

工程与应用

基于LabVIEW的减压阀可靠性试验平台设计

袁德虎, 谢文华, 金惠良

上海交通大学 机电控制研究所 SMC技术中心, 上海 200240

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摘要 依据ISO19973-4: 2007设计了一种减压阀可靠性试验平台, 并介绍了其气动回路、电气控制回路以及测控软件系统。利用该平台可方便地进行减压阀的可靠性试验, 可获得减压阀自开始试验到出现故障为止的全部有效试验数据, 并自动绘制压力波形。长期的试验结果证明, 该试验平台稳定性好、精度高、具有明显的节能优势。

关键词 [减压阀](#) [可靠性试验](#) [LabVIEW](#)

分类号

Design of test platform for reliability of pressure regulator based on LabVIEW

YUAN De-hu, XIE Wen-hua, JIN Hui-liang

SMC Technology Center, Institute of Mechatronics Control, Shanghai Jiaotong University, Shanghai 200240, China

Abstract

A test platform for reliability of pressure regulator is designed according to ISO19973-4: 2007. Its pneumatic circuit, electrical control circuit and controlling software system are also presented. Reliability test of pressure regulators can be conveniently carried out on this test platform, through which all of the valid data of pressure regulators from the beginning till to failure can also be acquired. And the pressure charts are automatically drawn out. Long-term test result has shown that this test platform has a good stability, high precision and obvious energy-saving advantage.

Key words [pressure regulator](#) [reliability test](#) [LabVIEW](#)

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通讯作者 袁德虎 yuandehu@163.com

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