The Power of Coated Draft Shields

What is a coated draft shield and why do you need it?
A draft shield is a barrier between the weighing chamber of a balance and the outer environment, which helps the balance measure highly accurate weighing values by minimizing the effect of drafts. As part of Sartorius’ commitment to “Simplifying Progress”, the use of a conductive coating on our draft shields further protects the weighing chamber of Cubis® II balances from outer static effects. This results in stable weighing values, which ultimately simplifies and speeds up your weighing process.

What is a Faraday cage?
A conductive coating is a tiny layer of a conductive material which works as a Faraday cage. A Faraday cage is an electrically conductive enclosure that is closed on all sides. In an external applied electric field (e.g., a person with a charged sample in hand, or a charged lab coat), a physical effect called influent keeps the interior of the Faraday cage free from fields. This is ensured by freely movable charge carriers in the Faraday cage.

What is the Benefit for You?
If you use an analytical, semi-micro or micro balance without a coated draft shield, electrostatics coming from vessels (e.g. eppis), beakers, gloves, clothing, sample, filters influence the weighing systems, resulting in drifting weighing values. The conductive coating layer on our draft shields ensures stable readouts by protecting the weighing chamber from outer static effects.

Scan the QR Code, below, to learn more about how a micro balance with a coated draft shield (Cubis® II) compares to a micro balance without coating layer (competitor device) when exposed to highly charged filter.

How do Cubis® II balances prevent static effects in the weighing chamber?
High power built-in Ionizer from Sartorius guarantees a fast discharging directly in the weighing chamber. For further information see the App-Note “Advantage Ionizer”.

Advantage Ionizer Application Note: