

INDUSTRIAL LABORATORY EQUIPMENT COMPANY



Textile Testing Instruments

3210 Piper Lane – Charlotte, NC 28208 – U.S.A.
PO Box 220245 – Charlotte, NC 28222 – U.S.A.
Phone: 704-357-3930 – Email: ile@ile-textiles.com

Catalog 2026

INDEX

ITEM	Page Number
Micronaire Testers	3
Trash Analyzers	3
Hygrometers, Thermometers, & Recorders	4-5
Sliver Reels	6
Moisture - Humidity	7-11
Evenness Testers	12-15
Scales & Balances	16-19
Yarn Reels	20-21
Twist Testers	22-23
Inspection Winders	24-25
Durometers	26
Yarn: Friction Tester	27
Tension Meters	28-29
Stroboscopes	30
Tachometers, Yarn Length Indicator	31
Force Testers	32-35
Elmendorf Testers	36
Thickness Gauges	37
Mace Snag Testers	38-39
Abrasion Testers	40-41
Crock Meters	42
Gray Scales	43
Color Assessment Cabinets	44
Microscopes	45-47
Linen Testers	48
Optical Thread Counters	48
Fabric Yield, Fabric Cutters & Balances	49-52
Viscometers	53
Refractometers	54
pH Meters	54
Perspiration Testers	54
Ovens	55-57
Shrinkage Ovens	58

INDUSTRIAL LABORATORY EQUIPMENT COMPANY, INC.

3210 Piper Lane – Charlotte, NC 28208 – U.S.A.

PO Box 220245 – Charlotte, NC 28222 – U.S.A.

Phone: 704-357-3930 – Email: ile@ile-textiles.com



Cotton Fineness Meter (Micronaire tester)

Complete with electronic vacuum pump, precision calibrated manometer and sample chamber.

**Calibration Cottons:
Call for details.**



Shirley Analyzer MK 2 – Cotton

To determine the lint, trash and dust content within a sample of cotton fiber up to 100 grams. Also used to determine non-fiber content of synthetic fibers and to open and clean fibers for further testing. The analyzer uses the carding principle with air separation of lint and non-lint content. With wheeled trolley for portability.

INDUSTRIAL LABORATORY EQUIPMENT COMPANY, INC.

3210 Piper Lane – Charlotte, NC 28208 – U.S.A.

PO Box 220245 – Charlotte, NC 28222 – U.S.A.

Phone: 704-357-3930 – Email: ile@ile-textiles.com

Certified Hygrometer and Temperature Indicator

Model: HTAB176

shows Relative Humidity and Temperature in both Fahrenheit and Centigrade at a glance. The Abbeon Certified Hygrometer Model HTAB-176 is certified to be accurate within $\pm 3\%$ RH. The dial indicates the complete range of 0 to 100% relative humidity. Each instrument has been tested at three different positions of the dial at temperatures ranging from 32° to 230°F. The calibration and certification are done under ISO-9001 control. The bi-metallic thermometer on the model HTAB-176 is accurate to $\pm 1\%$ of scale with a range of -20 to 100° Centigrade and 0 to 210° Fahrenheit. Graduations are 1° for Centigrade, 2° Fahrenheit and 1% RH.



Both the humidity and temperature are directly read without any calculations whatsoever. Solid 6-inch overall brass case drilled for wall mounting. Shipping weight: 3 pounds. Color differentiated 5-inch dial with black letters and numbers and a red pointer.

Thermometer Fahrenheit and Celsius Model: TAB77

The easy-to-read 5-inch dial indicates the temperature in a range of -20 to 120° Fahrenheit or -30 to 50° Celsius. The pointer actuated by a bi-metallic strip, reads with an accuracy of $\pm 1\%$ of scale. Comes with a one-year guarantee and five-year warranty.

Color differentiated 5-inch dial, 6-inch overall solid brass case, shipping weight: 3 pounds.



INDUSTRIAL LABORATORY EQUIPMENT COMPANY, INC.

3210 Piper Lane – Charlotte, NC 28208 – U.S.A.

PO Box 220245 – Charlotte, NC 28222 – U.S.A.

Phone: 704-357-3930 – Email: ile@ile-textiles.com



Temperature & Humidity Recorders



Multi-feature Temperature/Humidity Chart Recorder Model: TH803

With so many features it's sure to meet your monitoring needs!

- 8" chart size
- Digital display and audio/visual alarms
- Remote probe for hard-to-reach places

Other models available; please call or email for latest
information & pricing.

INDUSTRIAL LABORATORY EQUIPMENT COMPANY, INC.

3210 Piper Lane – Charlotte, NC 28208 – U.S.A.
PO Box 220245 – Charlotte, NC 28222 – U.S.A.
Phone: 704-357-3930 – Email: ile@ile-textiles.com



Sliver Reels

ROVING/SLIVER REEL – Model: ILE-EZ-36

Hand operated, 36" circumference, complete with counter to 999 yards.

ROVING/SLIVER REEL – Model: ILE-EZ-1M

Hand operated, 1-meter circumference, complete with counter to 999 Meters.



ACCU-REEL

Model: ILE-AR-18-E

Automatic motorized reel with electronic counter and circuits for control of fast and slow speeds. Soft start and stop. 1-yard circumference. Power requirement: 115 Volts, 60 Hz. Also available in 220 Volt, 50-60 Hz.

ACCU-REEL

Model: ILE-AR-18-M

Automatic motorized reel with electronic counter and circuits for control of fast and slow speeds. Soft start and stop. 1-meter circumference. Power requirement: 115 Volts, 60 Hz. Also available in 220 Volt, 50-60 Hz.

INDUSTRIAL LABORATORY EQUIPMENT COMPANY, INC.

