

BAUSCH + LOMB IRELAND STANDARD OPERATING PROCEDURE			
Document Number:	QA463	Document Title: Calibration of Pirani 501 Controllers and PRE10K	
Revision Number:	7	Gauge Heads	
Page Number:	Page 1 of 2	DCO Number:	DCO-WAT-00774CR-000148330

1.0. PURPOSE

- 1.1. To document the procedure for calibration of Pirani 501 Controllers and PRE10K gauge heads.

2.0. SCOPE

- 2.1. This procedure covers the calibration of the above instrumentation which is used on the Vacuum pumps in the Monomer Lab at the Bausch & Lomb Waterford Plant.

3.0. REFERENCES

- 3.1. QA400

4.0. FREQUENCY

- 4.1. These instruments are to be calibrated at six monthly intervals.

5.0. ACCURACY

- 5.1. The Pirani 501 controllers should yield results within 0.2 mbar of the certified standard.

6.0. PROCEDURE

- 6.1. Switch on pump and turn the "Gas Ballast" switch to "II" and leave for half an hour. This should be sufficient time to de-gas and warm-up the pump for use.
- 6.2. Turn off pump
- 6.3. Remove the Pre10K head from the pump set and attach manifold to the pump set. Attach the standard gauge head to the manifold along with the gauge heads being calibrated.
- 6.4. Switch on all Pirani 501 gauges being calibrated including the master gauge.
- 6.5. Vacuum on the certified Pirani 501 Controller shall then be set to atmospheric pressure (0 gauge reading). All other gauges shall be checked at this setting.
- 6.6. Close needle valve and speed valve on the pump and turn "gas ballast" switch to "I".
- 6.7. Turn on pump and allow to settle for 10 minutes.
- 6.8. Open needle valve slowly until master gauge reads 0.2 mbar and record the reading from the pirani 501 gauge(s) being calibrated. Adjust the needle valve to change to the next reading.

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6.9. The Pirani 501 Controllers shall be checked at the following settings:

- 1) 0.2 mbar vacuum..
- 2) 0.6 mbar vacuum.
- 3) 1.0 mbar vacuum.

6.10 If there is a discrepancy between the certified standard reading and any of the controllers, then these controllers shall be set to agree with the certified standard using the adjust screw on the gauge head.

7.0 RECORDS

7.1. All records and reports shall conform to SOP QA 400.

8.0 REMEDIAL ACTION

8.1. In the event that the required accuracy is not achieved, please refer to QA400, which documents the notification system in place and the required remedial action to ensure product integrity is maintained, if applicable

TRAINING: TRAINING IS Not REQUIRED AS A RESULT OF THIS REVISION

<u>Training Requirements</u>			
Who requires training:			
Is training required for this revision: (Yes/No)			
Revision History			
Revision	6	7	7
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