

☑ **Speed** – Traditional model making takes a lot of time. 3D printing accelerates the model making process and increases lab productivity. The materials 3D printers use set faster than conventional materials, so you can create more models in less time. Also, 3D printing allows you to print more than one model at a time, further streamlining the model-making process with predictable results and paving the way for more profit.

■ **High quality** – 3D printing produces superior models, time and again. PolyJet 3D printing technology can achieve layers as thin as 16 microns, providing the intricate detail necessary for dental laboratory work. Instead of unappealing sprue, which can leave behind extraneous materials and can take even more time to remove, Stratasys 3D printers use a water-soluble support material, to create complex features and overhangs and holes, so once the model is printed, a quick rinse removes excess material, revealing a detailed model. Also, because 3D printing is part of the digital workflow, a high level of accuracy is possible, thanks to the precision of digital scanning and the final 3D printed output.

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✓ **Cost reduction** – Because 3D printing is faster and easier to implement, labs realize a reduction in costs, both in terms of labor and materials. Labs can reduce the amount of steps in the model making process, and technicians do not have to spend as much time making models, thus reducing labor costs. Additionally, the cost of materials is greatly reduced, because fewer materials are involved and no tooling is required.

■ Ease of creation – CAD/CAM revolutionized dental lab work by allowing models to be scanned and manipulated in a computer before being milled. 3D printing takes that methodology to its next logical step – creating a model from seemingly nothing. 3D printing further simplifies the process, because the model can be printed directly from CAD data. And if there is a an error or the model must be rebuilt, it's just a matter of adjusting the CAD design and re-printing the model, making iteration faster and less expensive.

Multiple materials − 3D printing used to be limited to printing one material at a time.. That is no longer the case. With select Stratasys 3D printers, models can be printed in multiple colors and with multiple textures in one print. Multi-colored models better represent patient anatomy, helping with accuracy and lab and patient satisfaction. The ability to print multiple materials and incorporate multiple densities into one print, such as rigid and soft materials, allows the models to accurately simulate gum tissue along with teeth.