3210 Piper Lane – Charlotte, NC 28208 – U.S.A.

PO Box 220245 – Charlotte, NC 28222 – U.S.A.

Phone: 704-357-3930 – Email: ile@ile-textiles.com



Moisture Balances



ILE-MB-35 MOISTURE BALANCE

Moisture determination balance. 35-gram capacity, 0.005-gram sensitivity/0.05%. Automatically determines moisture or solid content and can display both in percentage. Dual LCD display for easy programming of parameter settings.

ILE-MB-45 MOISTURE BALANCE

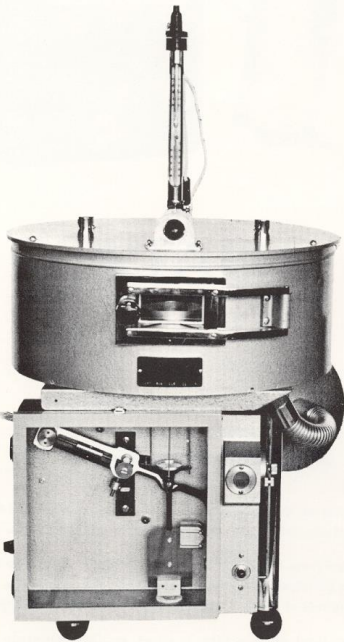
Moisture determination balance. 45-gram capacity, 0.001-gram sensitivity/0.01%. Automatically determines moisture or solid content and can display both in percentage. Dual LCD display for easy programming of parameter settings.

INDUSTRIAL LABORATORY EQUIPMENT COMPANY, INC.

3210 Piper Lane – Charlotte, NC 28208 – U.S.A.
PO Box 220245 – Charlotte, NC 28222 – U.S.A.
Phone: 704-357-3930 – Email: ile@ile-textiles.com



Moisture Oven

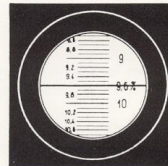


BRABENDER

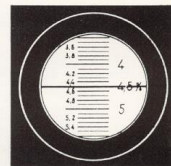
RAPID MOISTURE TESTER

MOISTURE CONTENT IN MINUTES

- NO CALCULATING
- NO DOUBLE WEIGHING
- NO DESICCATOR COOLING



Tobacco



Cotton Acetate

MOISTURE READING DIRECTLY ON DIAL

IN %

SPACE REQUIREMENTS:

Height: 33 in.
Diameter: 22 in.

WEIGHT: Approx. 77 lbs.

SHIPPING DIMENSIONS: 24 X 28 X 31 in.

INDUSTRIAL LABORATORY EQUIPMENT COMPANY, INC.

3210 Piper Lane – Charlotte, NC 28208 – U.S.A.

PO Box 220245 – Charlotte, NC 28222 – U.S.A.

Phone: 704-357-3930 – Email: ile@ile-textiles.com



Portable Moisture Monitors



Model M-200 Analog Moisture Meter

The Portable Moisture Monitor Model M-200 is a world standard for the measurement of moisture in cotton and other fibers and blends from raw stock to finished fabric. It also finds use in other hygroscopic materials such as paper, cigarette filter material and tobacco. A variety of sensing probes make the M-200 adaptable to many moisture applications in which material contact is allowed. Its features include...

- Easy-to-read analog meter with multiple scales for different materials and measurement ranges. Simple operating instructions are located on the back of the M-200 enclosure for easy use.
- All types of interchangeable sensing probes include hand rollers, needle probes, weighted surface probe, and long needle probes with spring-loaded guides, edge sensors, and special probe for insertion into tobacco bales.
- The M-200 is offered in three versions depending on application. The standard version is the Model M-200D which provides normal regain measurement ranges for most textile and related materials.
- The Model M-200B is the same as the Model M-200D but adds a special measuring circuit and range setting for higher moisture applications such as size add-on and wet pickup.
- The Model M-200C is designed for ease of use in the cotton ginning industry. It provides three very simple measurement ranges for lint and seed cotton. The Model M-200D includes all of the M-200C ranges and more.
- The Model M-200 is broadly used worldwide in the cotton marketplace.

Probes listed on page 11

INDUSTRIAL LABORATORY EQUIPMENT COMPANY, INC.

3210 Piper Lane – Charlotte, NC 28208 – U.S.A.
PO Box 220245 – Charlotte, NC 28222 – U.S.A.
Phone: 704-357-3930 – Email: ile@ile-textiles.com

Model M-400 Digital Moisture Meter



The Portable Moisture Monitor Model M-400 takes the world standard Model M-200 to the digital era. It has all the measurement ranges of the M-200 simplified into one full-span digital range. There is only one simple calibration setting to convert from the standard cotton scaling to other fibers, blends, and materials. And it uses the same interchangeable sensing probes as the M-200. Its features include...

- Easy-to-read digital meter displays moisture to 0.1% precision. Pushbutton access to a 3-digit calibration factor allows easy setup for different fibers, blends and materials. A comprehensive list of calibration settings is provided.
- All types of interchangeable sensing probes include hand rollers, needle probes, weighted surface probe, long needle probes with spring-loaded guides, edge sensors, special probe for insertion into tobacco bales.
- The Model M-400 can be used for all applications for which the M-200 models are used. Its linearized digital display provides the potential for many more uses.

INDUSTRIAL LABORATORY EQUIPMENT COMPANY, INC.

3210 Piper Lane – Charlotte, NC 28208 – U.S.A.
PO Box 220245 – Charlotte, NC 28222 – U.S.A.
Phone: 704-357-3930 – Email: ile@ile-textiles.com

Moisture Probes: (Used with both the Analog and Digital Meters)



Hand Roll, Type HR-20, for warp and fabric,
(Available with spikes for carpet, pile side)



Yarn Probe, Type NP-20A, for packaged yarn, and loom beams

Replacement Needles For Yarn Probe

model: NP-NEEDLE

Half moon plate containing 3 needles.
(Note: 2 plates required for each probe.)

