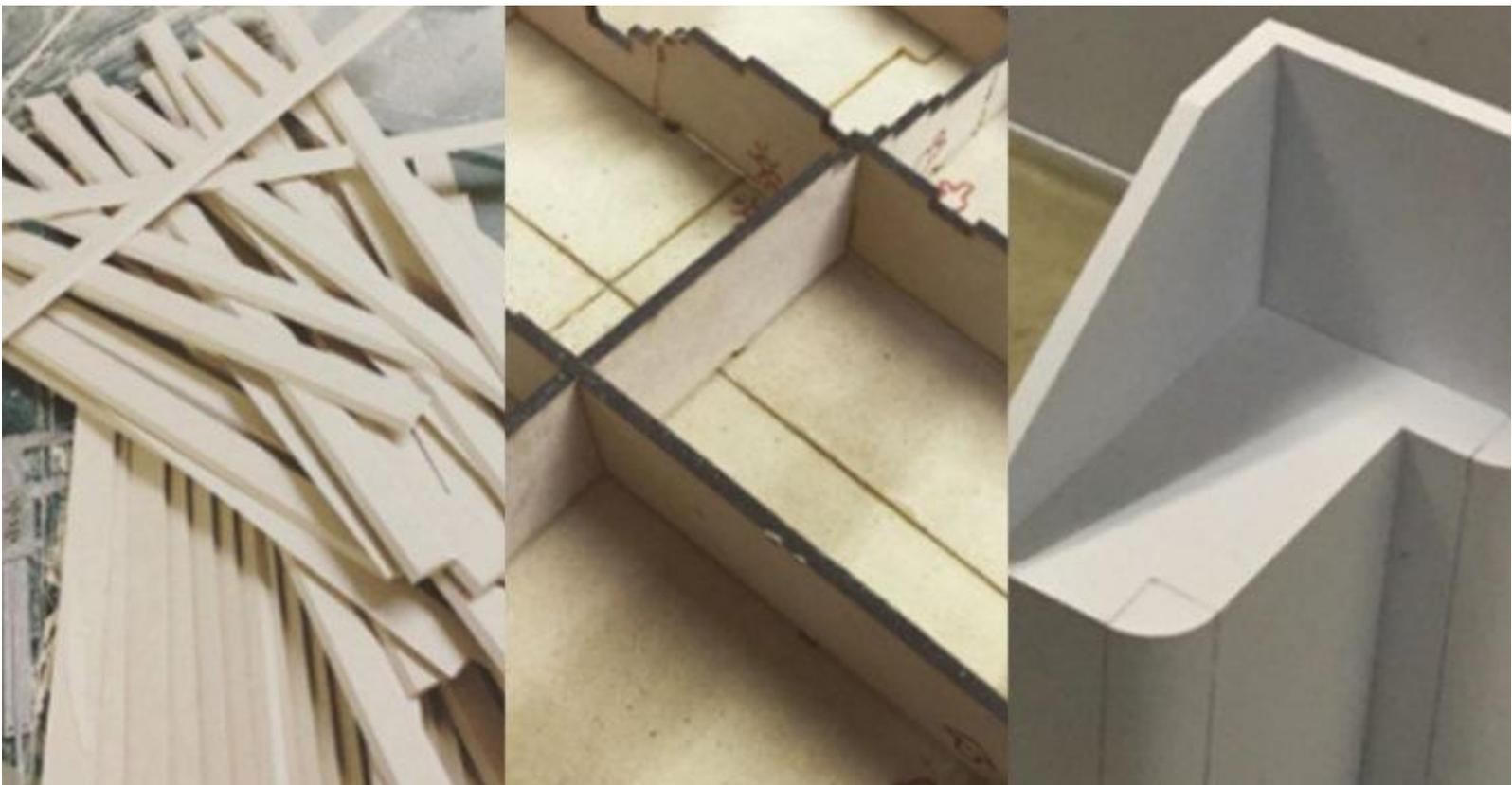


The Increase in Wamokei's Production and Revenue Thanks to 3D Printing



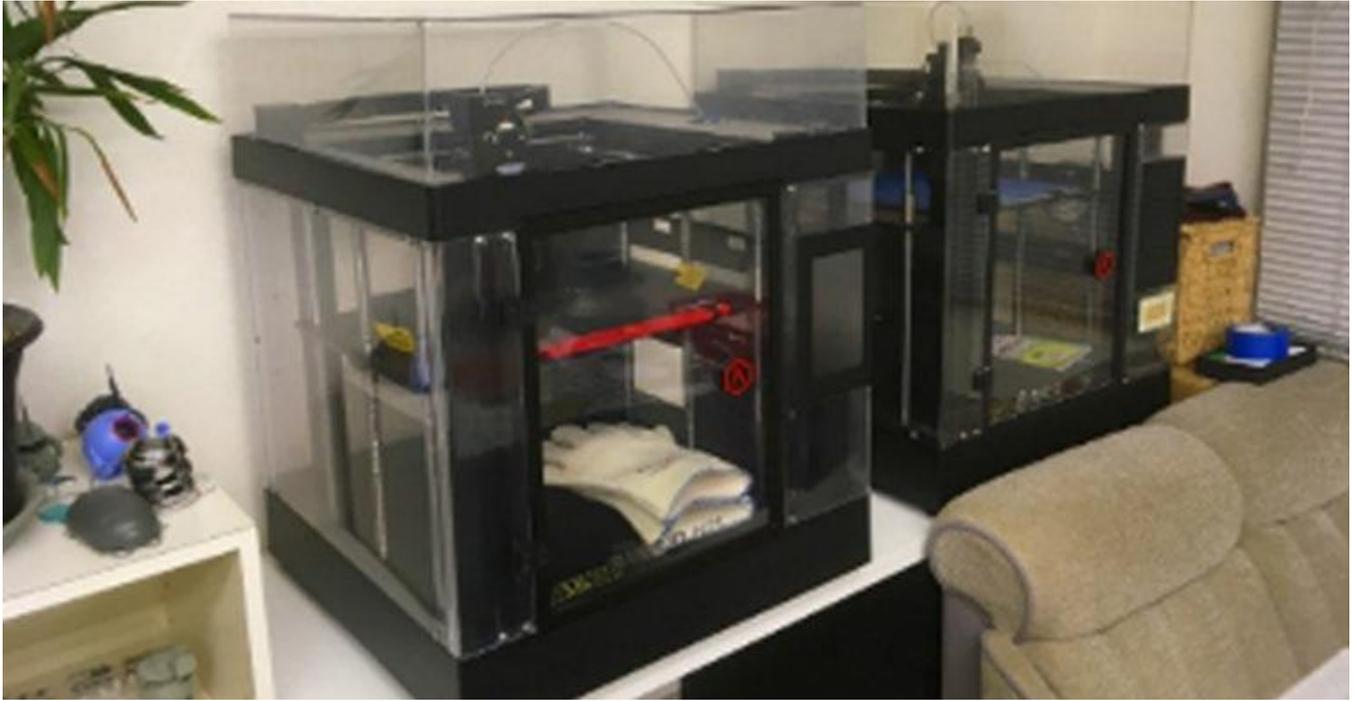
Wamokei is a modeling company with past work in architecture, construction, engineering, and more. Due to their experience with industrial machines and factories, Wamokei has been commissioned by entities from various industries, including healthcare, satellite, automotive, robotics, and food & beverage.



Wamokei's slogan

“Good Response, Smart Output” is the slogan on Wamokei’s [website](#) banner. This slogan is reflective of the change to Wamokei’s production process after it adopted 3D printing and the [Pro2 dual extruder 3D printer](#) from Raise 3D. Wamokei purchased its first Raise3D printer in April 2017. Due to the high-quality 3D printed models produced by the Pro2, Wamokei had an increase in business with clients still expecting high-quality 3D printed models. In regards to production, Wamokei’s first Pro2 dual extruder 3D printer lowered time and cost spend on labor for modeling, while increasing the types of modeling orders they can handle. Overall, this led to an increase in sales from more orders. Therefore in June 2020, Wamokei purchased a second 3D printer from Raise3D.





