

This plastics engineering firm is developing tech to lighten spaceships' load

By Malak Saleh

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Oviedo-based Semplastics, a composites engineering and manufacturing firm, won a \$500,000 Space Florida grant to continue the development of a hybrid plastic technology for the aerospace industry.

Semplastics, through its X-MAT division, is working with Haifa, Israel-based Polymertal to devise a lightweight plastic that can be coated with metal. The ultimate vision is to create a composite that not only is lightweight, but also can endure extreme temperatures to serve the aerospace industry, said Semplastics CEO [Bill Easter](#).



Bill Easter/SEMPLASTICS

"Producing components which are more durable, less expensive and can endure high heat and cold are of great interest to the aerospace industry," said [Tony Gannon](#), Space Florida's vice president of research and innovation. Clients in the space industry always are looking for ways to lower the costs of launches by reducing the weight of launch vehicles, satellites and satellite components.

It costs [\\$10,000](#) to put a pound of payload into Earth's orbit, according to NASA. With the space industry becoming more commercialized, the timing of Semplastics' product development will result in high demand, said [Sue Easter](#), director of customer relations at Semplastics and X-MAT.

The Semplastics/Polymertal composite currently is entering phase two of development. By June 2020, the company said it will have a prototype finalized for commercialization. The firm wants to enter both the Florida commercial market as well as Israel. Executives from Polymertal, which specializes in metal plating and coding tech, could not be reached for comment.



Semplastics, through its X-Mat division, has been awarded a Space Florida grant to continue work with Polymertal on high temperature plastics coated with metal. SEMPLASTICS

Semplastics previously won a grant through the Florida-Israel Innovation Partnership program in 2017. Companies always are encouraged to re-apply, Gannon said. There are four to five awardees chosen for this specific program every year and grants typically range from \$200,000 to \$300,000.

For companies interested in foreign partnerships and funding opportunities, the next wave of applications opens up on Sept. 11. Gannon encourages applicants to reach out to him directly or to apply [online](#).

Funding opportunities for small businesses have a trickle-down effect on the Central Florida economy, Gannon said. Capital allows the smaller firms to build up a supply chain to support space giants like Lockheed Martin Corp. (NYSE: LMT), Blue Origin and L3 Harris Technologies Inc. (NYSE: LHX) with much needed goods and services, he said, which also indirectly creates a need for more personnel and spikes a demand in high-paying jobs.