

# A new beginning, new challenges and new solutions!

By Gordon McCombie, group business development manager

*“Enhanced resources allow Aberdeen Hydraulics to carry out larger scale and more complex projects, delivering cost effective engineering solutions”*



Electric driven Hydraulic power unit designed for gas turbine project

### Integrated solutions

Since its acquisition in 2007, Aberdeen Hydraulics has built on the synergies derived from its sister companies Sparrows Offshore Services and Baricon Systems, to develop into a leading integrated hydraulic engineering services company.

As a result of its restructuring and new HSEQ programme designed to improve efficiency and meet the quality expectations of its customers, sales rose by 40% and the workforce has increased by 35%. Enhanced resources allow Aberdeen Hydraulics to carry out larger scale and more complex projects, delivering cost effective engineering solutions.

### Powering larger projects

A recent contract award called for the design, build, FAT test and installation of a hydraulic start system on a Pratt & Whitney FT 4 dual shaft gas turbine GG4A generator/gear box set. This was required to replace the original pneumatic system which had a long history of technical problems. The challenge was to come up with a design for a completely new hydraulic system to replace the problematic pneumatic unit.

The new turbine start system solution comprised of an electrically driven hydraulic power

unit complete with electrical main power, distribution and protection enclosure, starter contactor enclosure, HPU internal controls enclosure a control marshalling box and a hydraulic starter assembly consisting of hydraulic motor and sprag clutch.



Steve Ord, COO Aberdeen Hydraulics

The whole system was designed, manufactured, built and tested in line with the relevant design codes and standards supplied by the client and was mounted on a DNV approved frame.

In order to comply with the classification area that the unit will operate in, all electrical items are ATEX certified for use in a Zone 2 hazardous area. The new unit is an innovative design solution to a problem which is known to occur on other turbines and can potentially be transferred across other brands.

In the case of the turbines operated by their client, Aberdeen Hydraulics have eliminated a poor performing and unreliable system by introducing proven reliable technology to the start system delivering much greater reliability & availability where it did not previously exist, thus enhancing production within the field.

### Fuelling further growth

Building on Aberdeen Hydraulics recent successes, the group has invested over a million pounds in a new purpose-built facility in Bridge of Don, Aberdeen, with a state of the art workshop and test bed. The new bespoke hydraulics multi-train test bed has been designed by Aberdeen Hydraulics engineers to enable several hydraulic units to be tested simultaneously, enhancing the capacity of the workshop and the ability to provide customers with sharper lead times. With increased demand for specialist training programs underwritten by the NFPC (National Fluid Power Centre), an additional training classroom will also feature in the new facility, allowing more courses to be delivered.

Bosch Rexroth wishing to take advantage of the new set up and spare parts desk, has recently appointed Aberdeen Hydraulics as its official sales partner for its products.

The facility which will become operational in August 2009 will enable Aberdeen Hydraulics to consolidate all of its resources under the one roof from engineering, design and training to its spare parts and workshop facility. The clients will clearly see the benefit of a seamless cost effective service delivery. ■

For further information contact:  
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quoting reference AH081432



## New Bridge of Don Facility Opening Soon on Denmore Road

**Our new purpose built facility allows us to deliver a wider range of projects with faster lead times and more cost effective solutions**

- Purpose built test bed with multi-train system to accommodate multiple testing
- All hydraulics services under one roof for cost effective service delivery
- New classroom to deliver more hydraulics training courses
- Supply of Bosch Rexroth spare parts and components

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