



Technical excellence: delivered

# Case Study

Alderley Middle East: locally designed and delivered hydraulic packages



## Introduction

Alderley Middle East recently designed and manufactured a series of Wellhead Control Panels (WHCPs) and Accumulator modules for integration as part of multiple Gas Modular Wellsite Skid packages for a key client in Saudi Arabia.



### The Challenge

Locally design and deliver high-quality, highperformance WHCPs to meet the end user's exacting requirements - and deliver at the right price.

The WHCPs perform a safety critical function at their production wellsite, and therefore are a key component of the Modular Wellsite Skids.

The system is designed to monitor, control and, when required, shutdown various valves to ensure safe operation for multi-well applications.

The WHCPs form part of a safety instrumented function (SIF) loop for the valve arrangement or high-integrity pressure protection system (HIPPS).

#### The Solution

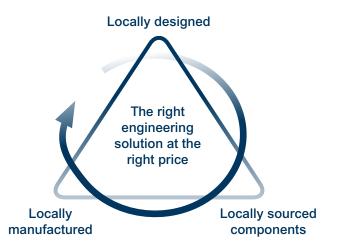
Using our in-house expertise, our local hydraulic engineers designed and manufactured the WHCP combined with an accumulator skid solution to optimise fit, form and function.

Housed within the WHCP are hydraulic reservoirs, filters, motor pump assemblies, regulators, SIL 3 capable transmitters and emergency shutdown valves (1 out of 2 voting: 1002). This provides stable and clean hydraulic fluid via 5 off outputs for the field valves at pressures ranging from 10 barg to 345 barg.

The WHCP is complete with a fusible loop circuit, back-up hand pump, hydraulic emergency shutdown and process shutdown, and local / remote manual override functions.

And as with all our solutions, the package was designed and tailored to suit our client's individual project specifications, and always incorporating safety, environmental and statutory requirements.





## The Results

Designed and manufactured locally, the panels are fully compliant with the end user's rigorous standards, are competitively priced and, as always, delivered with the high-quality associated with Alderley.

For this package, our client was extremely pleased with the SIL 3 capable WHCP, housed in a NEMA 4X certified enclosure.

And as with many of our solutions, our WHCPs can be supplied as a stand-alone solution or integrated as part of wider solution, for example, our Gas Modular Wellsite Skids.

## Contact <u>sales@alderley.com</u> to speak with our local hydraulics experts