

VSD to Enhance Test Bay Capabilities

INDUSTRY
Oil & Gas Industry

LOCATION
UK

PROJECT
Hayward Tyler Ltd - Test Bay for Motors & Generators

THE CHALLENGE

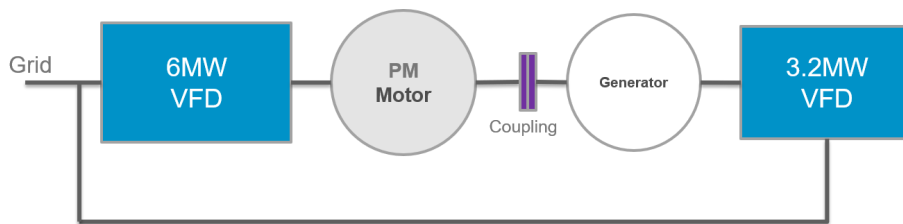
Severn Drives & Energy (SDE) were tasked to supply a Variable Speed Drive (VSD) to Hayward Tyler as an integral part of their in-house test bay, which has been designed to test motors up to 6,000RPM.

The 6Mega Watt (MW) VSD is designed to start a permanent magnet motor from stationary, without a motor shaft encoder and have the capability of dealing with extreme motor conditions such as an over-speed test of 6,600RPM for 2 minutes.

The challenge for SDE was to satisfy the full specifications and capabilities of the VSD required for the test bay in the limited lead time available, to ensure that the testing could be completed to the agreed customer schedule.

Required Capabilities

- ✓ Start-up from stationary without an encoder
- ✓ Ability to tune the operating software for Phase Advance (field Weakening)
- ✓ Full speed of 6,000RPM
- ✓ Over-speed of 6,600RPM (for 2 minutes)



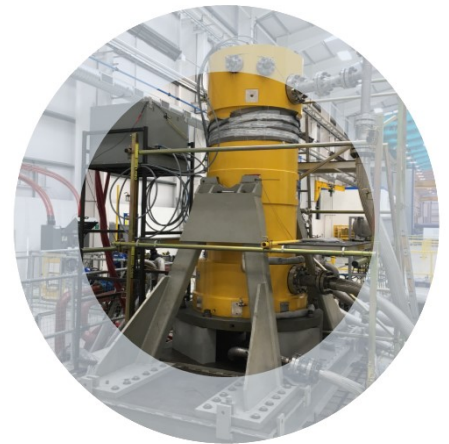
THE SOLUTION

SDE had the ability to fully satisfy all of the required capabilities with the VSD supplied. The VSD was installed within the timescales and when fully commissioned it was tested prior to carrying out customer testing.

THE OUTCOME

The outcome was an extremely robust and flexible test bay that ensured both existing and new customer testing can be completed efficiently and with a high degree of flexibility.

The VSD has enable Hayward Tyler the testing capabilities to carry out Locked Rotor testing and Full Load testing for their customers motors and generators up to 6MW 6,000RPM. An added advantage is that whilst carrying out the Full Load test (back to Back), the energy will be feedback to the grid through the 4-quadrant regenerative VSD.



For more information on Severn Drives & Energy, email sales@severnde.co.uk or visit www.severnde.co.uk