

Regulating Vacuum In Test System When Vacuum Source Varies

ACME Medical Devices needs to test the consistency of a compaction process.

By placing tubes, filled with compacted powders in a manifold, and drawing Methane through them, they can find out if the compaction rate is consistent from one tube to another.

Sounds easy. But wait, my vacuum source is inconsistent. How will I ever be able to know if the rate is consistent if my vacuum source varies?

Alicat to the rescue! By using a **PCDS-1PSIG-D**, they can control the vacuum in their test loop at a constant level, regardless of their source vacuum variance.

Need: Ability to control pressure in a test system, when source varies.

Solution: PCDS-1PSIG-D

Application Notes:

Vacuum source: varies between -29 inHg and -22 inHg.

She needs Vacuum in test system: -1 inHg at all times during the test procedure.

P1(INLET): atm, VOL: 575 ci, EXH: -29inHg.

- Even under inconsistent conditions, Alicat devices can be built to maintain a constant environment.
- Please note that when ordering a **PCD** (or any dual valve pressure controller configuration, i.e. "PCDS"), **it is imperative to know the following parameters:**

Inlet pressure (*P1),

Volume of the system (*VOL) and

Exhaust condition (*EXH)

These parameters allow Alicat to finely tune these devices using our proprietary algorithms. These devices cannot be built without them.

