

## Test Equipment Suppliers for TAPPI Test Methods

TAPPI does not sanction the companies cited in this list. TAPPI provides this information as a service to its members and the general public. This information was obtained initially from a survey of industry test equipment suppliers; it is updated as new information is provided by the test method reviewers or the suppliers. To be included in the current supplier list, please email the Standards Department at [standards@tappi.org](mailto:standards@tappi.org), or call +1-770-209-7276, or fax a memo to that department's attention at +1-770-446-6947.

**Suppliers on the list must confirm their listing on a regular basis. Failure to respond to requests for updated information will lead to being deleted from the list. If your company has been deleted from the list, you must contact [standards@tappi.org](mailto:standards@tappi.org) to be reinstated.**

NOTE 1: Only TAPPI Test Methods with known equipment suppliers are listed. Any errors or unlisted suppliers may be brought to the attention of the TAPPI Quality and Standards Department.

NOTE 2: This list was updated July 31, 2018.

### METHOD

### EQUIPMENT

### COMPANY

T 200 Laboratory beating of pulp (Valley beater method)

Complete Equipment  
Complete Equipment  
Complete Equipment  
Complete Equipment  
Complete Equipment  
Complete Equipment

KPC-Horizon, LLC  
OpTest Equipment Inc.  
Regmed Indústria Técnica de Precisão Ltda  
Testing Machines Inc.  
Voith Paper  
Techlab Systems, S.L.

T 205 Forming handsheets for physical test of pulp

Complete Equipment  
Complete Equipment  
Complete Equipment  
Complete Equipment  
Complete Equipment  
Complete Equipment  
Complete Equipment  
Complete Equipment

Adirondack Machine Corporation  
KPC-Horizon, LLC  
KPC-Horizon, LLC  
OpTest Equipment Inc.  
Regmed Indústria Técnica de Precisão Ltda.  
Technidyne Corporation  
Techpap, Inc.  
Testing Machines Inc.  
Techlab Systems, S.L.

T 210 Weighing, sampling, and testing pulp for moisture

Complete Equipment  
Complete Equipment  
Controlled Testing Environment  
Complete Equipment  
Complete Equipment

Adirondack Machine Corporation  
KPC-Horizon, LLC  
Parameter Generation & Control, Inc.  
Testing Machines Inc.  
Techlab Systems, S.L.

T 211	Ash in wood and pulp	Complete Equipment	KPC-Horizon, LLC
T 213	Dirt in pulp	Complete Equipment Micro-Scanner (FP Innovations/Paprican) Large Sheet In-speck-tor-A4 (LSI-A4) On-machine Dirt In-speck-tor (ODI) Complete Equipment Complete Equipment Complete Equipment Complete Equipment	KPC-Horizon, LLC OpTest Equipment Inc. OpTest Equipment Inc. OpTest Equipment Inc. Optomax Regmed Indústria Técnica de Precisão Ltda Techpap, Inc. Testing Machines Inc
T 218	Forming handsheets for reflectance testing of pulp (Buchner Funnel procedure)	Reflectance testers Pulp Inspector Complete Equipment	Technidyne Corporation Techpap, Inc. Testing Machines Inc.
T 220	Physical testing of pulp handsheets	Complete Equipment Complete Equipment  Complete Equipment Complete Equipment Complete Equipment Controlled Testing Environment Complete Equipment Retention aid testing Complete Equipment Complete Equipment	AMETEK-Chatillon IGT Testing Systems Complete Equipment Instron KPC-Horizon, LLC Mono Research Laboratories Inc. OpTest Equipment Inc. Parameter Generation & Control, Inc. Regmed Indústria Técnica de Precisão Ltda. Techpap, Inc. Testing Machines Inc. Techlab Systems, S.L.
T 221	Drainage time of pulp	Complete Equipment Intelligent Drainage Analyzer Complete Equipment Complete Equipment	KPC-Horizon, LLC OpTest Equipment Inc. Testing Machines Inc. Techlab Systems, S.L.
T 226	Specific external surface of pulp	Intelligent Drainage Analyzer	OpTest Equipment Inc.
T 227	Freeness of pulp	Complete Equipment Intelligent Drainage Analyzer Complete Equipment Pulp Inspector Complete Equipment Complete Equipment	KPC-Horizon, LLC OpTest Equipment Inc. Regmed Indústria Técnica de Precisão Ltda. Techpap, Inc. Testing Machines Inc. Techlab Systems, S.L.
T 230	Viscosity of pulp (capillary viscometer method)	Complete Equipment	Cannon Instrument Company

