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Seatools Exhibits Quality with Appearance Models from 3D Systems On Demand Manufacturing

3D Systems On Demand Manufacturing delivers durable and high quality detail in 3D printed appearance model display



No matter how many leagues under the sea your underwater problem is, Seatools exists to design, build and test custom equipment to solve subsea challenges. Based in the Netherlands, Seatools is a global provider of bespoke subsea solutions for companies ranging from offshore oil and gas to offshore renewables and aquaculture development. In light of its expansive and diverse scope, Seatools faced a distinct challenge in quickly and effectively communicating its range of custom offerings at the highly attended Offshore Technology Conference (OTC) in Houston, TX.

As the largest event in the world for the oil and gas industry, OTC attracts over 2,300 exhibitors a year and counting. Therefore Seatools knew it needed to make a splash with a creative trade show display to ensure a positive return on investment and do everything in its power to attract attention and engage new business.

With the help of 3D Systems' On Demand Manufacturing services, Seatools devised a unique subsea landscape to display seven distinct 3D printed appearance models of its various custom underwater technologies. Offering expansive prototyping and manufacturing services to support the entire product development lifecycle, 3D Systems' On Demand Manufacturing experts deliver quick, high quality parts ranging from fast turn and advanced prototypes to appearance models and low volume production.

CHALLENGE:

Quickly and effectively communicate diverse range of high quality equipment offerings with a creative trade show display.

SOLUTION:

3D Systems' On Demand Manufacturing and craftsmanship for durable, highly detailed SLS 3D printed appearance models.

RESULTS:

- Seven distinct, high quality 3D printed appearance models
- Durable nylon material survives transatlantic shipping and shows high detail
- Service quality of 3D Systems On Demand Manufacturing unburdens client
- Effective and eye-catching models draw a crowd, start conversations and help build new business relationships

High quality appearance models

As Seatools explored the various options available for achieving scale equipment models, the company first defined the outcome it had in mind. When all was said and done, Seatools needed high quality, highly detailed models that would reflect company standards and withstand transatlantic shipping.

"It was very important to me that the models arrive in Houston in one piece," said Johan Sol, a member of Seatools' supervisory board and marketing and business development office. "We are a company that sells high-end equipment with high quality, so if we were to show broken models on the show floor, it would not be in line with the quality we sell to our customers." With seven distinct models identified for display and the show deadline looming, speed of production was also a factor.

Due to the extensive time and costs involved in hand built scale models, conventional methodologies were soon ruled out in favor of 3D printing. It was then only a matter of selecting a technology, and Seatools' careful research pointed to selective laser sintering (SLS).

"The 3D models had to be transported by freight, and we knew from other scale equipment models in the past that they endure a lot of shock loads," Sol said. After a dialogue with 3D Systems' On Demand Manufacturing experts in the Netherlands, Seatools confidently opted for high strength nylon 3D prints produced on 3D Systems' sPro[™] 230 SLS machines in DuraForm[®] PA. Once 3D printed, the scale models were finished, painted and assembled by 3D Systems' manufacturing experts and delivered precisely to specification.

Robust scale models on demand

Seatools' choice of SLS technology proved advantageous both in terms of durability and visual appeal. Favored across industries for the material properties it can offer, SLS is widely used for functional applications, such as snap fits and living hinges, which came in handy for this project. To help Seatools achieve 3D appearance models that matched the company's quality standards, 3D Systems' on demand team engineered separate components for each equipment model to paint and piece together into an accurate final assembly.

According to Sol, the results were striking and effective. The diversified scale equipment models survived their journey from the Netherlands to Houston and represented the full sized machinery accurately in appearance and innovation. Due to the material properties of SLS printing and the ability to achieve thin walls with good strength, Seatools was ultimately able to include more high quality details than alternate 3D printing technologies could have provided. In addition to allowing trade show visitors to grasp the diversity of Seatools' offerings, the models reflected the level of care, focus and quality Seatools' customers can expect when working with the company.









The 3D models far outperformed their original task of helping Seatools avoid getting lost in the trade show shuffle, and played an instrumental role in the company's trade show display. Based on Sol's experience he says there are only a few seconds to catch people's attention in a trade show setting. The models not only helped Seatools draw a crowd to its booth, but they also enabled the Seatools sales team to make a more effective and interactive sales pitch. "Our team could use the subsea world to reference the various models and tell a story about the company while showing the diverse capabilities of Seatools," he says.

Expert craftsmanship and winning customer service

From beginning to end, the customer-focused attention and craftsmanship of 3D Systems' On Demand Manufacturing experts was central to the timeliness and quality of the final products delivered. Like Seatools, 3D Systems places a priority on understanding and answering the needs of its clients. Throughout CAD file optimization, 3D printing, painting and assembly, Seatools could rely on 3D Systems for technical mastery, multidisciplinary talent, honest comparisons and collaborative support. The high service level 3D Systems provided unburdened Seatools from all concerns related to scale model production, and allowed the undersea solutions company to focus on its core preparatory efforts.

New depths of innovation

As a leader in its field, Seatools constantly innovates to solve unique problems. The company treats trade shows no differently and took an insightful approach to sharing the complexity of the work it does for its various global clients. Not only was Seatools successful in clearly and creatively communicating the work it is capable of doing, but the 3D printed subsea world it presented opened the door for inquiring companies to see and understand what Seatools is all about.

"The subsea landscape was really an eye-catcher," says Sol. "It drew a crowd and helped introduce us to new companies to start building new relationships."

For help with your next trade show display or for more information on 3D Systems' complete range of product lifecycle support services, contact our On Demand Manufacturing experts.

Whether you need fast turn 3D printed parts, advanced prototyping with assembly and finishing services or low volume manufacturing including CNC, urethane casting and injection tooling, 3D Systems' On Demand Manufacturing services can help advance your project, timeline and goals.



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