Increased Reliability and Extended Service Intervals in an Ethylene Oxide Plant

by:

Dr. Seedorf, Michael and Bartsch, Ulrich
Technical Services Marl
Sasol Germany GmbH
45764 Marl
Germany
michael.seedorf@de.sasol.com

4th Conference of the EFRC
June 9th / 10th, 2005, Antwerp

Abstract:

Sasol Gemany, the German subsidiary of the South-African Sasol Ltd., operates – besides other production plants – an Ethylene Oxide plant in the Chemical Park at Marl, West of Germany. Two 2-stage piston compressors are in service to recompress residual gas to process pressure level. Efficiency was increased with optimisation and maximum utilisation of wear parts. Consequently, the service intervals of these critical recips were extended significantly. Secondly, operation is more reliable since the implementation of safety-oriented monitoring methods. This paper describes how the implementation of a monitoring strategy leads to a more efficient and reliable machine operation and is split into the following parts: Description of plant and process; Operating conditions of the residual gas compressors; Objectives and optimisation activities; Achievement of objectives.