	Complete Equipment CUED solution	OpTest Equipment Inc. Reagents, Inc.
T 231 Zero-span breaking strength of pulp (dry zero-span tensile)	Complete Equipment Complete Equipment Complete Equipment Complete Equipment Controlled Testing Environment Complete Equipment Complete Equipment Tensile Tester Complete Equipment	AMETEK-Chatillon Instron KPC-Horizon, LLC Mono Research Laboratories Inc. Parameter Generation and Control Regmed Indústria Técnica de Precisão Ltda. Testing Machines Inc. Tinius Olsen Testing Machine Co., Inc. Techlab Systems, S.L.
T 232 Fiber length of pulp by projection	Fiber Quality Analyzer - 360 (FQA-360) Complete Equipment Fiber analyzer	OpTest Equipment Inc. Regmed Indústria Técnica de Precisão Ltda Techpap, Inc.
T 233 Fiber length of pulp by classification	Complete Equipment Fiber Quality Analyzer - 360 (FQA-360) Bauer McNett Fractionator Complete Equipment Fiber analyzer Complete Equipment Complete Equipment	KPC-Horizon, LLC OpTest Equipment Inc. OpTest Equipment Inc. Regmed Indústria Técnica de Precisão Ltda Techpap, Inc. Testing Machines Inc. Techlab Systems, S.L.
T 234 Coarseness of pulp fibers	Fiber Quality Analyzer - 360 (FQA-360) Complete Equipment Fiber Analyzer Classifier, Blotter Paper	OpTest Equipment, Inc Regmed Indústria Técnica de Precisão Ltda Techpap, Inc. Testing Machines Inc.
T 236 Kappa number of pulp	Complete Equipment	OpTest Equipment Inc.
T 240 Consistency (concentration) of pulp suspensions	Complete Equipment Complete Equipment	Adirondack Machine Corporation Testing Machines Inc.
T 248 Laboratory Beating of Pulp (PFI Mill Method)	PFI Laboratory Mill	OpTest Equipment Inc.
T 252 pH and electrical conductivity of hot water extracts of pulp, paper, and paperboard	Partial Equipment	Paul N. Gardner Co., Inc.
T 254 Cupriethylenediamine disperse viscosity of pulp (falling ball method)	Viscosity Standard Oils	Baxter Diagnostics, Inc.

T 261	Fines fraction of paper stock by wet screening	Britt Jars/Complete Equipment & Parts Complete Equipment	Paper Research Materials Inc. Testing Machines Inc.
T 262	Preparation of mechanical pulps for testing	Complete Equipment Complete Equipment Complete Equipment	Adirondack Machine Corporation Testing Machines Inc. Techlab Systems, S.L.
T 271	Fiber length of pulp and paper by automated optical analyzer	Fiber Quality Analyzer - 360 (FQA-360) Complete Equipment Fiber analyzer	OpTest Equipment Inc. Regmed Indústria Técnica de Precisão Ltda Techpap, Inc.
T 272	Forming handsheets for reflectance testing of pulp (sheet machine procedure)	Complete Equipment Complete Equipment Complete Equipment Reflectance testers Pulp Inspector Complete Equipment Complete Equipment	Adirondack Machine Corporation KPC-Horizon, LLC Regmed Indústria Técnica de Precisão Ltda. Technidyne Corporation Techpap, Inc. Testing Machines Inc. Techlab Systems, S.L.
T 274	Laboratory screening of pulp (MasterScreen-type instrument)	Complete Equipment	Regmed Indústria Técnica de Precisão Ltda.
T 275	Screening of Pulp (Somerville-Type Equipment)	Complete Equipment Complete Equipment Complete Equipment Complete Equipment Complete Equipment	KPC-Horizon, LLC OpTest Equipment Inc. Regmed Indústria Técnica de Precisão Ltda Testing Machines Inc. Techlab Systems, S.L.
T 277	Macro stickies content in pulp: the “pick-up” method	Complete Equipment FP Auto Speck Coated paper/Silicone paper	Optomax Technidyne Corporation Voith Paper Inc.
T 278	Pulp screening (valley-type screening device)	Complete Equipment Complete Equipment	Testing Machines Inc. Voith Paper Inc.
T 401	Fiber analysis of paper and paperboard	Fiber Quality Analyzer - 360 (FQA-360) Fiber analyzer	OpTest Equipment Inc. Techpap, Inc.
T 402	Standard conditioning and testing atmospheres for paper, board, pulp handsheets, and related products	Controlled Testing Environment	Parameter Generation & Control, Inc.
T 403	Bursting strength of paper	Complete Equipment Burst strength tester	AMETEK-Chatillon Custom Scientific Instruments, Inc.

