

Pump control of steam heating system

APPLICATION C219

Type of Company: [Private Steam Heating Company](#)
Location: [Chicago, Illinois](#)

Many residential and office buildings and other facilities use steam systems for heating, and vacuum steam switches are often used to control the vacuum steam pumps.

As the system ages, the traditionally installed vacuum switches often do not function properly and become very difficult to adjust. The system wanders back and forth and is constantly overshooting the vacuum parameter settings.

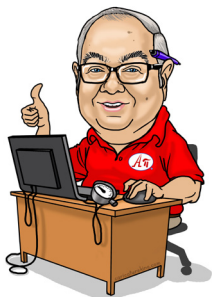
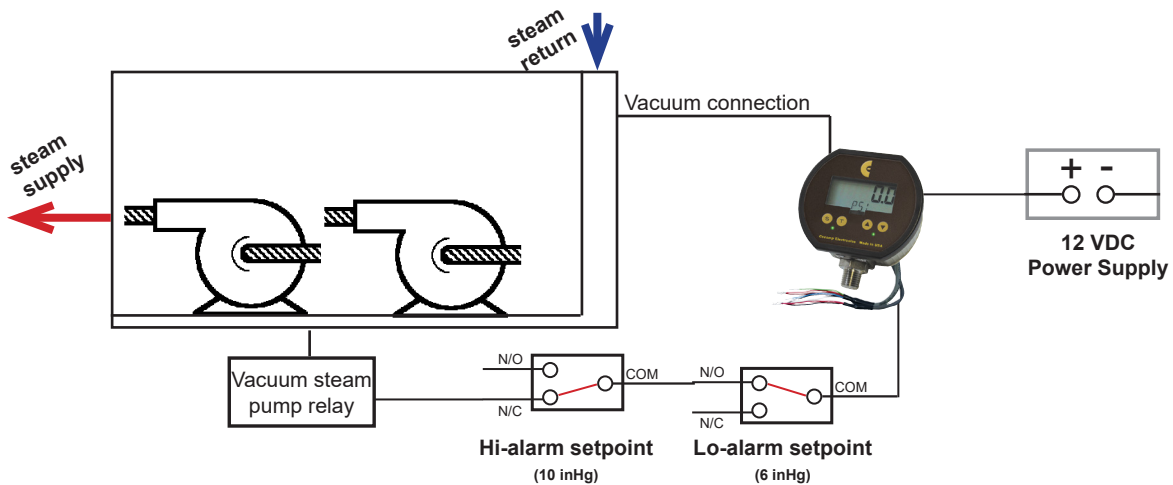
The result is poor heating regulation and complaints from residents - as well as customers.



By J. Crocker, commons.wikimedia.org/w/index.php?curid=1873383

The Engineering Issue

- The company must replace failing traditional vacuum switches that were installed on the original pumps.
- The switches must accurately control a very narrow range (6 to 10 inHg of vacuum) to ensure consistent resident comfort.



The “old” vacuum switch was replaced with a Cecom compound vacuum/pressure gauge, F16ADA-30V15PSIG, that includes pushbuttons, a digital display, and two relay switches. Due to the display and smoothness of operation, the engineer was able to easily and precisely set the lo and hi setpoints. After an entire heating season of testing, the engineer reported the gauge worked flawlessly and the heating system maintained the temperatures as required.

Problem. Solved.