications. In fact, in conjunction with local water authorities, Peter invented



(a) the new Frankston Concrete Products factory in Melbourne, Australia. (b) the old Frankston yard they occupied for nearly 50 years.



Left to right, Ben, Peter and Nick Zigouras, owners of Frankston Concrete Products.

tradewaste apparatuses such as grease and petroleum oil interceptor traps that eventually became certified and then required in all new local tradewaste applications. His work in developing these products proved to be a huge boost to his business as Frankston had a very strong foothold on the market once these interceptor products were mandated.

At the same time, plastic pipe was becoming a major focus of his business too, but he wisely never abandoned Frankston's wetcast roots. This served the company well as it faced stiff competition in the 1980s from large international plastic pipe suppliers. By keeping a toe in wetcast, Frankston was able to exit plastic and shift full throttle into wetcast production of concrete stormwater pits and tanks for residential, commercial and industrial customers.

A chance meeting that left a big impression

In the late 1990s, Peter's sons, Nick and Ben, became more involved in business. Ben was already somewhat engaged as he found himself installing the pits and tanks Frankston manufactured as part of a plumbing apprenticeship he was

pursuing. And Nick, who had moved back from Sydney, was operating his environmental science business out of the Frankston office.

Before long, the brothers took on more responsibility and found some very successful ways to diversify Frankston's concrete interests. With the company experiencing considerable growth and in the competent hands of his sons, Peter was able to step back a bit from the day-to-day operations.

That set the stage in for a cold call Ben received from Volker Nusser, a sales rep who worked for BFS Betonfertigteilesysteme GmbH, a concrete pipe and manhole machine manufacturer based in Blaubeuren, Germany, which since 2018 has been part of the Afinitas family of brands. Ben remembered how Volker brought them several brochures on drycast production machines like the Jumbo, Mammut, Souveraen and Atlantic. "Here was this big Bavarian guy telling us that we should start making drycast stuff ... and we had never heard of it!" laughed Ben.



The BFS Souveraen is known for its high quality, high throughput pipe production.

Above: Main gear box with extremely powerful electrical motors for the counter-rotating compressing tool.



Souveraen's robotic arm automatically inserts anchors to produce Frankston's unique pipe with lifting lugs. These products are extremely popular with Frankston's customers as installation time can be cut in half when using them. The anchor-feeding robot called BFS Transfix (patent pending) operates irrespective of shape of the pipe.

But the idea Volker planted with them firmly took hold. In 2013, the Zigouras family acquired a 4 hectare (almost 10-acre) empty lot that would eventually become the site of their new factory. After visiting drycast plants in Australia and Europe to understand the equipment and skills required to run them, the brothers determined drycast manufacturing was definitely in their wheelhouse. In fact, compared to the much slower spun pipe technology used in Australia, they felt they would be crazy not to do it.

Taking a chance on drycast

With the financial backing of their father, the brothers took the leap and decided to bring their longtime contact Volker Nusser and the BFS team with them on this new journey into drycast production. It was a giant step – a new plant to build, new equipment to purchase and a completely new production process to learn.

"In choosing BFS, price was important, quality was important, and we had been to the plant in Perth, Australia, to see the Souveraen and Atlantic operate. The Perth team was really big on the service they received from BFS after the sale," said Ben. "Plus, Volker's completely random drop in from a decade earlier meant something too."

Nick and Ben decided to build their 15,000 square meter plant around the BFS Souveraen 1625 packerhead concrete pipe machine, where they are now running pipe that is 300 DN up to 600 DN and the BFS Atlantic 1515 Roto model machine where they are running four different sizes of stormwater pits from 450mm x 450mm to 900mm x 900mm.

The BFS Souveraen is known for its very high product quality due to the design of its packerhead. Most packerheads have

a row of rollers and a row of trowels that pack the concrete against the form. The Souveraen has multiple rows of both. That allows concrete to be packed with as much force but with less torque required from the machine, providing more even distribution of the force against the concrete.



Pressing tool with roller levels.



Souveraen's computer-controlled production and camera system.



Three-piece mold design with forklift truck demolding device.

Souveraen's computer-controlled system calculates the concrete amount using the process controller and supplies it via the "S-feed" concrete supply system in a precisely defined amount and speed to the compaction process, resulting in consistent pipe quality. The machine's built-in weighing system ensures minimal waste as the concrete is released when the machine controller identifies the need.