	Complete Equipment	KPC-Horizon, LLC
	Complete Equipment	Instron
	Burst Testers	Mullen Testers
	Complete Equipment	OpTest Equipment Inc.
	Controlled Testing Environment	Parameter Generation and Control
	Complete Equipment	Regmed Indústria Técnica de Precisão Ltda.
	Complete Equipment	Technidyne Corporation
	Complete Equipment	Testing Machines Inc.
	Complete Equipment	Techlab Systems, S.L.
T 410 Grammage of paper and paperboard (weight per unit area)	Complete Equipment	KPC-Horizon, LLC
	Circular Sample Cutter	OpTest Equipment Inc.
	Controlled Testing Environment	Parameter Generation and Control
	Complete Equipment	Regmed Indústria Técnica de Precisão Ltda.
	Complete Equipment	Technidyne Corporation
	Complete Equipment	Testing Machines Inc.
	Complete Equipment	Techlab Systems, S.L.
T 411 Thickness (caliper) of paper, paperboard, and combined board	Complete Equipment	B.C. Ames Inc.
	Thickness guage	Custom Scientific Instruments, Inc.
	Complete Equipment	IGT Testing Systems
	Complete Equipment	KPC-Horizon, LLC
	Universal Micrometer	OpTest Equipment Inc.
	Controlled Testing Environment	Parameter Generation and Control
	Complete Equipment	Paul N. Gardner Co., Inc.
	Complete Equipment	Regmed Indústria Técnica de Precisão Ltda.
	Complete Equipment	Standard Scientific LLC
	Complete Equipment	Technidyne Corporation
	Complete Equipment	Testing Machines Inc.
	Complete Equipment	Techlab Systems, S.L.
T 412 Moisture in paper and paperboard	Complete Equipment	KPC-Horizon, LLC
	Controlled Testing Environment	Parameter Generation & Control, Inc.
	Complete Equipment	Paul N. Gardner Co., Inc.
	Complete Equipment	Regmed Indústria Técnica de Precisão Ltda.
	Complete Equipment	Techpap, Inc.
	Complete Equipment	Testing Machines Inc.
	Complete Equipment	Techlab Systems, S.L.
T 413 Ash in paper and paperboard	Complete Equipment	KPC-Horizon, LLC
	Complete Equipment	Testing Machines Inc.
	Complete Equipment	Techlab Systems, S.L.

T 414 Internal tearing resistance of paper (Elmendorf-type method)	Pendulum tear tester Complete Equipment Complete Equipment Controlled Testing Environment Complete Equipment Complete Equipment Partial Equipment Complete Equipment	Custom Scientific Instruments, Inc. KPC-Horizon, LLC OpTest Equipment Inc. Parameter Generation and Control Regmed Indústria Técnica de Precisão Ltda. Testing Machines Inc. Paul N. Gardner Co., Inc. Techlab Systems, S.L.
T 423 Folding endurance of paper (Schopper-type tester)	Complete Equipment Controlled Testing Environment Complete Equipment	OpTest Equipment Inc. Parameter Generation and Control Testing Machines Inc.
T 425 Opacity of paper (15°/diffuse illuminant A, 89% reflectance backing and paper backing)	Complete Equipment Complete Equipment Complete Equipment Complete Equipment Opacity meter	KPC-Horizon, LLC Paul N. Gardner Co., Inc. Technidyne Corporation Technidyne Corporation Testing Machines Inc.
T 437 Dirt in paper and paperboard	Complete Equipment Micro-Scanner (FP Innovations/Paprican) Complete Equipment Complete Equipment Complete Equipment	KPC-Horizon, LLC OpTest Equipment Inc. Optomax Techpap, Inc. Testing Machines Inc.
T 441 Water absorptiveness of sized nonbibulous paper and paperboard (Cobb test)	Complete Equipment Complete Equipment Complete Equipment Complete Equipment Controlled Testing Environment Complete Equipment Complete Equipment Water absorption apparatus Complete Equipment Complete Equipment	Gurley Precision Instruments IGT Testing Systems KPC-Horizon, LLC OpTest Equipment Inc. Parameter Generation & Control, Inc. Regmed Indústria Técnica de Precisão Ltda. Technidyne Corporation Techpap, Inc. Testing Machines Inc. Techlab Systems, S.L.
T 448 Water vapor transmission rate of sheet materials at standard temperature and humidity	Complete Equipment Controlled Testing Environment Vapor Permeability	KPC-Horizon, LLC Parameter Generation & Control, Inc. Regmed Indústria Técnica de Precisão Ltda.

