

# Ogle's timely 3D printing capabilities produce accurate marine turbine model

## Case Study

The precision and durability of the SLS 3D printing process in the capable hands of Ogle Models was successfully demonstrated in the production of a complex marine turbine model for OpenHydro.

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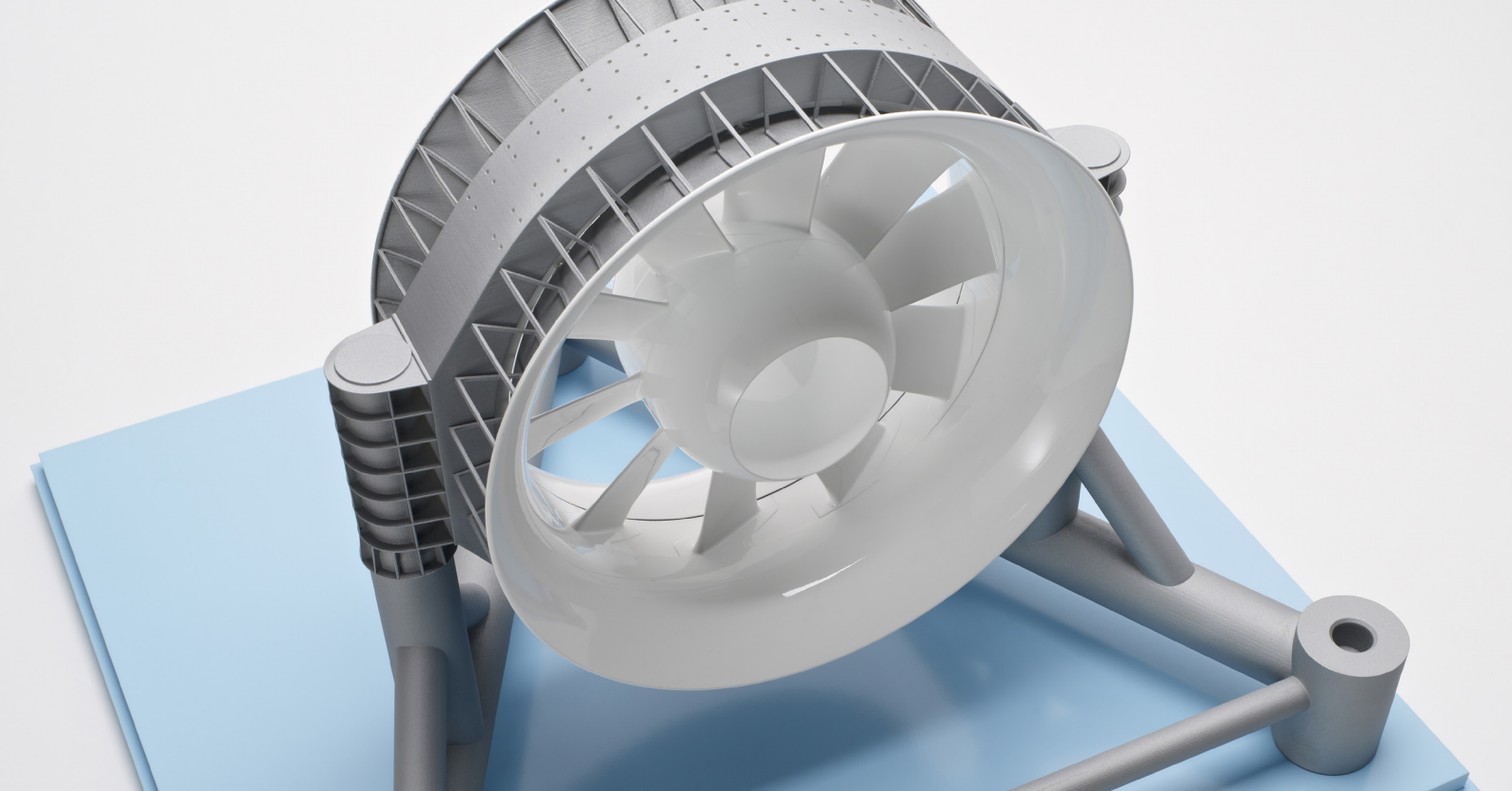
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Renewable and sustainable energy production is the panacea of environmental groups striving to highlight the serious damage that traditional energy production inflicts on the world.

Finding a 'green' energy solution is a primary goal of many governments and energy companies that are working towards meeting the global targets for reducing carbon emissions, whilst also avoiding the controversy of nuclear energy and the unsightly blots on the landscape resulting from wind turbines.

One company that is fully dedicated to renewable energy is OpenHydro. Based in Ireland, OpenHydro is a technology organisation that designs and manufactures marine turbines to generate renewable energy from tidal streams. The company's vision is to deploy farms of tidal turbines under the world's oceans - silently, invisibly and predictably generating electricity at no cost to the environment. OpenHydro's technology enables the ocean's immense energy to be harnessed for the benefit of all extracting energy from the world's oceans in an economically viable and environmentally sensitive manner.





The marine turbine technology developed by the company is called Open-Centre and with more than a decade of experience in developing and testing it in marine conditions, it is designed to be deployed directly on the seabed. Installations will be silent and invisible from the surface and located at depths that present no navigational hazard.

When OpenHydro wanted a complete and accurate replica scale model of one of the Open-Centre turbines, the company knew that there would be significant challenges in producing such a complex product. Alan Buggy, Mechanical Design Engineer at OpenHydro, was tasked with finding a supplier for producing the model, and after following up on a recommendation from a local contact he was left with no doubt that Ogle Models + Prototypes was the perfect fit. As Alan noted.

“Obviously I priced up a number of suppliers for this project but Ogle came in the cheapest and the most highly recommended. This is very unusual but it was also very reassuring”.

Ogle received the initial brief from OpenHydro to produce a 1:43 scale static block model, including specific colour and visual effects. According to Dean Lear, RP Project Coordinator at Ogle:

“The lead time for this model project was 12 working days, and initially we had to collaborate closely with OpenHydro, which involved numerous revisions to the brief to achieve the different levels of finish and detailing that they required”.

**FOR MORE INFORMATION PLEASE CONTACT:**

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