Size: Standard

model: NP-NEEDLE-HD

Half moon plate containing 3 needles.
(Note: 2 plates required for each probe.)

Size: Special ILE Heavy Duty Needles



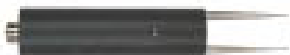
Surface Probe, Type WS-20, for open stock, picker laps, card sliver, roving, wool top, skeins, hanks, and loose yarn.



Single-End Probe, Type ES-20, for warp selvage, single ends, sliver, and roving



Bale Probe, Type LP-20, for baled stock



Bale Probe, Type SP-20, for baled stock

INDUSTRIAL LABORATORY EQUIPMENT COMPANY, INC.

3210 Piper Lane – Charlotte, NC 28208 – U.S.A.

PO Box 220245 – Charlotte, NC 28222 – U.S.A.

Phone: 704-357-3930 – Email: ile@ile-textiles.com



ILE DS-65 Evenness Tester



ILE DS-65 Digital Evenness Tester System

Digital Evenness Tester Series 4 software with 172 channels of *Ultra Scan* high-resolution Spectrogram and Diagram *fault* detection, Imperfection counter, Imperfection Density Screen, Variance Length Chart, Statistical data page, and memory storage of all tests. Price includes setup and training. System includes:

- ILE A2G2 Interface Box
- UT I-MO-B Monitor or UT II –MO-B
- Dell Computer w/ ILE Software
- Color Printer
- Flat Screen LCD Video Monitor

INDUSTRIAL LABORATORY EQUIPMENT COMPANY, INC.

3210 Piper Lane – Charlotte, NC 28208 – U.S.A.

PO Box 220245 – Charlotte, NC 28222 – U.S.A.

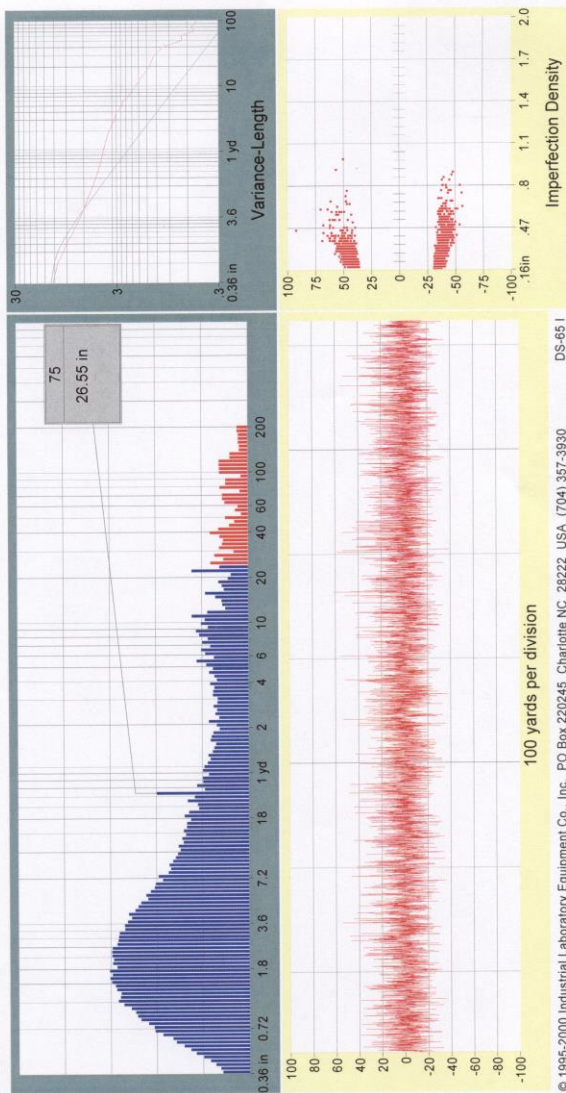
Phone: 704-357-3930 – Email: ile@ile-textiles.com



DS-65 Evenness Tester

Valued Customer of
Industrial Laboratory Equipment Co.
Demonstration Unit

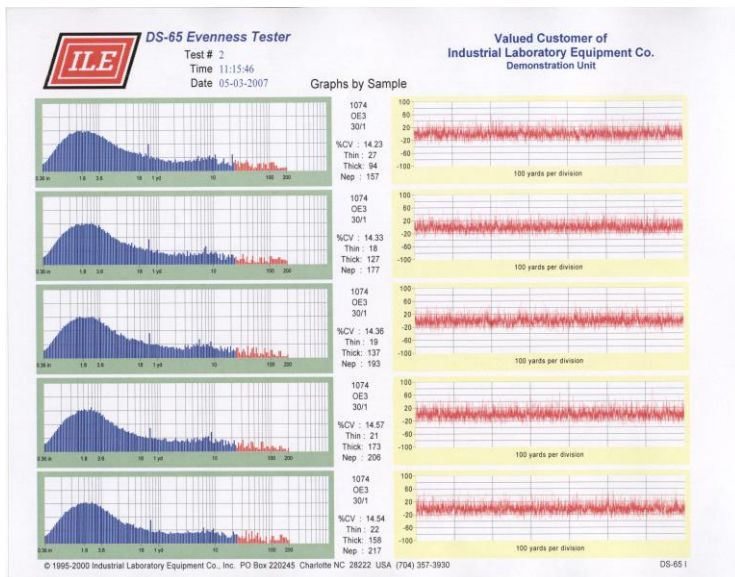
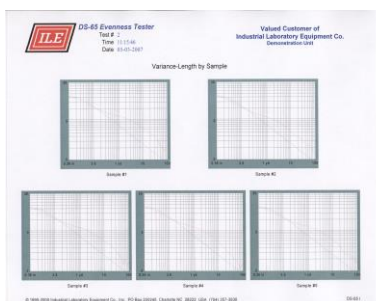
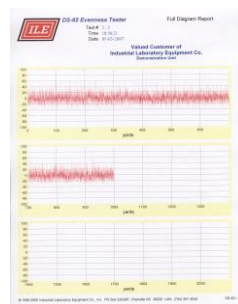
Speed	400 yd/min	Thin	-50 %	% CV	14.23	Cut Lengths	Time	10:51:36
Period	2.5 min	Thick	50 %			0.5 4.57	Date	05-03-2007
Scale	100 %	Nep	200 %			1.0 4.09		
Lot	1074	Staple	1.04 in	Test #	2 : 1	3.0 3.17	Thin	27
Machine	OE3	Count	30.0 Nec	Average	100.02	5.0 2.66	Thick	94
Style	30/1	Fineness	4.25 µnaire	Index	1.54	10.0 1.96	Nep	157