	Test Dish Test Dish	Stewart Assembly and Machining Testing Machines Inc.
T 452 Brightness of pulp, paper, and paperboard (directional reflectance at 457 nm)	Complete Equipment Complete Equipment Partial Equipment Brightness testers Complete Equipment	KPC-Horizon, LLC Paul N. Gardner Co., Inc. Techpap, Inc. Technidyne Corporation Testing Machines, Inc.
T 456 Wet Tensile Breaking Strength of Paper and Paperboard (“Wet Tensile Strength”)	Double Blade Cizalle Horizontal Tensile Machine Universal Tensile Machine	OpTest Equipment Inc. OpTest Equipment Inc. OpTest Equipment Inc.
T 458 Surface wettability of paper (angle of contact method)	Complete Equipment Complete Equipment Complete Equipment	KPC-Horizon, LLC Paul N. Gardner Co., Inc. Testing Machines Inc.
T 459 Surface strength of paper (wax pick test)	Complete Equipment Complete Equipment Controlled Testing Environment Complete Equipment Complete Equipment	KPC-Horizon, LLC OpTest Equipment Inc. Parameter Generation and Control Testing Machines Inc. Techlab Systems, S.L.
T 460 Air resistance of paper (Gurley Method)	Complete Equipment Complete Equipment Complete Equipment Complete Equipment Complete Equipment Complete Equipment	Gurley Precision Instruments KPC-Horizon, LLC OpTest Equipment Inc. Regmed Indústria Técnica de Precisão Ltda. Technidyne Corporation Testing Machines Inc. Techlab Systems, S.L.
T 461 Flame resistance of treated paper and paperboard	Flammability tester Controlled Testing Environment Complete Equipment	Custom Scientific Instruments, Inc. Parameter Generation and Control Standard Scientific LLC
T 464 Water vapor transmission rate of paper and paperboard at high temperature and humidity	Controlled Testing Environment Partial Equipment Test Dish	Parameter Generation & Control, Inc. Regmed Indústria Técnica de Precisão Ltda. Testing Machines Inc.
T 476 Abrasion loss of paper and paperboard	Complete Equipment	KPC-Horizon, LLC

	Complete Equipment Controlled Testing Environment Complete Equipment Complete Equipment Complete Equipment	OpTest Equipment Inc. Parameter Generation and Control Paul N. Gardner Co., Inc. Taber Industries Testing Machines Inc.
T 479 Smoothness of paper (Bekk method)	Complete Equipment Complete Equipment Controlled Testing Environment Topographical smoothness Complete Equipment	AMETEK-Chatillon OpTest Equipment Inc. Parameter Generation and Control Techpap, Inc. Testing Machines Inc.
T 480 Specular gloss of paper and paperboard at 75°	Complete Equipment Glossmeters, 60° Geometry Bench Glossmeters Microgloss Glossmeters Glossmeter Complete Equipment	KPC-Horizon, LLC Paul N. Gardner Co., Inc. Sheen Instruments, Inc. Sheen Instruments, Inc. Technidyne Corporation Testing Machines Inc.
T 489 Stiffness of paper and paperboard (Taber-type stiffness tester)	Complete Equipment Complete Equipment Controlled Testing Environment Complete Equipment Complete Equipment Complete Equipment Complete Equipment	AMETEK-Chatillon KPC-Horizon, LLC Parameter Generation and Control Regmed Indústria Técnica de Precisão Ltda. Paul N. Gardner Co., Inc. Taber Industries Testing Machines Inc.
T 494 Tensile breaking properties of paper and paperboard (using constant rate of elongation apparatus)	Tensile Testing Machine Complete Equipment Complete Equipment Complete Equipment Complete Equipment Complete Equipment Controlled Testing Environment Complete Equipment Complete Equipment Complete Equipment Complete Equipment Complete Equipment	AMETEK-Chatillon Instron KPC-Horizon, LLC Mono Research Laboratories Inc. Regmed Indústria Técnica de Precisão Ltda. OpTest Equipment Inc. Parameter Generation and Control Paul N. Gardner Co., Inc. Technidyne Corporation Testing Machines Inc. Tinius Olsen Testing Machine Co., Inc. Techlab Systems, S.L.
T 500 Book bulk and bulking number of paper	Book Bulk and Bulk Number Tester	Custom Scientific Instruments, Inc.

