

Quantum Neo Autocalibration shelves



a coesia company

In recent years, Cerulean introduced several Quantum Neo shelves that feature the ability to automatically self-calibrate. These include the A and J shelves as well as the X shelf with more planned in the future.

Autocalibration is a very useful attribute that works in the background while the shelf is idle. The self-calibration procedure takes a few seconds depending on the shelf type and is immediately interrupted as soon as a measurement is initiated.

- The X-shelf for example uses a 50g internal standard which is accessed via the control software at pre-defined intervals.
- The A shelf usually requires the internal PD standard to acclimatise for at least ½ hour to stabilise. Autocalibration then takes place at regular intervals when the instrument is in idle state.
- The J shelf has, in addition to the A shelf, a 50% ventilation standard which is used to provide a third calibration data point necessary for accurate curvilinear vent calibration.

The benefits of autocalibration include:

- Elimination of user intervention (replaced with an automatic internal system)
- The A and J shelves are unaffected by changes in atmospheric pressure during a run, regular Pressure Drop and Ventilation calibrations are vital to eliminate errors
- Weight scales may drift slightly over a run, therefore autocalibration of X shelf provides peace of mind

Cerulean is planning to implement autocalibration on most shelves variants in the future.

Please check availability with your Cerulean representative.

