

## EXTRACTION VS. FREE COOLING: TEST SHOWED SIGNIFICANT SAVINGS

**A large mobile operator wanted to test the difference between their existing extraction solution and a Dantherm Free Cooling solution. The results were clear: energy savings of 80 % on running the air conditioner**

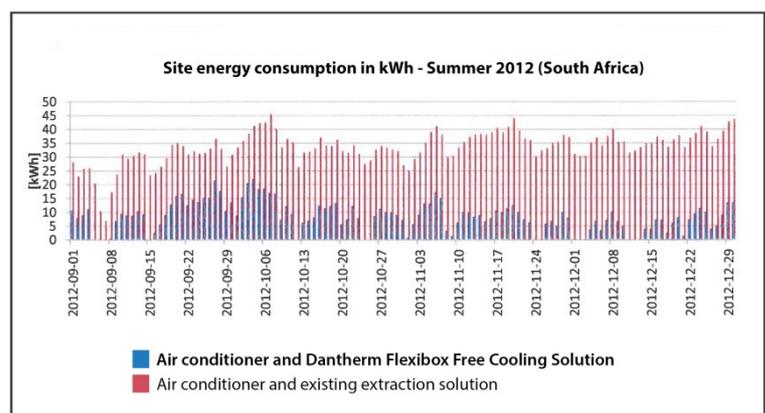
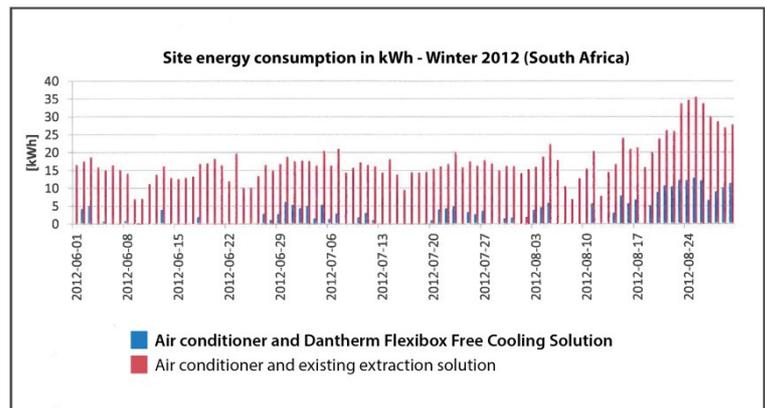
The customer wanted to test two similar shelters with two different cooling equipment setups:

- Same type of air conditioner.
- Two different Free Cooling solutions (with controller):
  - Extraction-type Free Cooling
  - Dantherm Flexibox Free Cooling with an ACUE controller
- The two shelters were placed in the same proximity, had the same transmission equipment, similar site traffic and the same temperature settings.
- The measurement was done according to how much the existing air conditioner needed to run – when controlled by the exhaust solution or the Dantherm Flexibox solution.
- The test ran for one year from April 2012 to April 2013.

The test showed significant differences in energy consumption:

The exhaust controller ran the air conditioner to consume 22.000 kWh, whereas the Dantherm-controlled site consumed 4.300 kWh. The answer to this difference lies in the fact that there are several ways to control temperatures at a Telecom site. The Dantherm-developed controller for the Flexibox is a well-proven solution with an intelligent, energy-saving strategy. This controller focuses on both the control of the Free Cooling Flexibox and the control of the air conditioner.

The Dantherm Flexibox solution is estimated to generate energy savings of 1.770 EUR/year in 2013 on each of the customer's sites – or 80 % energy savings in total. The energy company of the customer has forecast 20–30 % price increases/year the coming 3 years, so the solution will achieve ROI very quickly for this specific case.



Calculate *how much you can save* right now, or receive non-binding energy savings counselling...