Case Study

Chemical Hose



Industry: Chemical

Application: Fine Chemicals Manufacturing

Amount Saved: N/A

Time Saved: 4 Hours Tanker Offload & 4 Hours

Staff Supervision per Offload

Corroline+ hose dramatically speeds up offload time

ISSUE

Traditional smooth bore hose is generally only available in bore sizes up to 1" as larger sizes become much less flexible and more prone to kinking. Larger bore sizes are typically only available in convoluted hose due to the increased flexibility and kink resistance of the design. The disadvantages however, of convoluted hose compared with smooth bore are reduced flow rates – Resulting in increased offloading times - and risk of fluid entrapment – Resulting in unsanitary conditions and difficulty in cleaning. This could prove critical in certain applications.

Offload time is critical in this sort of application as most sites pay the tanker company for the time they are onsite, as well having their own staff supervise the offload; this is in addition to the cost of the chemicals they are offloading. In this particular case the tanker used to arrive onsite at 9am and offload to three separate points, finally leaving the site at 3pm, accounting for not only 6 hours cost for the tanker but, also six man hours for the supervision of the offload.



AFLEX SOLUTION

In answer to this Aflex Hose' unique patented PTFE liner design combines the benefits of both a smooth bore hose and a convoluted hose in one product. The PTFE liner comprises of a smooth bore inner for high flow rates and internal cleanability, and a convoluted outer to provide excellent flexibility and kink resistance. Previously this liner design was only available up to 2" but, recently Aflex Hose expanded their Bioflex Ultra, Pharmaline N and Corroline+ ranges to include 2.5" and 3" bore sizes, giving you the same benefits in a larger bore hose.



RESULTS

After trialling Aflex Hoses' 2.5" smooth bore PTFE Corroline+ hose used with dry-break couplings at one of their sites in the tanker offload bays, the customer decided to replace all their traditional design 3" convoluted PTFE hose that they would usually use. This saved them substantial time and money and improving their offload operations. The benefits of the improved flow rates of the smooth bore Corroline+ hose, despite the reduction in bore size, spoke for themselves. The fact that there was no bore restriction in comparison to the convoluted hose originally used meant that fluid flow through the hose was clean and uninterrupted and cut down off load times by four hours. The improved flow rates of the smooth bore 2.5" Corroline+ PTFE hose design meant that a tanker carrying out the same delivery was finished by 11am in comparison to the 3pm finish when using a traditional convoluted hose, this instantly saved the customer four hours cost for the tanker and four hours cost for the supervision.

MORE INFORMATION

Aflex Hose Ltd

Tel: +44 (0)1422 317200

Web: www.aflex-hose.com

Email: hello@aflex-hose.com



