



burkert
FLUID CONTROL SYSTEMS

Customer Testimonial – Castrol

Burkert's Integrated Globe Valve & Positioner Combination Provides Perfect Coolant Control on Castrol Engine Test Rig

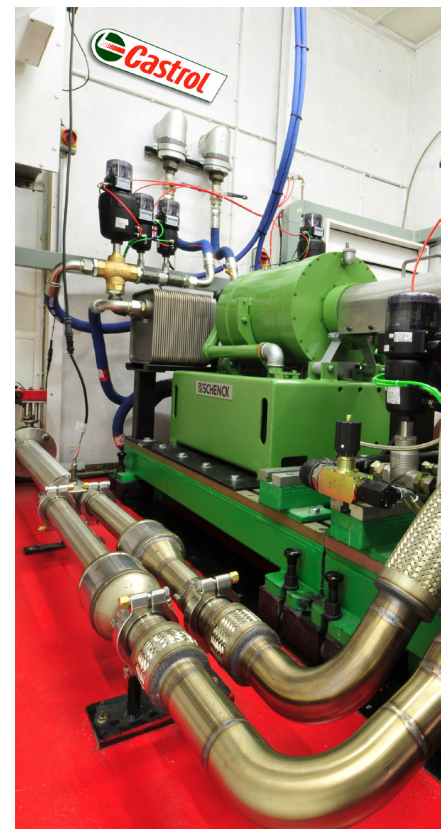
The flexible, precise control provided by Burkert's 2712 stainless steel globe valve and integrated 8630 Top Control positioner is delivering the ideal control solution on an engine coolant control system, part of a new engine test rig at BP Castrol's Technology Centre in Berkshire. Representing a considerable R&D undertaking, the rig has been designed to aid the development of premium specification engine oil for a high performance engine developed by a leading German manufacturer.

A household name for over 100-years, Castrol, part of Lubricants UK, continues to be the world leader in providing lubrication solutions for every application. The company carries out its own research and development in laboratories around the world, co-ordinated from its principal Technology Centre located at Pangbourne in the UK.

One of the recent projects that the Technology Centre has been tasked with is producing a new automotive test rig, the primary function of which is the development of a new high performance oil for an award winning, turbocharged engine. A special engine demands a special oil, and this was what Castrol set out to produce with the new rig.

Critical to the development process on the new rig is the engine coolant control system; it is essential to providing stable control to aid data logging. However, this proved to be an initial problem area for the Castrol engineers developing the rig. The original process valves employed were not producing the highly accurate increments required during testing, resulting in spurious data being sent to the rig's remote data logging system.

In an effort to resolve the problem, Burkert UK was called in. Following an evaluation of the system an integrated solution based upon Burkert's highly flexible 2712 system, was recommended.

