



ACTIVE DISPLACEMENT TECHNOLOGY

Active Displacement Technology from Storage Control Systems is a sealed and self-contained air bladder system used to counteract pressure differences in a sealed CA room. Designed to fit in the void air space between the bin stacks and the wall of a CA room, ADTs are easily integrated as part of new or existing storage facilities.

Even the tightest of CA rooms are affected by high barometric pressures. This causes negative pressures inside a storage, and may cause oxygen levels to rise. Those barometric changes in the atmosphere, or even things as simple as a refrigeration coil kicking on can do anything from changing gas levels several tenths to stressing or revealing leaks. A change in just a few tenths in oxygen level is enough to trigger a nitrogen system, and in a DCA storage, is enough to bring produce into higher rates of respiration. The greater and more frequent the water column pressure swings, the more energy is used, and the greater impact on eventual fruit quality. Stable pressures in CA may be as important as stable temperature, oxygen, and carbon dioxide levels.

Enter ADT. One or several ADTs are installed inside the storage and connected to a fresh air blower via quick disconnect hose. Pressure sensors inside the room and inside each ADT monitor both conditions in realtime. Once a negative pressure occurs, a custom PLC controller inflates the ADTs to the required volume in order to achieve positive pressure in the CA room. Simply put: the decrease in volume from the negative pressure is offset by the increase in volume of air displaced by the ADT. This naturalizes the pressure imposed on the storage, negating hairline storage imperfections, keeping the oxygen levels from rising.

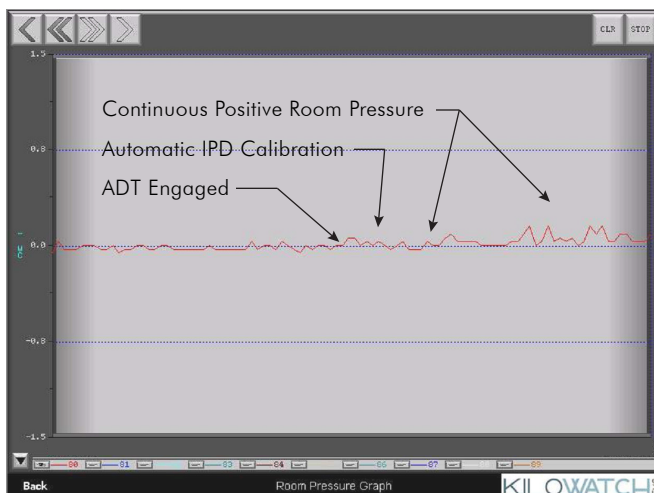
The effects of an ADT in a room is drastic! Runtimes are less, environmental conditions are more stable, and product quality is maintained, all with this simple ADT system.

FEATURES

- ▣ Patent Applied For
- ▣ Combats Barometric Pressure Swings
- ▣ Reduce Energy & Maintenance Costs
- ▣ Maintain CA & ULO Conditions
- ▣ Improve Both CA & DCA Stability
- ▣ Combats Minor Storage Leaks
- ▣ Automatic PLC Monitoring & Control



ADT on Wall Inside a CA Room



Room Pressure Records Showing Effects of ADT in CA Storage

KILOWATCHEMS
COMPATIBLE PRODUCT

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