



Giochi Preziosi Uses the Stratasys PolyJet technology to 3D Print Innovative Toy Designs

“

We increased the performance of internal design reviews, reaching a much-improved result for the Gormiti brand.”

Mr. Fabrizio Cofini, R&D project manager
Giochi Preziosi S.p.A



Making Imagination Reality

Giochi Preziosi is an established Italian manufacturer of its own toy brands as well as an exclusive distributor and licensor of major international brands including Disney. Its R&D team has built a strong reputation for its creative design ideas and the ability to innovate in a competitive market.

To push the boundaries of innovation for every toy design, the R&D team leverages several technologies, with additive manufacturing at the forefront. Giochi Preziosi approached Stratasys local partner, Energy Group, to purchase a Stratasys® J Series, a full-color, multimaterial 3D printer. With the ability to create hyperrealistic prototypes and print over 500,000 color combinations, the new printer made an immediate impression.

Used predominantly for advanced prototyping, the J Series helps Giochi Preziosi evaluate new toy ideas using true-to-life 3D models, and enables the team to create development samples for internal approval. The R&D team estimates internal approval time has been cut by up to 30%.

To achieve this, the team designs each part via CAD and uses a render software to deliver the desired aesthetic style digitally. Once the designs are validated, the final files are uploaded to GrabCAD Print™, allowing the team to best position each part for printing to ensure optimal efficiency during production.

“

The 3D printer has opened new doors to the way we can visualize and design new toys.”

Mr. Fabrizio Cofini, R&D project manager

Giochi Preziosi S.p.A



The J Series' intricate detail, vivid colors and advanced materials have significantly increased the quality and reduced lead time of the design process.

“We increased the performance of internal design reviews, reaching a much-improved result for the Gormiti brand,” said Fabrizio Cofini, R&D project manager. “The big advantage of the J Series here is the significantly reduced lead time in developing these prototypes compared to previous methods, but even more importantly, the quality of the product itself. The increased level of detail, vividness of color, as well as the diverse range of materials, allow us to improve the design review, pushing all products to each stage of the approvals process at a higher level of quality.”

“At Giochi Preziosi, we are always looking at ways to innovate to ensure we meet the demands of the highly competitive toy industry,” said Cofini. “The toy industry is constantly in flux as trends and interests change, and the particular concepts and design iterations we have to create need to reflect this. We have been leveraging Stratasys additive manufacturing to meet these needs and accelerate our approvals process and time-to-market. With the addition of the J Series and its unique capabilities, we have been able to expand our offering even further and overhaul less

reliable methods of producing toy prototypes and designs.”

Prior to using the J Series 3D Printer, the R&D team had trouble accurately repeating the level of color and detail for every individual model. This is particularly relevant when producing prototypes of action figures and dolls. The team would have to hand paint every single model with the required color scheme and detail because previously owned 3D printers could only produce models in a grey base color and with a longer post-processing step. The entire process was time-consuming and costly, and offered no flexibility with the inevitable design iterations that would typically arise.

“With this comes the inevitability of human-error and the inability to recreate detail and color, one hundred percent of the time. Using the J Series, the team is able to create attention-grabbing models using vivid colors and with a previously unattainable accuracy and repeatability. The vibrant models produced using Stratasys 3D printing perfectly represent what we would like the final toys to look like,” he added.



The full color, multimaterial Stratasys 3D printers.



At Giochi Preziosi, we are always looking at ways to innovate to ensure we meet the demands of the highly competitive toy industry.”

Mr. Fabrizio Cofini, R&D project manager

Giochi Preziosi S.p.A

Vision for the Future

Giochi Preziosi is already utilizing models produced using the J Series in order to enhance its stands at major international trade shows and toy fairs. Cofini explained, “The models we create now using the 3D printer are so close to the final product that we can display them at trade shows as previews of next season’s highlights. With the latest GrabCAD Print software update, Pantone validation, we see big potential for entering a much easier industrial color communication process from prototype to final production.”

“For us, the Stratasys 3D printer has opened our eyes to the possibilities of ultra-realistic prototyping and the opportunities are endless. Importantly, its capabilities grant our designers limitless freedom of imagination knowing that we now have the means to bring their ideas to life.”

Cofini concluded: “Working closely together with Energy Group and Stratasys, we have been able to learn how to fully optimize the use of our 3D printers for a wide range of design applications. We’ve also been able to identify and validate new applications in which additive manufacturing can replace traditional methods. This has given us the confidence to explore new creative ideas and innovate our design process without constraint.”

Stratasys Headquarters

7665 Commerce Way,
Eden Prairie, MN 55344
+1 800 801 6491 (US Toll Free)
+1 952 937-3000 (Intl)
+1 952 937-0070 (Fax)

stratasys.com

ISO 9001:2015 Certified

1 Holtzman St., Science Park,
PO Box 2496
Rehovot 76124, Israel
+972 74 745 4000
+972 74 745 5000 (Fax)

© 2020 Stratasys. All rights reserved. Stratasys and the Stratasys Signet logo are registered trademarks of Stratasys Inc. GrabCAD Print is a trademark of Stratasys, Inc. All other trademarks are the property of their respective owners, and Stratasys assumes no responsibility with regard to the selection, performance, or use of these non-Stratasys products. Product specifications subject to change without notice.
CS_PJ_CN_GiochiPreziosi_0720a