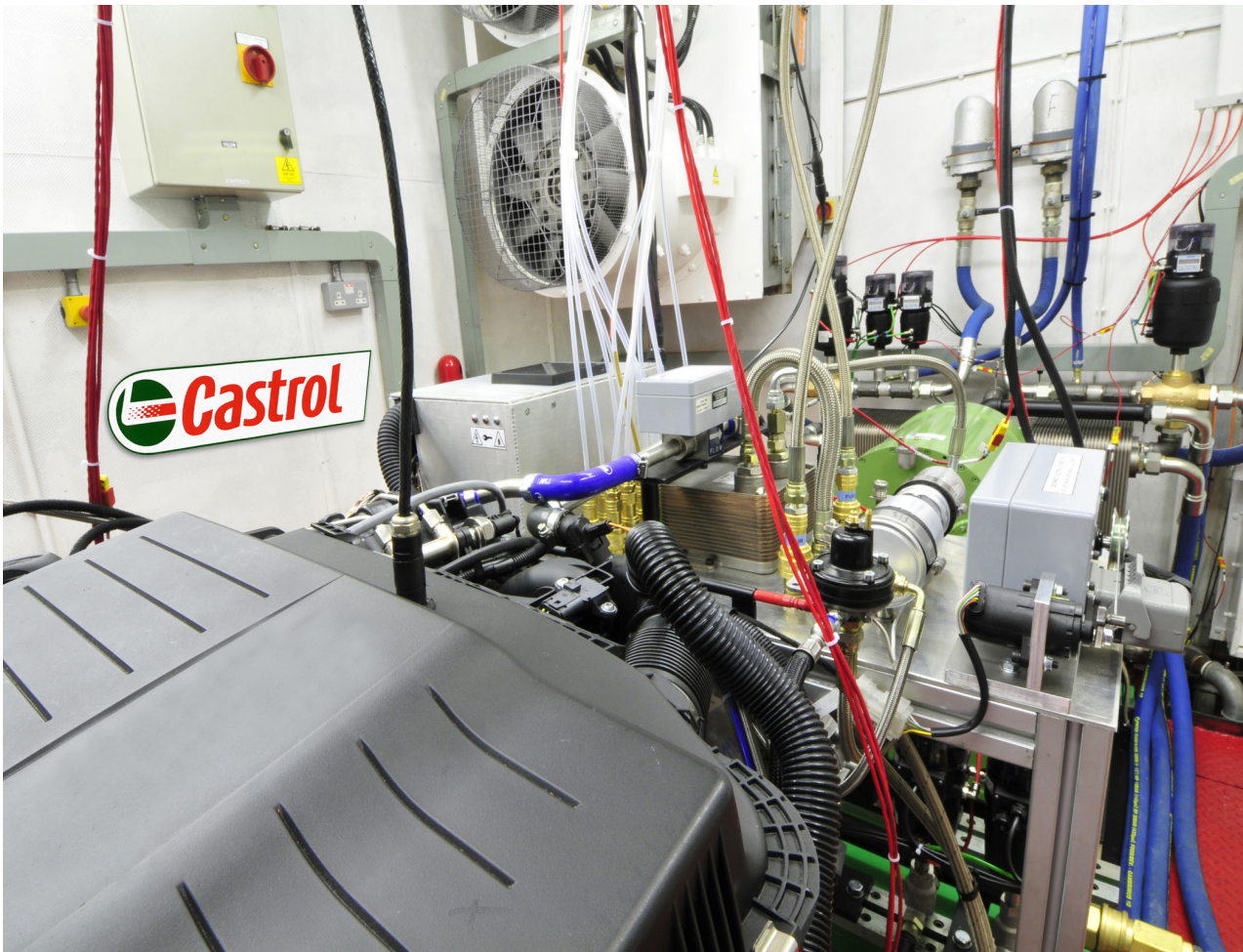


This system has been specifically engineered for reliable control in applications where control accuracy is paramount. It comprises an in-line 2712 stainless steel globe, combined with Burkert's new generation Top Control 8630 universal pneumatic actuator. This arrangement is extremely compact, and has excellent control characteristics, providing a unique control valve system which can be operated as either a simple accurate positioner or an auto-tune PID process controller for flow, temperature or pressure.

The 2712 system has already proven itself in a number of critical applications including precision distillation apparatus, fine control of pressure and flow control in chemical applications, SIP and auxiliary processes with steam, high accuracy test bench equipment and food, beverage and pharmaceutical CIPI.

"What we liked about the 2712 system was its size, flexibility and precision," said Richard Butcher, who is a Senior Engineer at the BP Castrol Technology Centre. The flexibility enables us to operate the valve control either remotely, from the test bed computer, or just employ simple local control. It also allows the 2712 system to operate across a wide range of temperatures, and enables us to configure the relationship between demand temperature and valve position; a feature we rate very highly."

A total of seven 2712 systems are now in use on engine test rig; they are providing accurate and independent control of coolant levels to maintain desired demand temperatures on all areas of the engine under test, including Engine Coolant, Intercooler, Oil, Fuel, Process Water, and Conditioning Air.



Burkert would like to thank Castrol for their kind permission to develop and reproduce this customer testimonial.

This is just one example of how we are redefining process systems and equipment. To learn more about how Burkert can help you, go to www.burkert.co.uk or contact your local representative.

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