



ACDP guidance makes reference to monthly monitoring of cabinet airflows. The method illustrated within the ACDP guidance of a direct face velocity measurement is only suitable for class 1 cabinets, which have a reasonably even inflow across the working aperture. Due to the design of Class 2 cabinet's the inflow at the front aperture changes significantly across the aperture (top to bottom) making accurate measurement with a vane anemometer not possible in most cases. As such the inflow on class 2 cabinets is measured as an average, determined by the rate of cabinet exhaust (BSEN12469), which is a more involved method and often not practical for the end users.

In terms of the ACDP guidance, the importance of the airflows is to maintain operator protection, which for class 2 cabinets is a function not only of inflow, but the down flow. As such any monitoring should be looking for changes to the operating condition, as recorded at servicing (when the Operator Protection test is performed) but this is not reflected in the guidance. Simple monitoring to prove the cabinet airflows meet those detailed in table 6.3 of the guidance will not in any way ensure operator protection or the correct operation of the cabinet as a whole.

If face velocities are taken at the front aperture, considerable care must be taken to ensure consistency, as relatively small changes in the monitoring point can cause significant changes in the recorded values. The values recorded will not reflect the overall inflow velocities, but can be used to monitor for changes in flow rate. However experience has shown that the monitoring of velocities on Class 2 cabinets, using this method is of little or no value, only leading to false alarms.

As such and in line with BSEN12469:2000, it is not recommended that end user monitoring of airflows on class 2 cabinets used at ACDP 2 is carried out.