© 1995-2000 Industrial Laboratory Equipment Co., Inc. PO Box 220245 Charlotte NC 28222 USA (704) 357-3930 DS-65 I

INDUSTRIAL LABORATORY EQUIPMENT COMPANY, INC.

3210 Piper Lane – Charlotte, NC 28208 – U.S.A.
PO Box 220245 – Charlotte, NC 28222 – U.S.A.
Phone: 704-357-3930 – Email: ile@ile-textiles.com



INDUSTRIAL LABORATORY EQUIPMENT COMPANY, INC.

3210 Piper Lane – Charlotte, NC 28208 – U.S.A.

PO Box 220245 – Charlotte, NC 28222 – U.S.A.

Phone: 704-357-3930 – Email: ile@ile-textiles.com

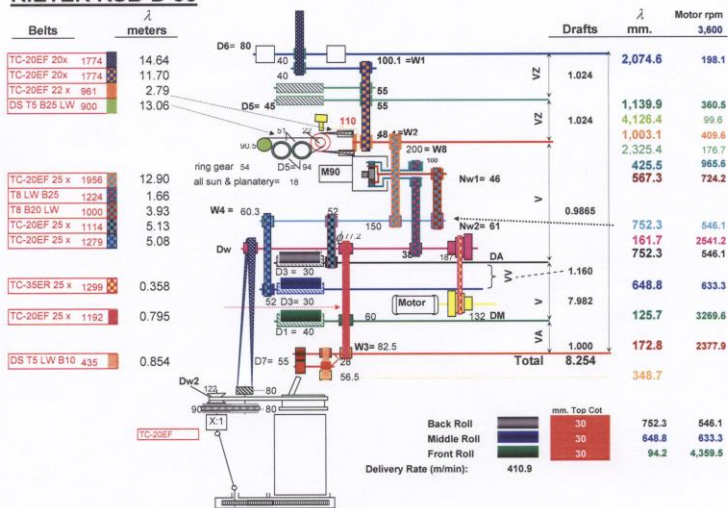
Date	Time	Test Number	Package Number	Spectrophotroph period	Average Factor	Standard Deviation	CV%	Deviation	U%	Index	Cut length 1	Cut Length 2	Cut Length 3	Cut Length 4	Cut Length 5	Thick count	Thin Count	Nep Count	Sig Spg Channel	Rel Spg Channel
3/21/2005	17:34:21	2	1	0	100.014	33.7	33.696	25.138	25.135	4.637	7.021	4.759	2.613	2.029	1.368	2152	1290	3154	121	1
3/21/2005	17:35:56	2	2	0	99.769	33.685	33.763	25.06	25.118	4.646	6.989	4.988	2.683	2.149	1.369	2153	1292	3148	121	1
3/28/2005	16:56:52	1	1	0	100.183	33.781	33.719	25.165	25.119	4.64	6.801	4.763	2.703	1.908	1.188	2167	1287	3154	121	1
3/28/2005	17:00:19	1	2	0	100.843	33.988	33.713	25.277	25.066	4.639	7.029	4.798	2.684	1.998	1.162	2180	1282	3144	121	1
3/28/2005	17:02:36	2	0	0	100.975	34.064	33.726	25.335	25.09	4.642	6.944	4.848	2.678	2.035	1.169	2173	1280	3141	121	1
3/28/2005	17:04:27	3	0	0	100.425	33.858	33.715	25.201	25.095	4.64	7.081	4.833	2.651	1.886	1.314	2174	1286	3136	121	1
3/29/2005	15:49:05	1	1	0	99.971	0.266	0.266	0.155	0.155	0.037	0.211	0.206	0.185	0.173	0.079	0	0	0	121	1
3/29/2005	15:51:49	2	1	0	100.064	33.686	33.684	25.107	25.091	4.633	7.046	4.942	2.646	1.901	1.336	2147	1289	3138	121	1
3/29/2005	15:53:31	2	2	0	84.612	20.531	24.265	15.237	18.008	3.339	13.31	12.933	12.586	12.487	12.299	574	344	837	121	1
3/29/2005	16:18:58	3	1	0	99.848	32.588	32.638	24.022	24.059	4.491	6.916	4.829	2.722	2.15	1.248	2138	1288	3114	121	1
3/29/2005	16:22:18	4	1	0	100.489	31.745	31.581	23.107	22.986	4.347	6.938	4.757	2.59	1.944	1.23	2144	1276	3118	121	1
3/29/2005	16:24:56	4	2	0	100.508	31.717	31.557	23.13	23.013	4.343	6.641	4.692	2.652	1.962	1.296	2139	1287	3123	121	1
3/29/2005	16:38:48	4	3	0	100.593	31.825	31.637	23.184	23.047	4.354	6.873	4.804	2.677	2.003	1.395	2144	1282	3109	121	1
3/29/2005	16:41:09	5	1	0	99.736	31.869	31.953	23.311	23.373	4.397	7.057	4.873	2.748	1.955	1.114	2160	1289	3111	121	1
3/29/2005	16:43:05	5	2	0	99.695	31.845	31.943	23.258	23.329	4.396	6.929	4.792	2.608	2.01	1.216	2157	1273	3109	121	1
3/29/2005	16:44:57	6	1	0	100.73	32.207	31.973	23.503	23.333	4.4	7.011	4.801	2.649	1.985	1.224	2145	1277	3111	121	1
3/29/2005	16:47:06	7	1	0	100.422	32.127	31.982	23.453	23.355	4.403	5.571	3.857	2.156	1.471	0.919	2146	1280	3114	121	1
3/29/2005	16:49:38	7	2	0	100.338	32.053	31.946	23.435	23.356	4.396	5.509	3.892	2.124	1.418	0.923	2148	1282	3116	121	1
3/29/2005	16:54:22	8	1	0	99.536	30.785	30.928	22.251	22.354	4.256	5.644	3.845	2.145	1.612	1.009	2138	1284	3112	121	1