	Controlled Testing Environment Complete Equipment	Parameter Generation & Control, Inc. Standard Scientific LLC
T 507 Grease resistance of flexible packaging materials	Complete Equipment	KPC-Horizon, LLC
T 511 Folding endurance of paper (MIT tester)	Complete Equipment Complete Equipment Complete Equipment Controlled Testing Environment Complete Equipment Complete Equipment	AMETEK-Chatillon KPC-Horizon, LLC OpTest Equipment Inc. Parameter Generation and Control Testing Machines Inc. Tinius Olsen Testing Machine Co., Inc.
T 512 Creasing of flexible packaging material paper specimens for testing	Complete Equipment Complete Equipment	KPC-Horizon, LLC Regmed Indústria Técnica de Precisão Ltda
T 515 Visual grading and color matching of paper	Controlled Testing Environment Color Matching Booths Complete Equipment	Parameter Generation and Control Paul N. Gardner Co., Inc. Testing Machines, Inc.
T 516 Envelope seal, seam, and window patch testing	Controlled Testing Environment	Parameter Generation & Control, Inc.
T 519 Diffuse opacity of paper ( $d/0$ paper backing)	Complete Equipment Complete Equipment Complete Equipment Complete Equipment	KPC-Horizon, LLC OpTest Equipment Inc. Technidyne Corporation Testing Machines Inc.
T 524 $L, a, b, 45^\circ/0^\circ$ colorimetry of white and near-white paper and paperboard	Complete Equipment Controlled Testing Environment Complete Equipment Complete Equipment Complete Equipment	KPC-Horizon, LLC Parameter Generation and Control Paul N. Gardner Co., Inc. Technidyne Corporation Testing Machines, Inc.
T 525 Diffuse brightness of pulp ( $d/0^\circ$ )	Complete Equipment Complete Equipment Spectrophotometers Partial Equipment Complete Equipment Complete Equipment	KPC-Horizon, LLC OpTest Equipment Inc. Paul N. Gardner Co., Inc. Techpap, Inc. Technidyne Corporation Testing Machines Inc.
T 526 Blister resistance of coated paper in heatset printing	Partial Equipment	KPC-Horizon, LLC
T 527 Color of paper and paperboard in CIE $Y; x, y, Y$ , dominant wavelength and		

excitation purity	Complete Equipment Controlled Testing Environment Complete Equipment Complete Equipment Complete Equipment	OpTest Equipment Inc. Parameter Generation and Control Paul N. Gardner Co., Inc. Technidyne Corporation Testing Machines Inc.
T 529 Surface pH measurement of paper	Complete Equipment	Paul N. Gardner Co., Inc.
T 536 Resistance of paper to passage of air (high pressure Gurley Method)	Complete Equipment Complete Equipment Controlled Testing Environment Complete Equipment Complete Equipment Complete Equipment	Gurley Precision Instruments KPC-Horizon, LLC Parameter Generation and Control Technidyne Corporation Testing Machines Inc. Techlab Systems, S.L.
T 537 Dirt count in paper and paperboard (optical character recognition - OCR)	Micro-Scanner (FP Innovations/Paprican) Complete Equipment Complete Equipment Complete Equipment	OpTest Equipment Inc. Optomax Techpap, Inc. Testing Machines Inc.
T 538 Roughness of paper and paperboard (Sheffield Method)	Complete Equipment Complete Equipment Topographical and optical apparatus Complete Equipment Complete Equipment	Gurley Precision Instruments KPC-Horizon, LLC Techpap, Inc. Technidyne Corporation Testing Machines Inc.
T 541 Internal bond strength of paperboard (z-direction tensile)	Complete Equipment Complete Equipment Complete Equipment Complete Equipment Controlled Testing Environment Complete Equipment Complete Equipment Complete Equipment Tensile Tester Complete Equipment	AMETEK-Chatillon Custom Scientific Instruments, Inc. Instron KPC-Horizon, LLC Mono Research Laboratories Inc. Parameter Generation & Control, Inc. Regmed Indústria Técnica de Precisão Ltda. Standard Scientific LLC Testing Machines Inc. Tinius Olsen Testing Machine Co., Inc. Techlab Systems, S.L.
T 543 Stiffness of paper (Gurley type stiffness tester)	Complete Equipment Complete Equipment Controlled Testing Environment Complete Equipment	Gurley Precision Instruments KPC-Horizon, LLC Parameter Generation & Control, Inc. Testing Machines, Inc.

T 545	Cross-machine grammage profile measurement (gravimetric method)	Controlled Testing Environment	Parameter Generation and Control
T 546	Machine direction grammage variation measurement (gravimetric method)	Controlled Testing Environment Complete Equipment	Parameter Generation & Control, Inc. Instron
T 547	Air permeability of paper and paperboard (Sheffield-type)	Complete Equipment Controlled Testing Environment Complete Equipment Complete Equipment	KPC-Horizon, LLC Parameter Generation & Control, Inc. Technidyne Corporation Testing Machines Inc.
T 549	Coefficient of static and kinetic friction of uncoated writing and printing paper by use of the horizontal plane method	Complete Equipment Static and Kinetic Coefficient Tester Complete Equipment Complete Equipment Complete Equipment Complete Equipment Complete Equipment Complete Equipment Complete Equipment Complete Equipment	AMETEK-Chatillon Custom Scientific Instruments, Inc. Instron KPC-Horizon, LLC Mono Research Laboratories Inc. OpTest Equipment Inc. Standard Scientific LLC Paul N. Gardner Co., Inc. Regmed Indústria Técnica de Precisão Ltda. Testing Machines Inc. Techlab Systems, S.L.
T 551	Thickness of paper and paperboard (soft platen method)	Complete Equipment Controlled Testing Environment Complete Equipment	KPC-Horizon, LLC Parameter Generation & Control, Inc. Testing Machines Inc.
T 555	Roughness of paper and paperboard (Print Surf method)	Complete Equipment Complete Equipment Controlled Testing Environment Topographical and optical apparatus Complete Equipment Complete Equipment	KPC-Horizon, LLC OpTest Equipment Inc. Parameter Generation & Control, Inc. Techpap, Inc. Technidyne Corporation Testing Machines Inc.
T 556	Bending resistance of paper and paperboard (Lorentzen & Wettre type tester)	Complete Equipment Complete Equipment	OpTest Equipment Inc. Paul N. Gardner Co., Inc.
T 559	Grease resistance test for paper and paperboard	Controlled Testing Environment	Parameter Generation & Control, Inc.
T 563	Equivalent black area (EBA) and count of visible dirt in pulp, paper and		