Wamokei expanded its 3D printer assets

“The adoption of 3D printers made manufacturing with intricate geometry easier and increased our business range. Thus, we can now undertake projects which we were incapable of doing previously. Even though the printing process takes time, its automated process eliminates the need for labor and significantly reduced total lead times.”

-- Mr. Oyama, President of Wamokei

Wamokei used to produce material sheets by CNC milling and layer the individual sheets to form a three-dimensional geometry. This resulted in an obvious step pattern on a vertical surface which required applying putty onto afterwards. Meanwhile, the operator needed to convert 3D files into a 2D drawing for CNC operations. Wamokei felt this process was too complicated to be practical to implement and refused to receive any orders involving this intricate method.



Traditional modeling method of Wamokei

The Pro2 Dual Extruder 3D Printer Increased Wamokei's Production

The Pro2 Dual Extruder 3D printer's build volume increased Wamokei's production, thanks to the Pro2's large build volume. The Pro2 has a maximum build size of 305x305x305 mm, allowing Wamokei to produce a large 3D printed part in a single process. In the past, Wamokei had to divide the large object into smaller parts and then spend numerous hours assembling the different pieces. After incorporating the [Pro2 Dual Extruder 3D printers](#) from Raise3D into its work process, Wamokei was able to efficiently produce larger 3D printed objects automatically.

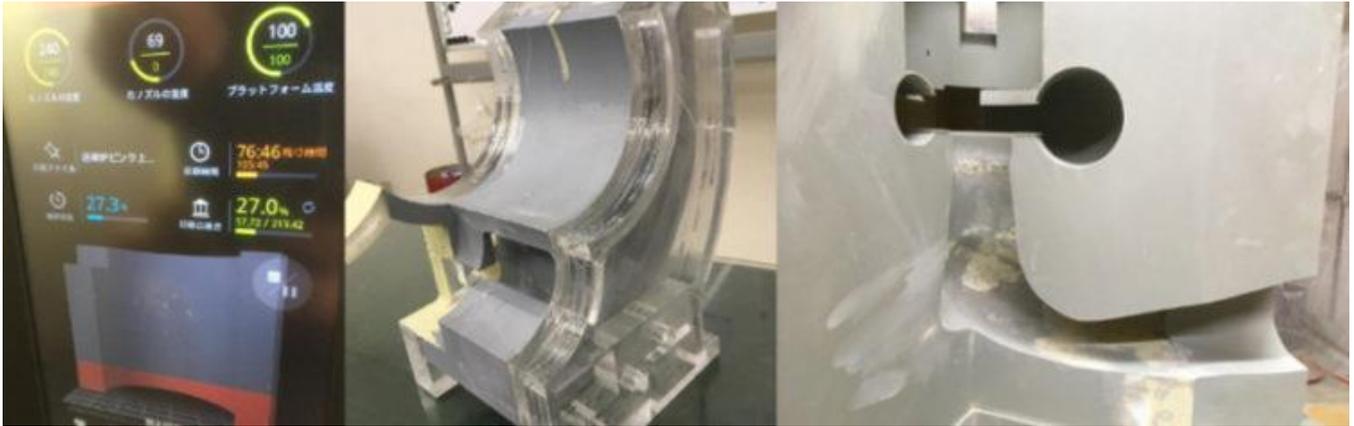


3D printed miniatures from Wamokei (Piano, Factory, Fish Detector, Playground Facility)

Combining Dual Extruder 3D Printers and 3D Slicing Software Made Production More Efficient

In addition to the dual extruder 3D printers, Wamokei utilized [ideaMaker](#), a 3D-slicing software from Raise3D. ideaMaker was able to use the original 3D files, eliminating the process of converting the files into a 2D drawing. This saved Wamokei production time.

By combining the Pro2 and ideaMaker, Wamokei was able to both increase production and, at the same time, make it more efficient. This improvement to their production process enabled Wamokei to accept orders requiring a wider range of modeling.