ILE DS-65 Gear Diagram



Industrial Laboratory Equipment Company, Inc.
P.O. Box 220245 - Charlotte, N.C. 28222
phone: 704-357-3930 - fax: 704-357-3940
www.ile-textiles.com - email: ile@ile-textiles.com

RIETER RSB-D 35



Licensed to:

Copyright © 2007 Industrial Laboratory Equipment Company, Inc. All Rights Reserved.
The text, logos and images on this page are protected under the Trademark and Copyright laws of the United States, as well as other countries. Any reproduction or further distribution of any original material appearing on this page without prior written permission of ILE is strictly prohibited.

INDUSTRIAL LABORATORY EQUIPMENT COMPANY, INC.

3210 Piper Lane - Charlotte, NC 28208 - U.S.A.
PO Box 220245 - Charlotte, NC 28222 - U.S.A.
Phone: 704-357-3930 - Email: ile@ile-textiles.com



ILE Textile Multi-Scales



Statistical Textile Multi-Scale System

Multi-Scale processor with electronic balance and printer with readout in Yarn Count, roving, grains, grains per yard, grams, pounds, denier, tex, worsted, wool run, ounces per sq./yd, grams per sq./meter, ounces, length in yards of package, high, low, range, average, standard deviation, and %CV. Instantly updates and displays data with each input. Histogram available for each run or batch. Selectable test length or sample size.

Model: ILE-90-LS-600

Capacity 600 x .01 gram

Model: ILE-90-LS-3000

Capacity 3000 x .01 gram

Model: ILE-90-ASZ-80

Capacity 80 x .0001 gram

Other Capacities available upon request.

INDUSTRIAL LABORATORY EQUIPMENT COMPANY, INC.

3210 Piper Lane – Charlotte, NC 28208 – U.S.A.

PO Box 220245 – Charlotte, NC 28222 – U.S.A.

Phone: 704-357-3930 – Email: ile@ile-textiles.com



Textile Multi-Scales

- Yarn Count
- Worsted
- Decitex
- Denier
- Metric Count

Textile Balances – Stand alone with out Statistics

Electronic balance with read out in standard units: grams (g), ounces (oz), pounds (lb), grains (GN); plus textile units: Yarn Count, Worsted, Tex, Decitex, Denier, and Metric Count. (Does not perform statistical function)

For short length samples, 1 yard (Ne) / 90 centimeter (Denier).

Model ILE-MS-A-OE-62	Capacity 62 x .0001 gram
Model ILE-MS-A-OE-110	Capacity 110 x .0001 gram
Model ILE-MS-A-OE-210	Capacity 210 x .0001 gram

For Full samples, 120 Yard (Ne) / 90 meter (Denier).

Model ILE-MS-AT-65	Capacity 65 x .0001 gram
Model ILE-MS-AT-110	Capacity 110 x .0001 gram
Model ILE-MS-AT-260	Capacity 260 x .0001 gram
Model ILE-MS-PT-51	Capacity 51 x .001 gram
Model ILE-MS-PT-210	Capacity 210 x .001 gram
Model ILE-MS-LT-210	Capacity 210 x .01 gram
Model ILE-MS-LT-2100	Capacity 2100 x .01 gram
Model ILE-MS-LT-3100	Capacity 3100 x .01 gram

Available accessories:

Internal Calibration

Thermal Printer

INDUSTRIAL LABORATORY EQUIPMENT COMPANY, INC.

3210 Piper Lane – Charlotte, NC 28208 – U.S.A.

PO Box 220245 – Charlotte, NC 28222 – U.S.A.

Phone: 704-357-3930 – Email: ile@ile-textiles.com



General Purpose Balances

High resolution dot matrix display can display 2 units at one time. Electronic balance with read out in 14 units including: grams (g), ounces (oz), pounds (lb), grains (GN), and 1 Custom Unit (Cst). Powered by AC adapter included. Internal Calibration available.

Analytical models (4 decimal places). Include Square Glass Draft shield with flip top and two sliding side doors.

Model ILE-A-OEP-(capacity)

Capacity 62 x .0001 gram
Capacity 110 x .0001 gram
Capacity 210 x .0001 gram
Capacity 0-100 x .0001, 100-210 x .001 gram

Precision models (3 decimal places). Include Square Glass Draft shield with flip top and two sliding side doors.

Model ILE-P-OEP-(capacity)

Capacity 210 x .001 gram
Capacity 410 x .001 gram
Capacity 610 x .001 gram
Capacity 100 x .001 & 410 x .01 gram

2 decimal place models.

