



CASE STUDY
TELECOMMUNICATIONS

Spectra Group 3D Prints Field-Ready End-Use Products with Origin





Due to the critical nature of the industries Spectra serve, providing reliable communications in remote and hostile environments is of paramount importance and means that they need to be constantly innovating and proactively developing products that will resolve issues before problems arise.

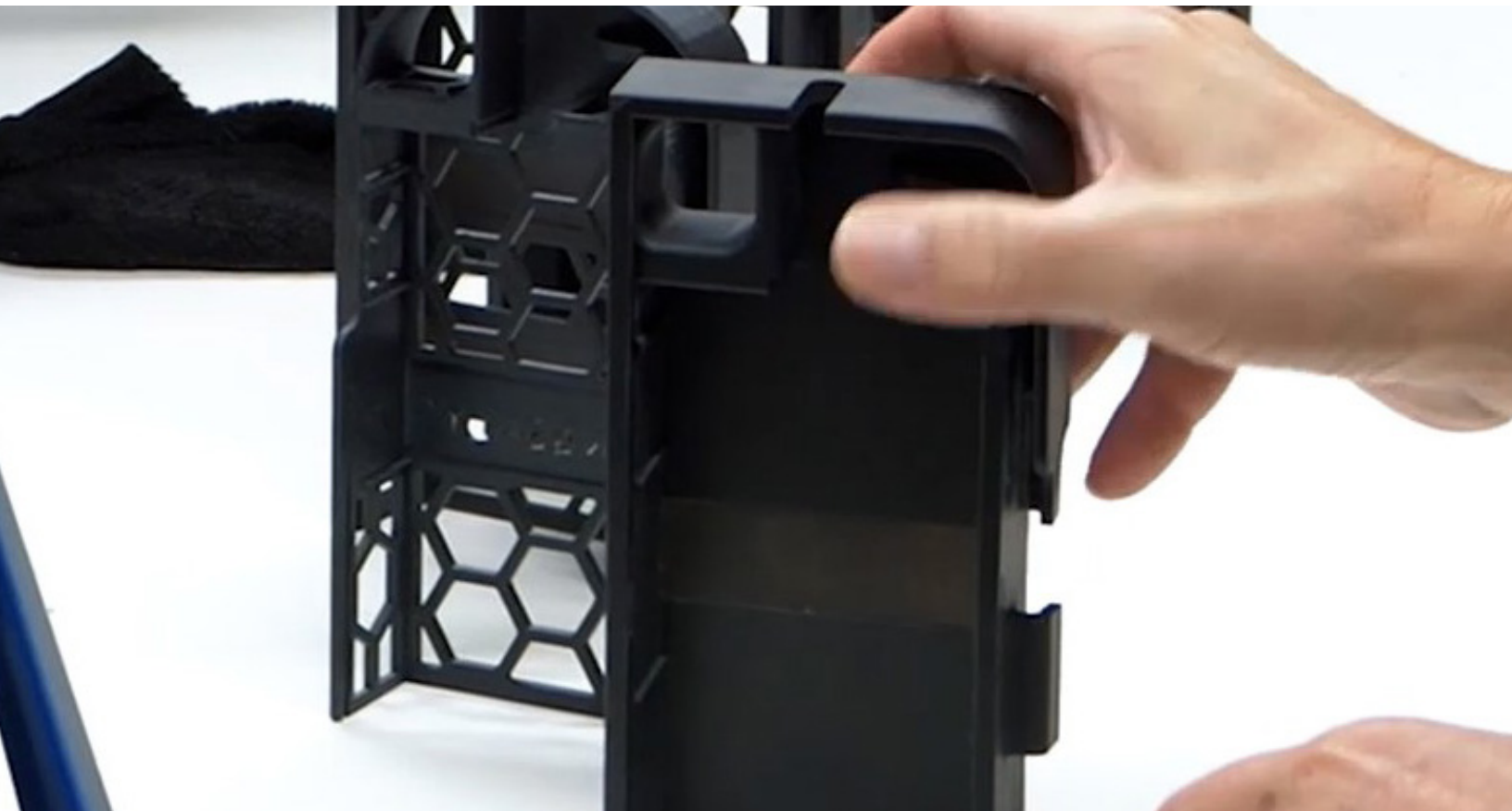
About Spectra Group

Spectra Group is a leading global provider of tactical and strategic mission-critical communication systems and high-grade information security and network capabilities.