paperboard by image analysis	Micro-Scanner (FP Innovations/Paprican) Large Sheet In-Speck-Tor Complete Equipment Complete Equipment	OpTest Equipment Inc. OpTest Equipment Inc. Optomax Testing Machines Inc.
T 566 Bending resistance (stiffness) of paper (Taber-type tester in 0 to 10 Taber stiffness unit configuration)	Complete Equipment Controlled Testing Environment Complete Equipment Complete Equipment Complete Equipment	KPC-Horizon, LLC Parameter Generation and Control Paul N. Gardner Co., Inc. Taber Industries Testing Machines Inc.
T 568 Physical area of sub-visible contraries in pulp, paper and paperboard by image analysis	Complete Equipment Micro-Scanner (FP Innovations/Paprican)	Optomax OpTest Equipment Inc.
T 569 Internal bond strength (Scott type)	Complete Equipment Complete Equipment Controlled Testing Environment Complete Equipment Complete Equipment Complete Equipment	KPC-Horizon, LLC OpTest Equipment Inc. Parameter Generation and Control Regmed Indústria Técnica de Precisão Ltda. Testing Machines Inc. Techlab Systems, S.L.
T 576 Tensile properties of towel and tissue products (using constant rate of elongation apparatus)	Tensile Testing Machine Complete Equipment Complete Equipment Complete Equipment Complete Equipment Complete Equipment Controlled Testing Environment Complete Equipment Complete Equipment Complete Equipment Complete Equipment	AMETEK-Chatillon Instron KPC-Horizon, LLC Mono Research Laboratories Inc. Regmed Indústria Técnica de Precisão Ltda. OpTest Equipment Inc. Parameter Generation and Control Paul N. Gardner Co., Inc. Technidyne Corporation Testing Machines Inc. Tinius Olsen Testing Machine Co., Inc.
T 648 Viscosity of coating clay slurry	Complete Equipment Viscometers Complete Equipment Complete Equipment	KPC-Horizon, LLC Kaltec Scientific, Inc. Paul N. Gardner Co., Inc. Testing Machines, Inc.
T 653 Specular gloss of paper and paperboard at 20°	Complete Equipment	KPC-Horizon, LLC

	Complete Equipment Controlled Testing Environment Glossmeters, 75° Geometry Complete Equipment Complete Equipment	KPC-Horizon, LLC Parameter Generation & Control, Inc. Paul N. Gardner Co., Inc. Technidyne Corporation Testing Machines Inc.
T 676 Viscosity of starch and starch products	Complete Equipment Complete Equipment	KPC-Horizon, LLC Paul N. Gardner Co., Inc.
T 800 Drum test for fiberboard shipping containers (revolving hexagonal drum)	Controlled Testing Environment	Parameter Generation & Control, Inc.
T 802 Drop test for fiberboard shipping containers	Complete Equipment Controlled Testing Environment Complete Equipment Complete Equipment	Lansmont Corporation Parameter Generation & Control, Inc. Regmed Indústria Técnica de Precisão Ltda. Testing Machines, Inc.
T 803 Puncture test of containerboard	Complete Equipment Complete Equipment Complete Equipment Complete Equipment Controlled Testing Environment Complete Equipment Complete Equipment	AMETEK-Chatillon Instron KPC-Horizon, LLC Mono Research Laboratories Inc. OpTest Equipment Inc. Parameter Generation and Control Testing Machines Inc. Techlab Systems, S.L.
T 804 Compression test of fiberboard shipping containers	Complete Equipment Complete Equipment Complete Equipment Complete Equipment Complete Equipment Controlled Testing Environment Complete Equipment Complete Equipment Compression Tester Complete Equipment	AMETEK-Chatillon Instron KPC-Horizon, LLC Lansmont Corporation Mono Research Laboratories Inc. OpTest Equipment Inc. Parameter Generation & Control, Inc. Regmed Indústria Técnica de Precisão Ltda. Testing Machines Inc. Tinius Olsen Testing Machine Co., Inc. Techlab Systems, S.L.
T 807 Bursting strength of paperboard and linerboard	Complete Equipment Complete Equipment Complete Equipment Burst Testers Complete Equipment	AMETEK-Chatillon Instron KPC-Horizon, LLC Mullen Testers OpTest Equipment Inc.

