

Value Added Services

**Electronic Controls** [Data Acquisition, Test Stands]

# **Vacuum Pump Test Stand**

### Challenge

John Henry Foster Company was asked for a rotary vane vacuum pump, tested and verified to meet medical industry standards set by end-customer and the medical association. To satisfy the testing criteria, a test stand was built at JHF. Thousands of pumps have been successfully tested on the stand, with the results relayed to the end customer and electronically archived.

#### Goals

- Run pump through series of steps to verify performance
- Store all results of the test
- Provide Certificate of Conformance for performed test

## System Features

- PC controlled I/O system
- Customized software for control and data acquisition
- Database storage of testing parameters & pump results
- On-Demand customized certificate of conformance with appropriate data
- One-touch operation for test

## **Project Successes**

- Has become the standard used by end-customer for vendor supplied testing
- Easy operation
- Upgradeable for future testing changes
- Customized reporting
- Archived testing results
- Printed Certificate of Conformance with data for all vacuum pumps included in shipment



TestID	Serial Number	Test Date	Test Result	Test Drift	Pass/Fail
364	031607-14	3/16/2007	385.9	3.3	PASS
363	031607-13	3/16/2007	378.9	1.1	PASS
362	031607-12	3/16/2007	385.9	28	PASS
361	031607-11	3/16/2007	383.4	2.9	PASS
360	031607-10	3/16/2007	384	3	PASS
359	031607-9	3/16/2007	382.7	3.6	PASS
358	031607-8	3/16/2007	376.6	3.9	PASS
357	031607-7	3/16/2007	377.9	0.9	PASS
356	031607-6	3/16/2007	409.1	0.7	PASS
355	031607-5	3/16/2007	365.8	1	PASS
354	031607-4	3/16/2007	402.9	0.7	PASS
353	031607-3	3/16/2007	367.1	0.5	PASS
352	031607-2	3/16/2007	366.1	0.9	PASS
351	031607-1	3/16/2007	389.1	2	PASS
350	031407-1	3/14/2007	344.9	2	PASS
344	0207606496	3/9/2007	-670.3	29	PASS
343	0207611758	3/9/2007	-663.9	1.9	PASS
332	0706605318	3/2/2007	-655.1	16.42	PASS
331	0706805321	3/2/2007	-635.955	8.22	FAIL
322	030107-7	3/1/2007	381.117	4.23	PASS
320	030107-6	3/1/2007	365.312	4.22	PASS
210	090407 E	9.M 23007	AUE JOE	4.00	DAGG

