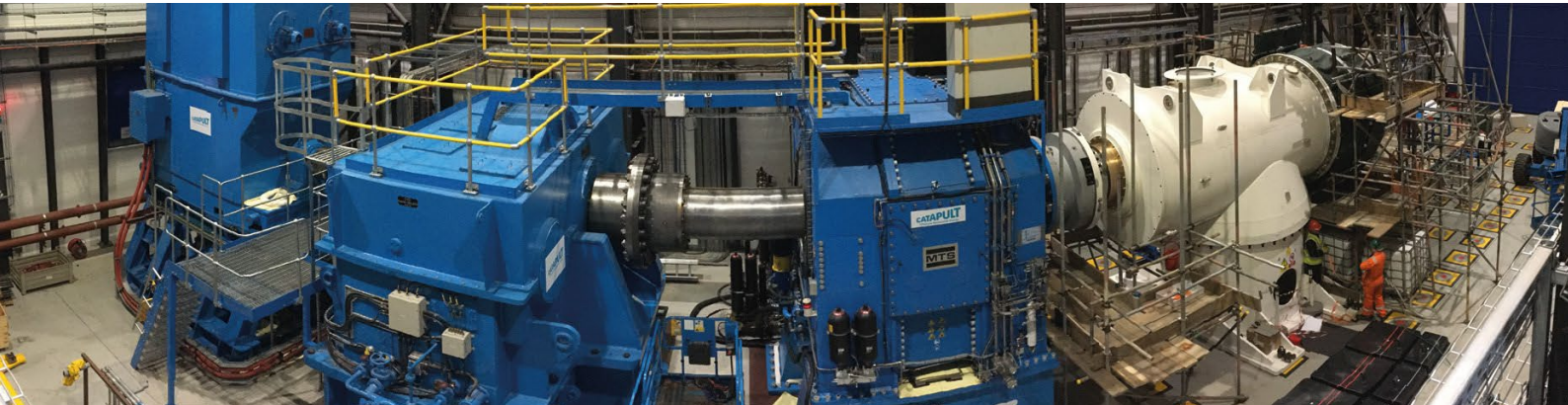


ATLANTIS AR1500 TIDAL TURBINE TEST

CASE STUDY



ADVANCED DRIVETRAIN TESTING FOR THE INDUSTRY'S MOST ADVANCED TIDAL TURBINE

Atlantis Resources, world-leaders in tidal power generation, chose ORE Catapult to prove and de-risk its next-generation AR1500 turbine. Ahead of its deployment at Meygen, the world's largest planned tidal stream project, in the Pentland Firth, the turbine underwent a rigorous representative testing programme.

The tides in the Firth, which connect the North Sea and the Atlantic ocean, are among the fastest in the world. Millions of tonnes of water surge through the area every day, accelerated by a natural channel.

At our testing centre in Blyth, our state-of-the-art 3MW power train test facility simulated the extreme dynamic loading conditions that the AR1500 will experience in the water. By carrying out controlled tests on the turbine in conditions as close as possible to the tidal environment, we gave Atlantis the confidence to move forward with the deployment phase. It also helped Atlantis reduce the length of the offshore commissioning phase: a particularly expensive period of the project.

Testing was completed within the 21-day schedule, and the AR1500 was shipped north for installation in 2017.

[View a video of the AR1500 in our 3MW test facility >>](#)

“ This is a very important project: it's cutting-edge technology, and it's strategically important to the UK...the ORE Catapult team have been invaluable in supporting us and helping us to achieve our objectives ”

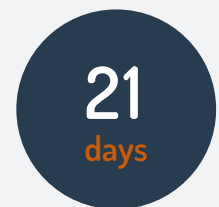
Dave Rigg, Atlantis Resources' Head of Engineering Services



The AR1500 was tested prior to its installation at Meygen, the UK's first electricity-producing tidal array.



We provided investor confidence by supporting the validation of the control system and mechanical hardware.



Testing was delivered by ORE Catapult on schedule and within the allocated 21 day period.