



PHARMACEUTICAL TESTING EQUIPMENT

USP / EP / JP-Compliant Solutions for Modern Pharmaceutical QC & R&D

Pharmaceutical Testing Equipment encompasses the precision instruments that pharmaceutical manufacturers, QC laboratories, and R&D teams rely on every day to verify the quality, safety, and regulatory compliance of solid-dose, semi-solid, and inhaled drug products. Every tablet, capsule, blister pack, and inhaler reaching a patient must meet stringent specifications for hardness, friability, disintegration, dissolution, density, weight uniformity, particle size, flowability, package integrity, and dose-content accuracy — and each of these parameters demands a dedicated, pharmacopoeia-compliant testing instrument.

Torontech offers a comprehensive portfolio of pharmaceutical testing equipment engineered to support the full quality-control workflow from raw-material characterization through finished-product release. The range includes digital density meters (ToronDDM™ Series — DDM-50, DDM-70, DDM-90, and portable P100) for liquid density and specific gravity; dissolution testers and disintegration testers for in-vitro drug-release verification; tablet hardness, friability, and gelatine-capsule hardness testers for mechanical-strength QC; electromagnetic sieve shakers, tap density testers, and the EFT-01 powder flowability tester for powder characterization; the LT-101P leak tester for blister/strip package integrity; and a complete suite of inhaler testing instruments for MDI, DPI, and nasal-spray performance verification. Every instrument is engineered for full compliance with USP, EP, JP, IP, ASTM, ISO, and FDA 21 CFR Part 11 standards.

Test with Confidence. Release with Certainty.

In pharmaceutical manufacturing, every batch is a promise to a patient. A failed dissolution test, an incorrect tablet hardness, a leaking blister pack, or a misreported API density can trigger recalls, regulatory actions, and serious patient-safety risks. The QC laboratories that consistently deliver compliant, defensible, audit-ready results are the ones equipped with pharmaceutical testing instruments built for precision, compliance, and data integrity — and the Torontech pharmaceutical testing portfolio gives you exactly that.

Whether you are running routine batch release in a high-throughput generics plant, developing the next breakthrough drug formulation, certifying inhaled products to USP standards, or supporting global regulatory submissions, Torontech has the pharmaceutical testing platform engineered to meet your exact needs. Equip your laboratory with the testing instruments trusted by QC professionals, formulation scientists, and regulatory teams worldwide.

APPLICATIONS

Applications in Industries

- **Pharmaceutical Manufacturing** — Routine batch QC, in-process control, finished-product release testing, and stability studies for tablets, capsules, blister packs, and inhalation products.
- **Generic & Contract Manufacturing (CMO/CDMO)** — High-throughput compendial testing for multi-product facilities serving global pharma clients under GxP regulations.
- **R&D and Formulation Development** — Powder characterization, dissolution profiling, hardness optimization, and packaging-integrity screening during early-phase and clinical-trial drug development.
- **Biotechnology & Biopharmaceutical** — Density, concentration, and packaging integrity testing for biologics, vaccines, and protein-based formulations requiring 21 CFR Part 11 audit trails.
- **Nutraceuticals, Veterinary & Herbal Medicines** — Compendial-style testing of supplements, vitamin tablets, herbal extracts, and veterinary formulations.
- **Universities & Pharmaceutical Research Institutes** — Teaching laboratories, graduate research, and method development across pharmaceutical sciences, drug delivery, and formulation engineering.
- **Regulatory & Third-Party Testing Laboratories** — Independent compendial testing, certification services, and regulatory submission support for pharma clients worldwide.

FEATURES

Why Choose Torontech for Your Pharmaceutical Testing Needs

With more than two decades of experience supplying advanced analytical and QC instruments to pharmaceutical companies, contract laboratories, and research institutions across more than 60 countries, Torontech delivers premium pharmaceutical testing performance backed by global expertise.

Comprehensive Single-Source Portfolio

From density meters and dissolution testers through hardness, friability, disintegration, leak, tap-density, flowability, and inhaler testing — Torontech offers one of the most complete pharmaceutical QC portfolios available, simplifying procurement, validation, training, and service across your entire QC laboratory.

Full Pharmacopoeia Compliance

Every Torontech pharmaceutical instrument is engineered for full compliance with the world's leading pharmacopoeias and regulations — USP, EP, JP, IP, ASTM, ISO, and FDA 21 CFR Part 11. This ensures every test result is universally accepted, audit-ready, and defensible in regulatory submissions and customer reviews.