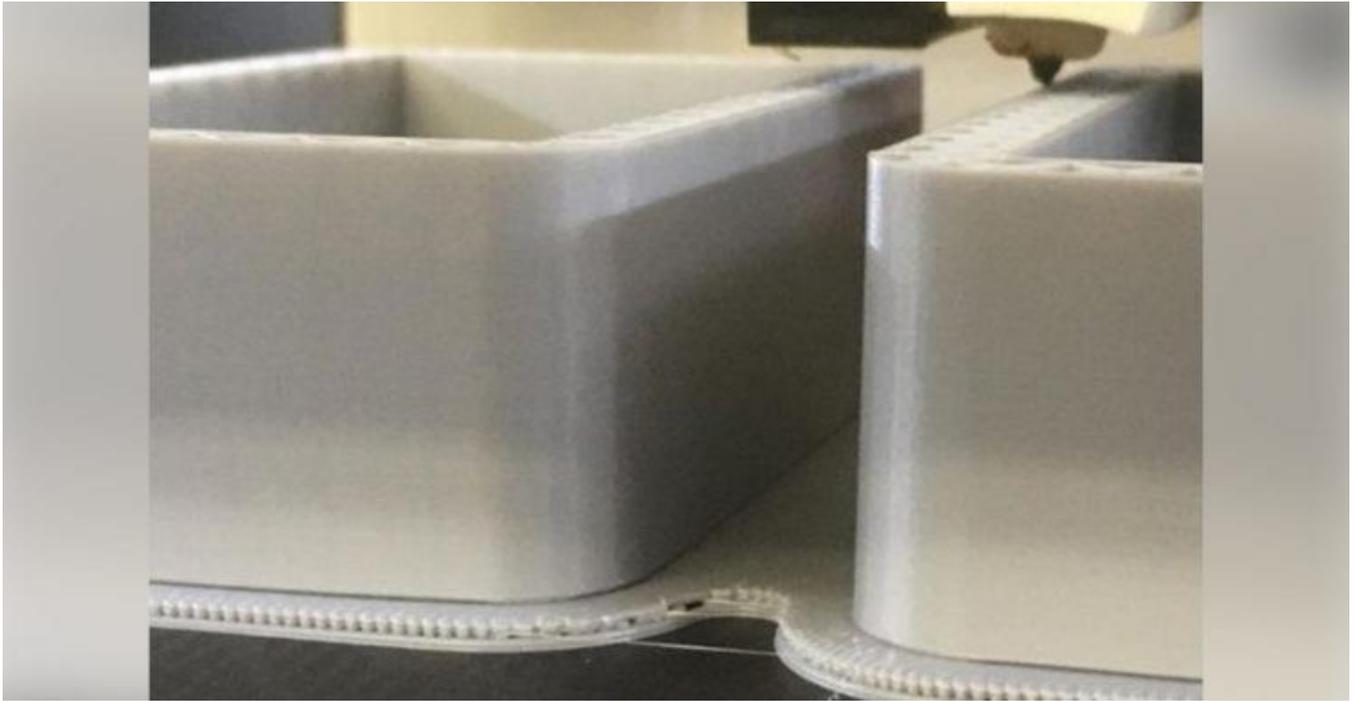
Pro2 creates 3D printed parts (Hydropower Station)

