

Over the course of the last several decades, one balance emerged as the industry standard for weighing and compounding. The Torsion Balance DRX-3 was first introduced after the Second World War, and rapidly became the industry standard. Chances are if you go into a compounding pharmacy in any of the fifty states, you will find a DRX-3 behind the counter.

The DRX-3 is made of durable materials to prevent wear and corrosion. Stainless steel weighing pans and a sealed metal case provide protection against dust contamination and seepage. The height of the plexiglass lid allows for weighing with the top down. By meeting or exceeding the standards established in Handbook 44, the DRX-3 guarantees top-notch performance under all conditions.

The internal mechanism of the DRX-3 is its most remarkable feature. Taut special bands (made from an alloy of cobalt, chromium and nickel) wrap around three metal frames to which the upper and lower beam bars of the balance are firmly clamped. The center frame or truss is rigidly attached to the stand or base.

The dial mechanism consists of a special alloy calibrated spiral spring, one end of which is attached to the hub of the dial and the other end to the upper beam bar. Rotating the spiral spring shaft applies torque to the upper beam bar. This allows the simulated changing of weight as quickly or slowly as desired, with no resulting strain on the mechanism.

Because the entire mechanism is one piece, without any loose parts to wear out, the mechanism is permanently adjusted. The lack of movement of parts (one over the other) assures the user that the initial accuracy and sensitivity remain constant for the life of the balance.

By not incorporating a knife edge fulcrum (which can wear down over time) along with the sliding weight and graduated beam, a sensitive balance, independent of wear and unaffected by dust or dirt, is now a reality.

This remarkable mechanism enabled the creation of a balance with a sensitivity of 1/32 grain, or 2 milligrams. The DRX-3 can be relied upon to accurately reflect the tiniest of weight

gradations. This is of paramount importance, particularly when it comes to the compounding of multiple pharmaceuticals.