Bench Scales

A bench scale is a countertop weighing platform, typically 30 lb to 500 lb capacity with a 12x12 in to 24x24 in stainless platter, used for receiving, portioning, packaging and production checks. It sits between a compact balance (grams) and a floor scale (pallets) in both capacity and footprint.

Bench scale selection by duty

Application	Typical capacity	Typical readability	Notes
Portioning, food prep, small parcels	30–60 lb	0.01–0.02 lb	12x12 in stainless platter
Packaging and receiving	100–150 lb	0.05 lb	15x15 in platter
Heavy cartons and freight parcels	300–500 lb	0.1 lb	20x20 in or larger
Wash-down food processing	60–150 lb	0.02–0.05 lb	IP67 stainless, sealed keypad

Certification and compliance

- Authorized A&D Weighing dealer. Sold as an authorized dealer since 1998, so every unit carries the full manufacturer warranty and factory firmware — not grey-market stock.
- NIST-traceable calibration certificate. Any instrument can ship with a calibration certificate produced in our Cypress, Texas lab using mass standards traceable to NIST, with as-found and as-left values recorded.
- NTEP legal-for-trade options. Models in this category are available with an NTEP Certificate of Conformance evaluated against NIST Handbook 44, ready for sealing by your state weights-and-measures authority.
- ASTM E617 / OIML R111 test weights. Verification weights are supplied in ASTM Class 1–6 or OIML E2–M3 tolerances, sized so the standard's tolerance stays inside one third of the scale's smallest division.
- In-house repair & on-site service. Factory-trained technicians repair, adjust and re-certify weighing equipment in our own Texas workshop and on-site across the Houston metro.

Specification checklist

- Platter versus package. Anything overhanging the platter loads the cell off-axis and shifts the reading.
- Resolution you can actually use. 1/5,000 division is standard; higher resolution rarely survives a busy production bench.
- NTEP if it sets a price. Retail, deli and direct-sale weighing must be legal for trade.
- Connectivity. RS-232/USB output eliminates manual weight entry into shipping software.
- Environment. Stainless and sealed electronics wherever there is moisture, dust or cleaning chemicals.

Frequently asked questions

What is a bench scale used for?

Bench scales are used for receiving, portioning, packaging, parcel weighing, and production quality checks — any task too heavy for a compact balance and too small for a floor scale.

What is the difference between a bench scale and a platform scale?

The terms overlap. Bench scale usually means a countertop unit up to about 500 lb; platform scale usually implies a larger, floor-level deck for pallets and drums.

How accurate is a digital bench scale?

Most display 1/5,000 of capacity — a 150 lb x 0.05 lb scale, for example — and hold within one to two increments when level and calibrated against certified test weights.

Can I use a bench scale for shipping?

Yes. For carrier billing you want a scale that reads in the same increment the carrier bills in, and ideally one with a serial or USB output so weights transfer into your shipping software automatically.

Terminology

Accuracy	How close a displayed weight is to the sample's true mass. Accuracy is limited by readability, repeatability and linearity together, so a scale can never be more accurate than its specification sheet's worst of those three figures.
Calibration	Adjusting a scale's span so it reads a certified test weight correctly, documented with as-found and as-left values. Distinct from verification, which records a reading without changing anything.
Capacity	The maximum mass a scale is rated to weigh. Usable capacity is the rated capacity minus every container, fixture or platform that sits on the pan, because tare does not add capacity back.
Crane scale	A scale suspended from a hoist or crane hook that weighs a load in tension through a load cell or load pin. Rated in tons with a safety factor, and typically read at 1/2000 to 1/5000 of capacity.
Drift	A slow change in reading with no change in load, usually caused by temperature change, air movement, static, or a settling mechanical assembly rather than by an instrument fault.
Legal for trade	A device certified and sealed for use in commercial transactions where weight determines price. In the United States this requires an NTEP Certificate of Conformance and a seal from the state or local weights-and-measures authority.
Load cell	The transducer that converts force into an electrical signal. Strain-gauge cells output a few millivolts per volt of excitation and are used from bench scales up to truck scales.
NTEP	The National Type Evaluation Program, run by NCWM, which tests weighing devices against NIST Handbook 44 and issues a Certificate of Conformance with an accuracy class. Required for legal-for-trade use.

EK1200i.com — authorized A&D Weighing dealer since 1998. Calibration, repair and application support from Cypress, Texas.
Call 832-290-3120 · info@mnmscales.com · https://ek1200i.com/bench-scales