	Controlled Testing Environment Complete Equipment Complete Equipment Complete Equipment Complete Equipment	Parameter Generation & Control, Inc. Regmed Indústria Técnica de Precisão Ltda. Technidyne Corporation Testing Machines Inc. Techlab Systems, S.L.
T 808 Flat crush test of corrugated board (flexible beam method)	Complete Equipment Complete Equipment Complete Equipment Sample Crush Tester Controlled Testing Environment Specimen Cutter Complete Equipment Compression Machine Complete Equipment	AMETEK-Chatillon Instron Mono Research Laboratories Inc. OpTest Equipment Inc. Parameter Generation and Control Regmed Indústria Técnica de Precisão Ltda Testing Machines Inc. Tinius Olsen Testing Machine Co., Inc. Techlab Systems, S.L.
T 809 Flat crush of corrugating medium (CMT test)	Complete Equipment Complete Equipment Complete Equipment Complete Equipment Controlled Testing Environment Complete Equipment Complete Equipment Compression Machine Complete Equipment	AMETEK-Chatillon Instron KPC-Horizon, LLC Mono Research Laboratories Inc. OpTest Equipment Inc. Parameter Generation & Control, Inc. Regmed Indústria Técnica de Precisão Ltda. Testing Machines Inc. Tinius Olsen Testing Machine Co., Inc. Techlab Systems, S.L.
T 810 Burst strength of corrugated and solid fiberboard	Complete Equipment Complete Equipment Complete Equipment Burst Testers Complete Equipment Controlled Testing Environment Complete Equipment Complete Equipment Complete Equipment Complete Equipment	AMETEK-Chatillon Instron KPC-Horizon, LLC Mullen Testers OpTest Equipment Inc. Parameter Generation & Control, Inc. Regmed Indústria Técnica de Precisão Ltda. Technidyne Corporation Testing Machines Inc. Techlab Systems, S.L.
T 811 Edgewise compressive strength of corrugated fiberboard (short column test)	Complete Equipment Complete Equipment Complete Equipment Complete Equipment	AMETEK-Chatillon Instron KPC-Horizon, LLC Mono Research Laboratories Inc.

	<p>Sample Crush Tester  Controlled Testing Environment  Complete Equipment  Complete Equipment  Compression Tester  Complete Equipment</p>	<p>OpTest Equipment Inc.  Parameter Generation &amp; Control, Inc.  Regmed Indústria Técnica de Precisão Ltda.  Testing Machines Inc.  Tinius Olsen Testing Machine Co., Inc.  Techlab Systems, S.L.</p>
T 812 Ply separation of solid and corrugated fiberboard (wet)	<p>Complete Equipment  Complete Equipment  Complete Equipment  Complete Equipment</p>	<p>AMETEK-Chatillon  Instron  Regmed Indústria Técnica de Precisão Ltda.  Testing Machines, Inc.</p>
T 815 Coefficient of static friction (slide angle) of packaging and packaging materials (including shipping sack papers, corrugated and solid fiberboard) (inclined plane method)	<p>Complete Equipment  Complete Equipment  Complete Equipment  Controlled Testing Environment  Complete Equipment  Complete Equipment  Partial Equipment</p>	<p>Custom Scientific Instruments, Inc.  KPC-Horizon, LLC  OpTest Equipment Inc.  Parameter Generation &amp; Control, Inc.  Standard Scientific LLC  Testing Machines Inc.  Paul N. Gardner Co., Inc.</p>
T 818 Ring crush of paperboard	<p>Complete Equipment  Complete Equipment  Complete Equipment  Complete Equipment  Complete Equipment  Controlled Testing Environment  Specimen Holder  Complete Equipment  Complete Equipment  Compression Machine  Complete Equipment</p>	<p>AMETEK-Chatillon  Instron  KPC-Horizon, LLC  Mono Research Laboratories Inc.  OpTest Equipment Inc.  Parameter Generation &amp; Control, Inc.  Regmed Indústria Técnica de Precisão Ltda  Techpap, Inc.  Testing Machines Inc.  Tinius Olsen Testing Machine Co., Inc.  Techlab Systems, S.L.</p>
T 820 Flexural stiffness of corrugated board	<p>Complete Equipment  Complete Equipment  Complete Equipment  Controlled Testing Environment  Complete Equipment  Complete Equipment</p>	<p>AMETEK-Chatillon  Instron  Mono Research Laboratories Inc.  Parameter Generation and Control  Testing Machines Inc.  Techlab Systems, S.L.</p>
T 821 Pin adhesion of corrugated board by selective separation	<p>Complete Equipment</p>	<p>Instron</p>