Model ILE-L-OEP-(capacity)

Capacity 610 x .01 gram
Capacity 2100 x .01 gram
Capacity 4100 x .01 gram
Capacity 6100 x .01 gram
Capacity 1000 x .01 & 4100 x .1 gram

1 decimal place models.

Model ILE-G-OEP-(capacity)

Capacity 4100 x .1 gram
Capacity 6100 x .1 gram
Capacity 8100 x .1 gram



INDUSTRIAL LABORATORY EQUIPMENT COMPANY, INC.

3210 Piper Lane – Charlotte, NC 28208 – U.S.A.
PO Box 220245 – Charlotte, NC 28222 – U.S.A.
Phone: 704-357-3930 – Email: ile@ile-textiles.com

Electronic balance with read out in 17 units including: grams (g), ounces (oz), pounds (lb), grains (GN), and 1 Custom Unit (Cst). Powered by AC adapter included. Internal Calibration available.

Analytical models (4 decimal places). Include Square Glass Draft shield with flip top and two sliding side doors.

Model ILE-A-OAP-(capacity)

Capacity 65 x .0001 gram
Capacity 110 x .0001 gram
Capacity 260 x .0001 gram



Precision models (3 decimal places). Includes Round glass windscreen with removable top.

Model ILE-P-OAP-51



Precision models (3 decimal places). Includes Square Glass Draft shield with flip top and two sliding side doors.

Model ILE-P-OAP-(capacity)

Capacity 210 x .001 gram
Capacity 310 x .001 gram.



2 decimal place models.

Model ILE-L-OAP-(capacity)

Capacity 210 x .01 gram
Capacity 410 x .01 gram
Capacity 810 x .01 gram
Capacity 2100 x .01 gram
Capacity 3100 x .01 gram



1 decimal place models.

Model ILE-G-OAP-(capacity)

Capacity 2100 x .1 gram
Capacity 4100 x .1 gram
Capacity 8100 x .1 gram

Many other models available; contact ILE with required capacity & readability.

INDUSTRIAL LABORATORY EQUIPMENT COMPANY, INC.

3210 Piper Lane – Charlotte, NC 28208 – U.S.A.
PO Box 220245 – Charlotte, NC 28222 – U.S.A.
Phone: 704-357-3930 – Email: ile@ile-textiles.com



ILE Yarn Reels



ILE Skein Reels incorporate advanced design and economy into a rugged and versatile stainless steel laboratory instrument. All models provide heavy duty wrap arms with collapsible tension release for easy removal of skeins, cams to provide a constant rate of traverse to insure the yarn lies even across the fly, and digital counters to provide precision stopping.

Table Top Yarn Skein Reel

- Specify Motorized or Hand Operated Model (picture not shown).
- Available In 5 Or 6 Skeins
- Includes Individual Tension Discs
- 18 inch square base
- Also available in 8 Skein model with an 18 inch x 24 inch base.

Fly Circumferences Available:

54 inch = 1 ½ Yard, 36 inch = 1 yard, 1.125M = 1- 1/8 Meter, 1M = 1 Meter

Models Available:

Hand operated, 5 position

ILE-5-SKRH-36
ILE-5-SKRH-54
ILE-5-SKRH-1M
ILE-5-SKRH-1.125M

Hand operated, 6 position

ILE-6-SKRH-36
ILE-6-SKRH-54
ILE-6-SKRH-1M
ILE-6-SKRH-1.125M

Motorized, 5 position

ILE-5-SKRM-36
ILE-5-SKRM-54
ILE-5-SKRM-1M
ILE-5-SKRM-1.125M

Motorized, 6 position

ILE-6-SKRM-36
ILE-6-SKRM-54
ILE-6-SKRM-1M
ILE-6-SKRM-1.125M

Motorized, 8 position

ILE-8-SKRM-36
ILE-6-SKRM-54
ILE-6-SKRM-1M
ILE-6-SKRM-1.125M

Specify Voltage for Motorized Units.

INDUSTRIAL LABORATORY EQUIPMENT COMPANY, INC.

3210 Piper Lane – Charlotte, NC 28208 – U.S.A.
PO Box 220245 – Charlotte, NC 28222 – U.S.A.
Phone: 704-357-3930 – Email: ile@ile-textiles.com



Free Standing Single Fly Yarn Skein Reel

- Available In 10 Or 12 Skeins
- Includes Individual Tension Discs
- 31 inch x 24 inch base
- Specify Voltage for Motorized Units.

Fly Circumferences Available:

54 inch = 1 ½ Yard,
 36 inch = 1 yard,
 1.125M = 1- 1/8 Meter,
 1M = 1 Meter

Models Available:

Motorized, 10 position

ILE-10-SKRM-36
 ILE-10-SKRM-54
 ILE-10-SKRM-1M
 ILE-10-SKRM-1.125M

Motorized, 12 position

ILE-12-SKRM-36
 ILE-12-SKRM-54
 ILE-12-SKRM-1M
 ILE-12-SKRM-1.125M

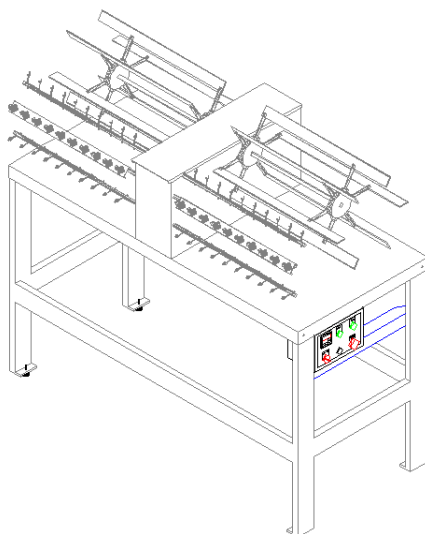
Free Standing Dual Fly Yarn Skein Reel

- Available In 20 Skeins
- Includes Individual Tension Discs
- 55 inch x 24 inch base

Models Available:

Motorized, 20 position

ILE-20-SKRM-36
 ILE-20-SKRM-54
 ILE-10-SKRM-1M
 ILE-10-SKRM-1.125M



INDUSTRIAL LABORATORY EQUIPMENT COMPANY, INC.

