Industrial Scales

Industrial scales are heavy-duty weighing systems built for production, warehouse and plant environments — floor and pallet scales, crane scales, bench scales and counting scales — typically rated 30 lb to 20,000 lb with sealed load cells and indicators specified for dust, moisture and vibration.

Which industrial scale for which job

Application	Typical capacity	Typical readability	Notes
Pallets, drums, carts	1,000–10,000 lb	0.5–2 lb	Floor / pallet scale
Suspended and lifted loads	1,000–20,000 lb	0.5–10 lb	Crane scale
Cartons, portions, receiving	30–500 lb	0.01–0.1 lb	Bench scale
Fasteners and inventory	6–150 lb	0.001–0.01 lb	Counting scale

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

- Match the instrument to the material handling. Forked, lifted, carried or counted — each implies a different class.
- Environmental rating. IP66/IP67 stainless for wash-down; alloy cells are adequate for dry warehouses only.
- Data output. RS-232, Ethernet or wireless where weights must land in a WMS or ERP.
- Serviceability. Load cells and junction boxes should be field-replaceable without returning the base.
- Compliance. NTEP plus state sealing for any weight that appears on an invoice.

Frequently asked questions

What is an industrial scale?

An industrial scale is a weighing system designed for plant, warehouse and production duty — sealed load cells, rugged decks, and indicators built for continuous use — as opposed to laboratory or retail instruments.

How long do industrial scales last?

A properly installed floor or bench scale routinely runs 10–15 years. Load cells fail from overload, moisture ingress and electrical surge far more often than from wear.

How often should industrial scales be calibrated?

Verify with a check weight at least monthly and schedule a NIST-traceable calibration annually — quarterly in regulated or high-throughput operations.

Can you service scales on site?

Yes. We provide on-site calibration, verification and repair across the Houston metro, and NIST-traceable bench calibration for units shipped to our Cypress, Texas lab.

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/industrial-scales