Data Integrity & 21 CFR Part 11 Support

Advanced models (such as ToronDDM-70 and DDM-90) deliver complete data-integrity architecture: audit trails, electronic signatures, multi-user permission control, and MD5-protected file export. Combined with PDF/Excel reporting and Wi-Fi printing, your QC laboratory is ready for FDA, EMA, and global regulatory audits.

Engineered for Reliability & Precision

Torontech instruments combine premium engineering — Peltier temperature control, AI-driven parameter setting, HD bubble detection, programmable PID systems, and intuitive touchscreen interfaces — to deliver the repeatable, drift-free results

that demanding pharmaceutical QC requires.

Cost-Effective Value & Global Support

Torontech delivers premium pharmaceutical testing performance at a transparent, competitive price point. With offices and authorized partners across the USA, Canada, UAE, KSA, GCC, EU, India, APAC, Africa, and Latin America, expert installation, IQ/OQ/PQ qualification, training, and service are always within reach.

TECHNICAL SPECIFICATIONS

Product Comparison Table

Instrument	Function / Test	Key Features & Compliance
Digital Density Meters (ToronDDM-50 / 70 / 90 / P100)	Liquid density, specific gravity & concentration of APIs, excipients, solvents, formulations	Oscillating U-tube; resolution to ± 0.00001 g/cm ³ ; AI parameter setting; Peltier temperature control; HD bubble detection; 21 CFR Part 11 (DDM-70/90); ASTM D7777-24 (P100)
Dissolution Testers	In-vitro dissolution rate of tablets, capsules, transdermals (USP Apparatus 1, 2)	Multi-vessel, programmable; auto-sampling options; USP <711>, EP, JP, IP-compliant; precise temp & stirring control

Electromagnetic Sieve Shaker	Particle size analysis & grading of powders, granules, raw materials	Electromagnetic vibration (no rotating parts); 3D throw motion; programmable amplitude & timing; ASTM E11, ISO 3310 sieve compliance
Tablet Hardness Testers	Crushing strength / breaking force of tablets & caplets	Manual / semi-auto / fully auto models; force range up to ~500 N; USP <1217>, EP-compliant; data export & QC reports
Disintegration Testers	Disintegration time of tablets, capsules & suppositories	USP <701> & <2040>-compliant; 1, 2, or 3 basket-rack stations; programmable cycles; precise temp control (37 °C)
Leak Tester LT-101P	Package integrity / vacuum leak test for blister packs, strips, sachets	Vacuum chamber method; USP <1207>; programmable vacuum level & dwell time; visual leak confirmation
Tap Density Tester	Bulk & tapped density of powders, granules	USP <616>, EP 2.9.34, JP-compliant; programmable tap count; dual-station options; precise tap rate
Friability Testers	Mechanical resistance / abrasion of uncoated tablets	USP <1216>, EP 2.9.7-compliant; programmable rotation count & speed; single or dual drum
Powder Flowability Tester EFT-01	Flow properties of pharmaceutical powders (angle of repose, flow rate, density)	Comprehensive flowability characterization for formulation development; USP <1174>-aligned methodology
Gelatine Capsule & Soft-Gel Hardness Tester (Auto PharmaCheck)	Mechanical strength of gelatine and soft-gel capsules	Automated breaking-force measurement; specialized fixture for soft-gel & hard-gel capsules; QC-grade reproducibility

Inhaler Testing Instruments	Performance testing of MDIs, DPIs, nasal sprays (DUSA, dose content uniformity, aerodynamic particle size)	USP <601>, <603>, <905>; supports cascade impactor, vacuum pumps, breath simulators for full inhaler QC workflow
------------------------------------	--	--



Torontech Inc.

251 Consumers Road, Suite 1200
Toronto, Ontario, M2J 4R3, Canada 🇨🇦

Phone: +1 416 368 2721 | Fax: +1 416 981 7652
Email: info@torontech.com

Torontech, LLC

601 Brickell Key Drive, Suite 700
Miami, FL 33131, USA 🇺🇸

Toll-Free: 1-866-383-7919
Email: sales@torontech.com

Torontech ME FZE

Meydan Grandstand, 6th Floor,
Meydan Road, Nad Al Sheba,
Dubai-261440, UAE 🇦🇪

Phone: +971 488 19252
Email: me@torontech.com

