Floor Scales and Pallet Scales

A floor scale is a low-profile weighing platform — usually 3x3 ft to 5x5 ft and rated 1,000 lb to 10,000 lb — that sits on the floor so pallets, drums and carts can be rolled or forked directly onto it. Four load cells under the deck are summed in a junction box so the reading is the same wherever the load sits.

Floor and pallet scale selection

Application	Typical capacity	Typical readability	Notes
Drums, carts, light pallets	1,000–2,500 lb	0.5 lb	3x3 ft deck
Standard GMA pallets, shipping	5,000 lb	1 lb	4x4 ft deck, most common
Oversize freight, machinery	10,000 lb	2 lb	5x5 ft deck, ramps optional
Wash-down / food processing	2,500–5,000 lb	1 lb	Stainless, IP67 cells

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

- Deck size before capacity. The load must sit fully inside the deck; overhang concentrates force on two cells and destroys accuracy.
- Corner error spec. Ask for the published shift-test figure — this is what determines agreement with a carrier's scale.
- Load cell environment rating. IP67/IP68 stainless cells for wash-down, alloy for dry warehouse duty.
- Indicator features. Accumulation, tare memory, RS-232 or Ethernet output if weights feed a WMS or shipping system.
- Installation. A pit-mount frame gives flush loading; a surface mount needs ramps for pallet jacks.

Frequently asked questions

What size floor scale do I need for a pallet?

A 4 ft x 4 ft deck rated 5,000 lb handles standard 48x40 in GMA pallets and covers the majority of warehouse work. Move to 5 ft x 5 ft only if your loads overhang the pallet.

How accurate are floor scales?

A quality 5,000 lb floor scale displays in 1 lb increments and holds within ±1–2 increments across the deck once corner-trimmed. Accuracy in service depends on a level, solid foundation — flexing floors are the most common cause of drift.

Can a floor scale be used for legal-for-trade shipping?

Yes, if the scale base and indicator together carry an NTEP Certificate of Conformance and the installed system is sealed by your state weights-and-measures office.

Do floor scales need ramps?

Only if you load with a pallet jack. Forklifts can place loads directly on a surface-mounted deck; pallet jacks need either ramps or a pit installation.

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/floor-scales