Avery Weigh-Tronix

Laboratory Accuracy,
Industrial Strength.



BSQ

BENCH BASES

High precision bench bases built to withstand industrial use

Strong. Reliable. Accurate.

Avery Weigh-Tronix

The BSQ bench base offers an unrivalled combination of accuracy and strength. The high quality Avery Weigh-Tronix Quartzell™ weight transducer allows users to weigh any item, from 0.0005 g to a 175 lb/80 kg box, while the design offers exceptional protection against tough environments.

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Unrivalled Accuracy

The BSQ is a highly accurate, digital bench base with up to 1 billion internal count resolution and readability up to 3.5 million divisions (unapproved). In practice, this means that the BSQ can detect even the tiniest of weight changes with astounding precision. Featuring the very latest state of the art suspended Quartzell technology, the BSQ guarantees repeatable balance accuracy at all times.

The Quartzell's digital signal allows the scale to weigh faster and with greater resolution than standard load cells. Small and large items can be weighed on a single base, allowing one scale to do a job that might previously have required several. With a fast return to zero between readings, the BSQ provides the speed and repetitive accuracy that can be vital in situations where highly accurate weight readings are required.



Large scale base
12 in x 14 in (305 mm x 355 mm)
70 lb &175 lb (35 kg & 80 kg)



Medium scale base
9 in x 12 in (230 mm x 305 mm)
70 lb (35 kg) only



Small scale base
6" dia (152mm dia)
2 lb & 10 lb (1 kg & 5 kg) only



Draft Shield

When weighing with extremely high resolutions, any small air movement close to the scale can have a significant impact on the scale's accuracy and performance. To help combat this, an optional draft shield is available, which can be easily fitted to the 2 lb (1 kg) and 10 lb (5 kg) BSQ base. This simple to use four-door draft shield allows the scale operator to access the weight platter while obtaining optimum weighing accuracy. Crafted from robust acrylic, it is ideal for use in most industrial environments.

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Indicator Column

An optional 15" or 23" high ZM indicator column can be easily and quickly mounted to the rear of the BSQ base. This enables the BSQ base to become completely freestanding and portable, ideal for applications where wall mounting the indicator is not practical.

Made from robust stainless steel, the column indicator can also house the ZQ battery. This enables the BSQ and ZM223 or ZM400 Series Indicator to be fully portable with up to 12 hours battery use between charges.



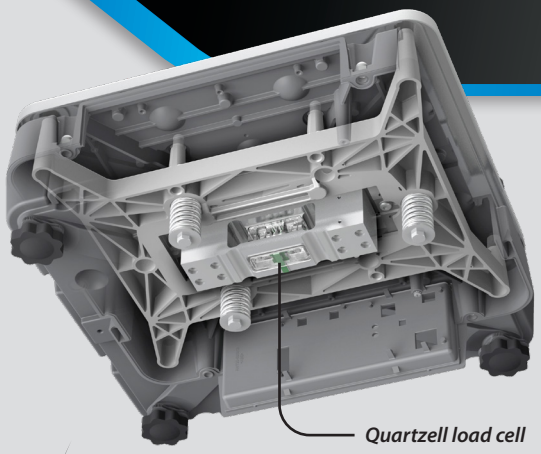


Strength by Design

BSQ bench scale bases are exceptionally rugged by design. These tough and resilient bases are engineered to resist overloading and sudden dropped loads, with up to 1100% overload protection as standard.

The rugged die-cast clamshell case and anti-shock spring suspension system protect the Quartzell weight sensor from sudden impacts and overloads. This design and construction technique allows the scale to withstand overloads of more than ten times its capacity, without affecting accuracy.

Designed for use in tough industrial environments, the BSQ is versatile enough for use in laboratories and other applications that require precision weighing.



Quartzell™

Quartzell™ Speed and Accuracy

Unlike a strain gauge load cell, which produces an analog signal that has to be converted to digital, the Quartzell transducer uses two, highly accurate double-ended tuning fork quartz crystal sensors. The resulting digital frequency greatly reduces weight conversion errors while increasing speed and accuracy.

Digital Accuracy

Because each cell uses two quartz crystals, the Quartzell transducer eliminates external influences such as temperature and pressure. When weight is applied, the signal is not affected by environmental interferences, resulting in a more accurate weight reading.

Durability

The rugged, long-lasting Quartzell transducer is manufactured using state of the art techniques and equipment, resulting in a product that will stand the test of time.

Proven in Thousands of Installations Worldwide

Since first introducing Quartzell to the market in 1995, Avery Weigh-Tronix has continued to enhance and develop the technology to offer the highest accuracy, speed, and reliability.

The Quartzell transducer provides consistent, repeatable output. This ability increases speed, saves time, provides greater accuracy, and minimizes user error.



Environmental Protection

The dust, dirt, oils, and liquids that are present in many industrial applications can create a hostile environment for all types of electrical equipment. The BSQ is built to withstand the rigors of these harsh surroundings.

Interference

The clamshell cover is fully enclosed, reducing the likelihood of environmental interference caused by the accumulation of dust and dirt or even drafts, which might otherwise cause slight nuances in weighing accuracy.

Fluids and Dirt

Built-in drip pathways help to channel unwanted dirt and fluids away from critical areas within the base. This clever design makes the scale suitable for use in dirty, oily environments where liquids such as cutting fluids could otherwise affect the accuracy of the Quartzell weighing element.

Thermal Resistance

The internal design of the 70 lb to 175 lb (35 kg to 80 kg) BSQ scale offers an excellent thermal coupling barrier, enabling weighing of hot items while protecting against a thermal shift that could affect the accuracy of the base.



Underhook Weighing

As well as a standard weighing platter, the 2 and 10 lb (1 and 5 kg) BSQ bases have the added flexibility of an underhook accessory.

This quick-fit feature allows items to be suspended beneath the scales, for density weighing type applications.

Connectivity

Link the BSQ with a weight indicator or computer to facilitate capture and display of weight data. Avery Weigh-Tronix offers a vast array of compatible peripherals, from simple weight displays to more advanced programmable indicators. Peripherals link with the scale via RS232 or USB ports. The ability to power the base via either of these ports provides additional flexibility when weighing remotely.



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