

# Application story



## Hexane Injection into Natural Gas Pipework

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| <b>Location</b>                                          | USA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <b>Hydra-Cell model</b> | G25XKSTHFECA      |
| <b>Type of application</b>                               | Hexane Injection into Natural Gas Pipework                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <b>Flow rate</b>        | 50 l/min (13 gpm) |
| <b>Liquid</b>                                            | Hexane                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <b>Pressure</b>         | 20 bar (290 psi)  |
| <b>Application details</b>                               | <p>When a major regional gas supplier in the USA began to use imported liquid natural gas (LNG) the number of reported leaks in its distribution pipes rose to unacceptable levels. The chemical composition of the gas was causing pipe seals and O rings to shrink and become brittle. Replacing seals throughout the network would be a massive operation in terms of cost and time, and the company found a more practical solution – injecting into the pipeline a chemical (hexane) that would recondition the elastomers, restoring their sealing qualities without reducing the burning efficiency of the gas.</p> <p>The process requires liquid hexane to be delivered to atomising nozzles in the pipeline. Contracting engineers working on the pilot reconditioning plant, incorporated in the pipeline network in 2006, chose Hydra-Cell G25 pumps for the system – selected for their seal-less design, their ability to handle non-lubricants and their low pulsation.</p> <p>Dry running was also important. Initial problems related to the vapour pressure of hexane were overcome and from the outset results showed a massive percentage drop in the number of new leaks reported.</p> |                         |                   |
| <b>Advantages of Hydra-Cell pump on this application</b> | Consistent pulse-free delivery. Seal-less design, compatible with non-lubricating fluids. Reliable working on continuous duty. Ability to run dry. Metering accuracy.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                         |                   |

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