

# Application story

  
**WANNER**<sup>™</sup>  
**HYDRA-CELL<sup>®</sup> PRO**  
SEAL-LESS PUMP TECHNOLOGIES



## Developing Gas Turbine Fuel Flexibility

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| <b>Location</b>                                          | USA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>Hydra-Cell model</b> | D35XKBGFHEHA             |
| <b>Type of application</b>                               | Fuel Feed to Blending System                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <b>Flow rate</b>        | Up to 140 l/min (37 gpm) |
| <b>Liquid</b>                                            | Methane<br>Butane<br>Propane                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <b>Pressure</b>         | Up to 100 bar (1450 psi) |
| <b>Application details</b>                               | <p>Hydra-Cell D35 pumps were chosen to pump methane, butane and propane in a unique world-class combustion test facility developed by the Turbine Research &amp; Development division of GE in Greenfield, South Carolina. The project, named 'fuel flex', was judged Final Runner Up out of 340 entries in the GE Energy Engineering Awards 2010.</p> <p>The need for fuel flexibility in gas turbines necessitates a quality test facility which has to be versatile in order to accommodate the different requirements of GE customers. Working with Wanner International and other industry experts, GE were able to develop a special delivery system to supply the gases which are used in the blending process.</p> <p>The proven versatile performance of the Hydra-Cell pumps have been integral to the successful demonstration of the system's capabilities. It has already completed over 25 tests.</p> |                         |                          |
| <b>Advantages of Hydra-Cell pump on this application</b> | Ability to handle non-lubricating liquids reliably. Controllability. Ability to pump liquids of very low viscosity efficiently.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                         |                          |

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