



Desiccant Drier Removes Moisture to Eliminate Interference in Radio Frequencies

Challenge:

Antennas are critical to ensure optimal radio frequency coverage. For a connected functional network they need to work over a wide range of terrains and in many different environments. One of the main environmental challenges is moisture accumulation from fluctuations in temperature and pressure. Moisture accumulation generally occurs at the top of a tower and can lead to signal interference or even complete failure of the link.

A customer that provides antenna towers for everything from mobile phone service to radio broadcasting was looking for a long life, maintenance free, compact desiccant drier that could be placed within a control box. While the box already had a NEMA 4X enclosure rating, there was a concern that air being pumped up to the box may contain some moisture, compounding the problem.

Solution:

Bimba solved this problem by modifying the traditional air booster by packing it full of desiccant drier beads, tightly compacted with a spring-loaded piston. Bimba offered a further improvement by providing the compact desiccant drier with RoHS compliant materials, ensuring that proper disposal guidelines would be met after the product was consumed.



Benefits:

- Long life.
- Compact.
- RoHS compliant.

Other Applications:

- Electronic Components Packaging
- Medical Equipment
- Relays and Communication Devices