3210 Piper Lane – Charlotte, NC 28208 – U.S.A.
 PO Box 220245 – Charlotte, NC 28222 – U.S.A.
 Phone: 704-357-3930 – Email: ile@ile-textiles.com



ILE Twist Testers

Twist Tester – Model: ILE-ITC-5-H

Hand operated twist tester, for plied and singles yarn, 0-20 inches and 0-50 centimeters. For both S and Z Twist. Battery activated lamp indicates proper tension and completed test for singles yarns. Counter power supply: specify 120-220 Vac, or battery pack.



Motorized Twist Tester – Model: ILE-ITC-5-M

Motor operated twist tester, for plied and singles yarn, 0-20 inches and 0-50 centimeters. For both S and Z Twist. Battery activated lamp indicates proper tension and completed test for singles yarns.



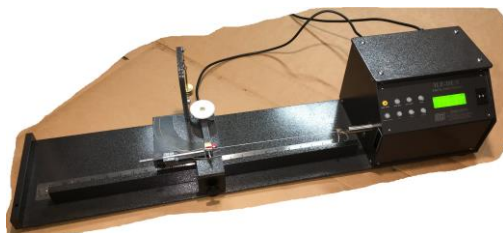
Both Models also available in 100 inch.

INDUSTRIAL LABORATORY EQUIPMENT COMPANY, INC.

3210 Piper Lane – Charlotte, NC 28208 – U.S.A.
PO Box 220245 – Charlotte, NC 28222 – U.S.A.
Phone: 704-357-3930 – Email: ile@ile-textiles.com

Electronic Digital Twist Tester – Model: ILE-DE-5

Semi-Automatic testing of single or plied yarns. Digital displays of twist for sample length tested, as well as twist per unit selected (twist per inch, twist per centimeter). Automatically stops at end of test. Allows multiple test of same sample. Variable speed. Specify 110 or 220 volts, 50/60 Hz.



Digital Microprocessor Twist Tester – Model: ILE-DTC-2000

Semi-Automatic testing of single or plied yarns. Digital displays of twist for sample length tested, as well as twist per unit selected (twist per inch, twist per centimeter). Automatically stops at end of test. Allows multiple test of same sample. Variable speed. Sample memory of groups or batch tests. Statistical data of multiple samples provided in addition to high, low, range, and average. Printer included. Specify 110 or 220 volts, 50/60 Hz.

Twist Insertion – Model: ILE-ITD-28

Twist Insertion Instrument. For inserting various twists in yarns. 0-20 inches and 0-50 cm. Specify S or Z twist when ordering.



Twist Insertion – Model: ILE-ITD-32S

Designed to allow the inserting of various twists in yarns for research and development. Unit comes ready for 0-20 inch and 0-50 cm testing with bi-directional electronic counting in S or Z rotation. Pre-Set allows for exact duplication of samples. Complete with extension for 0-50 inch or 0-160 cm samples. Standard tension weights included. 110V, 60 hz

INDUSTRIAL LABORATORY EQUIPMENT COMPANY, INC.

3210 Piper Lane – Charlotte, NC 28208 – U.S.A.

PO Box 220245 – Charlotte, NC 28222 – U.S.A.

Phone: 704-357-3930 – Email: ile@ile-textiles.com



ILE Inspection Winders

BOARD WINDER, Model: ILE-TPR-5

Taper-ray Trapezoidal Board Winder, motor driven with electronic speed controls for even wraps on all size yarns. With 3 black boards. Specify 115v 60 Hz. or 220v, 50Hz.



ADDITIONAL FEATURES:

Option B: Multiple Traverse Head

Multiple traverse head for comparison of up to 5 different yarns on the same board.

Option C: Adjustable Clamping Jaws

Adjustable clamping jaws on the motor side to allow for winding standard ASTM cardboards or longer black anodized trapezoidal or rectangular boards.

ADDITIONAL BOARDS (ILE Trapezoidal or rectangular, black metal):

ASTM Photographic Yarn Appearance Standards

Grades A, B, C, D (mounted). Boards sold individually. Select 1 range per board. Specify No.: 1-12, 12-24, 24-36, 36-50, 50-75 or 75-135 (English cotton count).

INDUSTRIAL LABORATORY EQUIPMENT COMPANY, INC.

3210 Piper Lane – Charlotte, NC 28208 – U.S.A.

PO Box 220245 – Charlotte, NC 28222 – U.S.A.

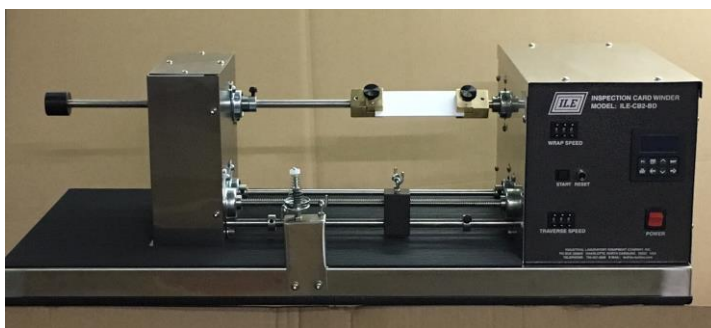
Phone: 704-357-3930 – Email: ile@ile-textiles.com

Inspection Card Winder - Model: ILE-CB-2-SD

Dual motor driven inspection card winder. Single layer sample one direction only. Specially designed for winding sample cardboards of color and natural yarns. Speed of card and traverse are adjusted separately. Automatic stop and preset location. Sample spacing set manually. Specify power requirement: 110V, 60Hz. or 220V, 50Hz.