	Complete Equipment Complete Equipment Sample Crush Tester Complete Equipment Complete Equipment Complete Equipment	KPC-Horizon, LLC Mono Research Laboratories Inc. OpTest Equipment Inc. Regmed Indústria Técnica de Precisão Ltda. Testing Machines Inc. Techlab Systems, S.L.
T 822 Ring crush of paperboard (rigid support method)	Complete Equipment Complete Equipment Complete Equipment Complete Equipment Controlled Testing Environment Complete Equipment Complete Equipment Complete Equipment Compression machine Complete Equipment	AMETEK-Chatillon Instron KPC-Horizon, LLC Mono Research Laboratories Inc. OpTest Equipment Inc. Parameter Generation and Control Regmed Indústria Técnica de Precisão Ltda. Techpap, Inc. Testing Machines Inc. Tinius Olsen Testing Machine Co., Inc. Techlab Systems, S.L.
T 824 Fluted edge crush of corrugated medium	Complete Equipment Complete Equipment Complete Equipment Controlled Testing Environment Medium Fluter/Specimen Holder Complete Equipment Compression machine Complete Equipment	AMETEK-Chatillon Instron Mono Research Laboratories Inc. Parameter Generation and Control Regmed Indústria Técnica de Precisão Ltda. Testing Machines Inc. Tinius Olsen Testing Machine Co., Inc. Techlab Systems, S.L.
T 825 Flat crush test of corrugated board (rigid support method)	Complete Equipment Complete Equipment Complete Equipment Complete Equipment Sample Cutter Controlled Testing Environment Complete Equipment Complete Equipment Complete Equipment	AMETEK-Chatillon Instron KPC-Horizon, LLC Mono Research Laboratories Inc. OpTest Equipment Inc. Parameter Generation & Control, Inc. Regmed Indústria Técnica de Precisão Ltda. Testing Machines, Inc. Techlab Systems, S.L.
T 826 Short span compressive strength of containerboard	Complete Equipment Controlled Testing Environment Complete Equipment Complete Equipment	OpTest Equipment Inc. Parameter Generation and Control Testing Machines Inc. Techlab Systems, S.L.

T 829	Score quality test	Force Gauge/Load Cell Complete Equipment Complete Equipment Complete Equipment Controlled Testing Environment Complete Equipment Complete Equipment Complete Equipment Force Gauge/Load Cell Complete Equipment	AMETEK-Chatillon Custom Scientific Instruments, Inc. Instron Mono Research Laboratories Inc. Parameter Generation & Control, Inc. Regmed Indústria Técnica de Precisão Ltda Standard Scientific LLC Techpap, Inc. Testing Machines Inc. Techlab Systems, S.L.
T 831	Water absorption of corrugating medium: water drop penetration test	Controlled Testing Environment	Parameter Generation & Control, Inc.
T 834	Determination of paperboard roll hardness	Complete Equipment Complete Equipment Complete Equipment Partial Equipment	KPC-Horizon, LLC Regmed Indústria Técnica de Precisão Ltda. Testing Machines Inc. Paul N. Gardner Co., Inc.
T 835	Water absorption of corrugating medium: water drop absorption test	Controlled Testing Environment	Parameter Generation & Control, Inc.
T 836	Bending stiffness, four point method	Complete Equipment Complete Equipment Complete Equipment Controlled Testing Environment Complete Equipment Complete Equipment	AMETEK-Chatillon Instron Mono Research Laboratories Inc. Parameter Generation and Control Testing Machines Inc. Techlab Systems, S.L.
T 838	Edge crush test using neckdown	Complete Equipment Complete Equipment Complete Equipment ECT Neck-down Cutter Complete Equipment Complete Equipment Complete Equipment	AMETEK-Chatillon Instron Mono Research Laboratories Inc. OpTest Equipment Inc. Regmed Indústria Técnica de Precisão Ltda. Testing Machines Inc. Techlab Systems, S.L.
T 839	Edgewise compressive strength of corrugated fiberboard using the clamp method (short column test)	Test Fixture Sample Crush Tester Complete Equipment Complete Equipment Complete Equipment	KPC-Horizon, LLC OpTest Equipment Inc. Regmed Indústria Técnica de Precisão Ltda. Testing Machines Inc. Techlab Systems, S.L.

T 843 Fluted edge crush of corrugating medium (rigid support method)

Complete Equipment  
Controlled Testing Environment  
Complete Equipment  
Complete Equipment  
Complete Equipment

Instron  
Parameter Generation and Control  
Regmed Indústria Técnica de Precisão Ltda  
Testing Machines Inc.  
Techlab Systems, S.L.

T 1015 Fiber Glass Mat Uniformity (Visual Defects)

Complete Equipment  
Complete Equipment

Regmed Indústria Técnica de Precisão Ltda  
Techpap, Inc.