



Abstract

Session 38: Valves

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Title

38-2: Electromechanical actuator for reciprocating compressor stepless control

Summary

Electromechanical actuator for reciprocating compressor stepless control

Flow control systems represent one of the main topic of research and analysis for valve and reciprocating compressor makers.

Among the methods already in use, the reverse flow one needs advanced electronic systems able to control the suction valve shutter position in a quick, reliable and accurate way.

Unlike the current systems, the new one developed by Dott. Ing. Mario Cozzani s.r.l. is characterized by the use of electromechanical actuators.

The control algorithm definition has been made by using model-based and rapid prototyping techniques. This paper shows the results of the theoretical and experimental studies that the Cozzani company has carried out on the new stepless control system, considering also the energy saving.