The Challenge

Spectra Group approached SYS Systems, a Stratasys UK Platinum partner, to explore the opportunity of additive manufacturing to help reduce their outsourcing and expand their in-house prototyping and manufacturing capabilities. Spectra wanted to not only reduce costs but achieve greater flexibility across their entire product development process and even end-use products.

Spectra Group Head of Research & Development, Simon Perrett, said: "The products we produce haven't just got to look good, they have to perform really well as well. When I came into the company and looked at how much we were outsourcing, one of the things I looked at was cost for things like tooling, but also the flexibility that if we have an idea, how we can change it and how to change it quickly."





The Solution

Spectra Group invested in a Stratasys Origin 3D printer, supplied by SYS Systems, enabling them to achieve mass production of end-use parts with a diverse range of high-performance materials.

This innovative 3D printing solution unlocked significant improvements in Spectra Group's product development process by allowing them to develop, iterate and produce prototypes and end-use products in a much faster timeframe than before.

Powered by the patented P3™ DLP technology, Origin enables companies like Spectra Group to manufacture

high-quality parts without the cost of inject mold tooling, whilst maintaining minimal inventory by printing on-demand with exceptional accuracy, consistency and isotropy.

"Our first project came about just after we had set the printer up," said Simon. "Within a couple of weeks, we were printing the parts off perfectly. At that point, we knew we could do a lot more with the printer's capabilities."



The first time capability is always good, the product is reliable and the products aren't just for R&D or prototyping, we're sending those parts into the field."

Simon Perrett

**Head of Research and Development
at Spectra Group**

The Benefits

Since investing in a Stratasys Origin, Spectra Group have revolutionized their in-house product development processes which has enabled them to increase the manufacturing of field-ready end-use products directly from their Herefordshire site.

Stratasys' Origin printer provides Spectra Group with unparalleled production efficiency for their critical communications systems. Utilizing P3 DLP technology, the 3D printer delivers high-quality parts with industry-leading accuracy, consistency, and detail.

The fast print times, affordable single-component resins, minimal post-processing, low waste, and high yields enables Spectra Group to now launch products faster than ever before, whilst also allowing them to adapt to market demands with greater flexibility.

Simon said: "Once we're happy with a product, we don't have to go and get any injection mold tooling or anything. We can literally produce a part, with a little bit of post-processing, insert all the parts we need to and then ship it out. That was the revolution we were after and now we have achieved it."



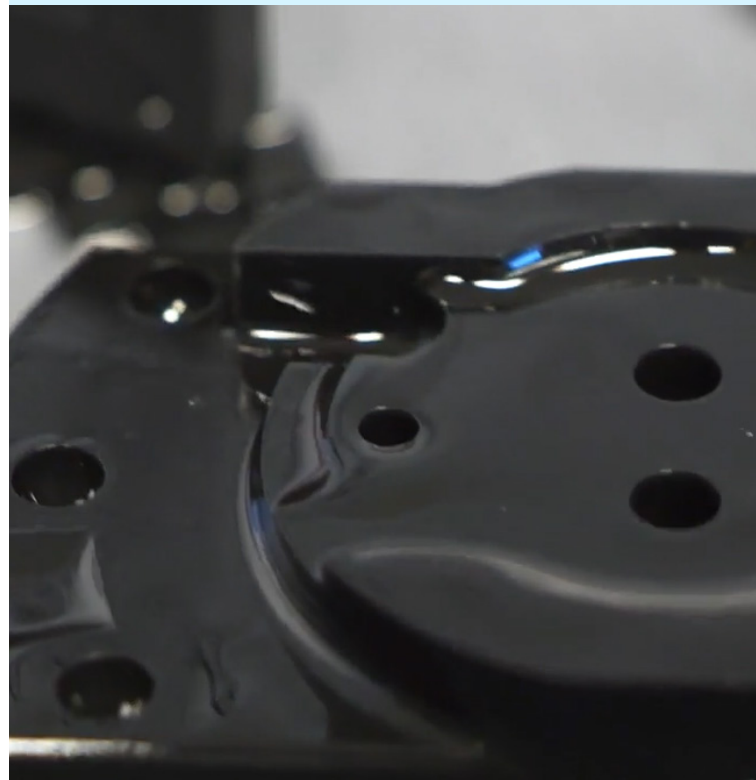
Simon Perrett, Head of Research and Development at Spectra Group

Courtesy of SYS Systems, Stratasys UK Platinum partner



We constantly want to diversify and change things, and the Origin printer gives us that capability. We couldn't do without this printer now."

Simon Perrett
Head of Research and Development at Spectra Group



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