Pro2 Industrial Capabilities Led to High Quality 3D Printed Models

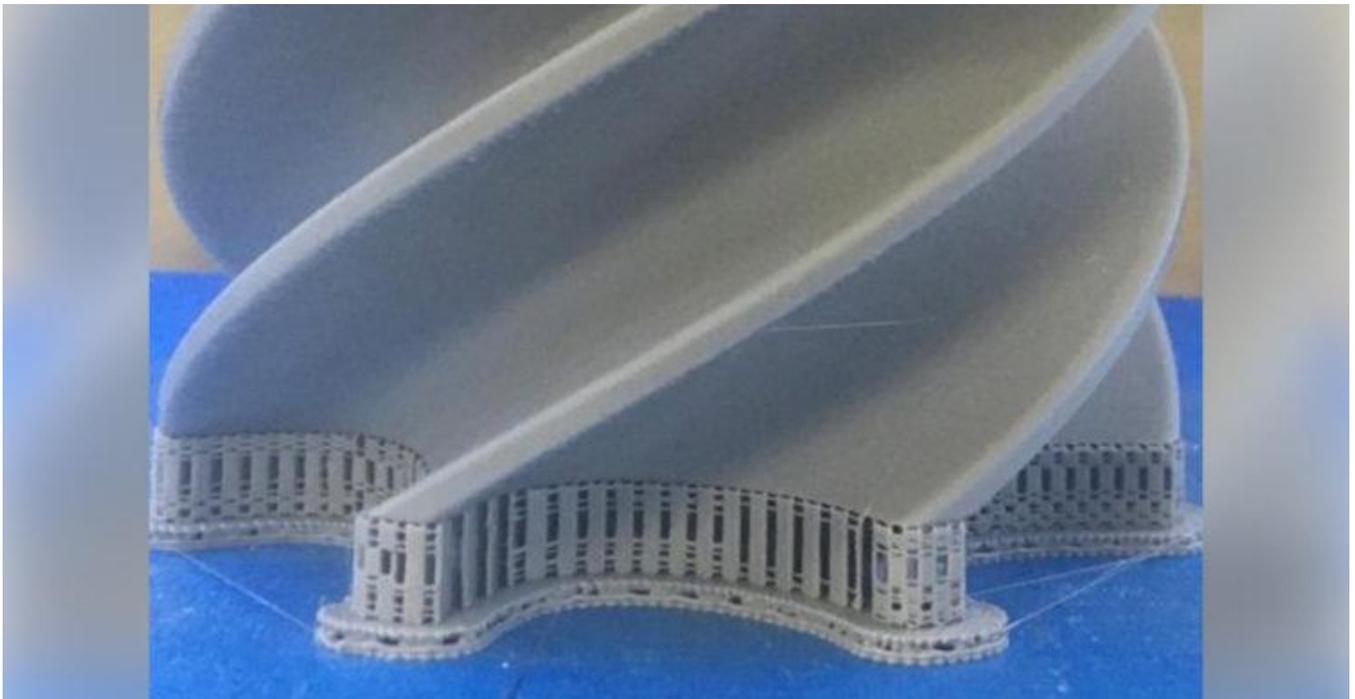
As a model-making company, Wamokei's main objective is extreme quality, embodied as high levels of detail and smoothness, both of which are especially emphasized by the Japanese. Wamokei's model orders cover a wide range of model types, including architecture, equipment, instruments, vehicles, and mechanical structures. This means Wamokei needs to efficiently produce various kinds of structures including large, tiny, thin, flat, curved, twisted, shaped, bugled, and hollowed. The Pro2 Dual Extruder 3D printer can produce these different shapes in a smooth, high-quality, and finely detailed 3D-printed model. Certain characteristics of the [Pro2](#) enable it to create 3D printed models that meet Wamokei's clients' quality expectations.



First, the Pro2 can print at small layer heights for a smoother surface on the final 3D printed object. Wamokei uses a 0.01mm layer height to deliver a smooth surface with minimal post-processing, such as putty or polishing.



Second, as an [industrial 3D printer](#), the Pro2 can reliably print for days. A consistent and reliable 3D printing process is critical for high-quality 3D printed parts. In the case of Wamokei, large-scaled 3D printed models need to have the same smoothness and level of detail throughout the entire surface, which the Pro2 is able to accomplish.



The Pro2's ability to print detail even at a small-scale helps Wamokei maintain high-quality standards. One example is the piano miniature for Fazioli, an Italian piano brand. The length of the mini piano is less than a bullet point pen. Its chair and frame are printed by the Pro2 with only a few millimeters thickness in the thinnest area.



In conclusion, the Raise3D's Pro2 Dual Extruder 3D printer improves production by making it more efficient while lowering costs.

Connect with Raise3D

Do you have a great 3D printing success story and think it would be cool to be featured on www.raise3d.com, we would love to learn more! Write to us at inquiry@raise3d.com

For more information about Raise3D printers and services, browse [our website](#), or [schedule a demo](#) with one of our 3D printing experts.

Prosthetic component in the slicing phase, in ideaMaker