In addition, BFS's unique three-piece mold design increases efficiency with rapid loading and unloading of the mold thanks to its quick-closure mechanism. The double-hinged molds are opened and closed by the forklift driver by a hydraulic mechanism and can be carefully transported to the curing area where they are demolded.

The Frankston team is pleased with the quality and output they are receiving from the Souveraen, where the machine has the capability to produce up to 300 pipes per day of any size using only two operators. According to Ben, the limiting factor is their ability to hire staff. Because they can currently staff only one shift, their typical production numbers are much lower per day. But the labor savings of the automated machinery will be transformative (and already is) according to Ben as they bring more wetcast products online, particularly on their other machine: the BFS Atlantic.

The Atlantic is a versatile machine that can produce diverse concrete elements: large, small, round, angular. At the heart of the Atlantic is a powerful three-head central vibrator with hydraulic clamping and program-controlled compaction force setting. This ensures well-regulated, forceful and fast concrete compaction. The Frankston Atlantic machine is specially equipped with the BFS Roto mold-turning device to increase the efficiency of making stormwater pits with bases. Roto allows the product to be poured upside-down

and, once made, the pit is rotated on to the pallet to minimize the amount of handling needed. This functionality can be disabled for products without a base. The Frankston Atlantic also automates the process for 4-sided knock-outs on the pit walls saving the team time and reducing rework.



Frankston's BFS Atlantic 1515 system is designed to produce tanks, pits, manholes, tapers, pipes and similar concrete products with a height up to 1500mm and a max inner diameter of 1500mm and square products up to 900mm x 900mm.



The Atlantic 1515 with pallet handling on the right side. The pallet magazine is adjustable to accommodate a range of pallets.

"Our record for 450mm x 450mm stormwater pits is 120 in one day," said Ben. "To put that in perspective, with wetcast production it would have taken us 3 weeks to do it and the cost is about two-thirds less. The Atlantic has been a real game changer with how much you can do."

Ben said eventually they will stop making stormwater pits in wetcast and manufacture their entire range of products out of the Atlantic. "This will help our labor situation immeasurably. You would be talking about running that whole operation with a max of 3 people as opposed to 15," said Ben.

What are the chances of a Pandemic?

As luck would have it, the new Frankston plant opened its doors in January 2020, a few weeks before the world was turned on its head by the COVID-19 pandemic. The Souveraeen and Atlantic were in the process of being commissioned when Australia was closing its borders and the BFS technicians working on the project had to leave.

"They were very apologetic, but what could they do, they had to get out," said Ben. "But we were like 'what do we do?'" Fortunately, thanks to virtual technology they were able to very successfully complete the commissioning via online methods and Whats App. "Klaus Müller, and the BFS technical team were getting up at all hours to help us finish and this really validated my decision to go with them."

"It has been a lot of fun working with the Frankston team from the very beginning," said Klaus Müller, Managing Director of BFS Manufacturing for Afinitas. "Now we are happy that they are producing such great products. The success of our customers is our reward."

And, as Ben admits, they took on a lot at once, but having an experienced supplier like Afinitas/BFS really helped them in terms of designing the plant layout, selecting the equipment suited to their production needs, and mastering the equipment and production processes. "They even helped us think through things like how the stockyard should be laid out," said Ben.



Automated wall knockout process has greatly increased efficiency.



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Ben Zigouras checking on operations in the plant.

Upon a recent visit, Torben Mørch, Vice-President of Sales for Afinitas, who now covers the Australian market remarked how impressed he was with the plant construction and its operations. "The plant is kept clean, and the machinery is well-maintained, the production team works like clockwork and you can see they are proud of what they do. And the products look great, so it is really a pleasure to visit this plant."

No chance of stopping

Ben describes how when his approximately 30 team members are in place and the machines are running, the Frankston plant is "just humming." And already receiving an ROI on their equipment investments makes him very optimistic about the opportunities that await them. While in the near term their focus is on perfecting the products they have, about 99%, of which are for the stormwater industry, they have their eyes on expanding their reach and product offerings.

"When I think back on that first contact with Frankston, plunked right out of a Melbourne phone book, and what this small company developed into, it is amazing" said Afinitas Sales Manager Volker Nusser. "But I always knew they were serious about their work and would be successful."

In reflecting on their success, Ben credits his father's willingness in the early 1970s to take on a business he knew nothing about and then doubled down on it in 2013 by backing his sons in their expansion into drycast. "He taught us, you got to put your cards on the table and give it a go," said Ben.

There's a good chance this is not the last you'll hear of Frankston. ■

FURTHER INFORMATION



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