

Abstract

This paper presents results from an investigation on a nonlinear compressor control. The useful range of operation of turbo compressors is limited by choking at high rate flows and by the onset of instability known as surge at low rate flows. Traditionally, this instability has been avoided by using control systems that prevent the operating point of the compressor to enter in the unstable region. It is not efficient to apply classical controllers, such as simple P, PI and PID when the parameters of compression system change frequently. The aim of our work is to design and simulate an intelligent controller. A simulation part is clearly presented with the advantages of the intelligent system