Inspection Card Winder - Model: ILE-CB-2-BD

Dual motor driven inspection card winder. Specially designed for winding sample cardboards to check appearance characteristics of dyed yarns on colorimeters. Programmable counter allows selection for width of sample and the number of layers. Digital controllers allow for exact speed of card wrap motor and traversing motor. The instrument will then exactly reproduce future cards, starting in the same position on each card, and then providing the exact number of wraps per length. This is extremely critical when using spectrophotometers and colorimeters. The instrument always begins sampling in the same direction and provides bi-directional traverse. These features allow exact duplication of samples in optimum results from colorimeters. The ILE-CB-2BD is the only instrument with the above features. Universal clamping jaw accommodates various sizes of cardboard. Specify power requirement: 110V, 60Hz. or 220V, 50Hz.



ADDITIONAL FEATURE: -Multiple Traverse Head

Allows for comparison of up to 5 different yarns on the same board.

INDUSTRIAL LABORATORY EQUIPMENT COMPANY, INC.

3210 Piper Lane – Charlotte, NC 28208 – U.S.A.

PO Box 220245 – Charlotte, NC 28222 – U.S.A.

Phone: 704-357-3930 – Email: ile@ile-textiles.com



Durometers

Durometer, Ergo Style

The Ergo Style Durometers are built to meet or exceed current ASTM D2240, ISO 7619 and ISO 868 specifications. Complete with memory pointer, test block and carrying case. Height 4" (10.2cm); Width 2.25" (5.7cm); Depth 1.75" (4.4cm); Weight 6 oz. (170g). NIST Traceable. The Ergo Style Durometers are available in Type A, B, C, D, DO, E, O and OO.



Type	Material Selection Guide	Spring gf	Indenter Shape
A	Rubber (Soft)	821 gf	35° Truncated Cone
B	Rubber (Moderately Hard)	821 gf	30° Cone
C	Rubber (Medium Hard); Plastics (Medium Hard)	4.53 kgf	35° Truncated Cone
D	Rubber (Hard); Plastics (Hard)	4.53 kgf	30° Cone
DO	High Density Textile Windings (Slasher beams, etc.)	4.53 kgf	3/32" Spherical Dia.
E	Medium Density Textile Windings; Soft Foams & Cushions	821 gf	.200" Spherical Dia.
O	Medium Density Textile Windings; Soft Rubber (printer rolls)	821 gf	3/32" Spherical Dia.
OO	Low Density Textile Windings; Foam and Sponge Rubber	113 gf	3/32" Spherical Dia.

Durometer, Yarn Package

The Yarn Package Style Durometers come complete with carrying case and offer an optional memory pointer and optional test block. Height 4.44" (11.0cm); Width 1.97" (5.0cm); Depth 1.97" (5.0cm); Weight 1.10 lb (500g). *This item is not NIST Traceable.*



Type	Material Selection Guide	Bottom Surface	Indenter Shape
2.5	Closely wound bobbins of synthetic fibers	Concave Radius	2.5mm Ball
5	Loosely wound bobbins of synthetic fibers and closely wound natural fibers, yarns and threads	Concave Radius	5mm Ball
10	Very loosely wound bobbins of thick yarns, such as carpet yarns	Concave Radius	10mm Ball
2.5F	same as 2.5 with Flat working face for measuring warp beams or for bobbin diameters over 400mm	Flat	2.5mm Ball
5F	same as 5 with Flat working face for measuring warp beams or for bobbin diameters over 400mm	Flat	5mm Ball
10F	same as 10 with Flat working face for measuring warp beams or for bobbin diameters over 400mm	Flat	10mm Ball

INDUSTRIAL LABORATORY EQUIPMENT COMPANY, INC.

3210 Piper Lane – Charlotte, NC 28208 – U.S.A.
 PO Box 220245 – Charlotte, NC 28222 – U.S.A.
 Phone: 704-357-3930 – Email: ile@ile-textiles.com



Friction Meter



Yarn Friction Meter

– **Model: ILE-YFM**

Hand-held instrument to directly read the coefficient of friction of running yarn. Made in U.S.A.



Friction Meter Stand

– **Model: ILE-FMS**

Optional friction meter instrument stand with motor for laboratory testing. 110 volt. (Friction Meter shown, but not included) Made in U.S.A.

INDUSTRIAL LABORATORY EQUIPMENT COMPANY, INC.

3210 Piper Lane – Charlotte, NC 28208 – U.S.A.

PO Box 220245 – Charlotte, NC 28222 – U.S.A.

Phone: 704-357-3930 – Email: ile@ile-textiles.com



Tension Meters



Electronic Tension Meter

Model: ILE-EL-TEN-(range)

Zivy electronic tension meter. 1-gram sensitivity. Filament speeds up to 2000 m/min. Available models: 200M (0-200g) 400M (0-400g).

Software also available. Please advise if required.



Digital Tension Meter, Model: ETMB-(specify range)

Three long, closely-spaced slender shafts with precision guide rollers, perfect for limited access tension measuring applications. Speeds up to 2000 m/min. Stores average, minimum, maximum, and peak tension.

Available Ranges:

100: (0.5 – 100); 200: (1 – 200);

500: (1 – 500) grams.



Digital Tension Meter, Model: DTMB-(specify range)

Accurately measure the running line tensions with thickness compensator. Tensions are sampled 62 times per second and averaged over a user selected interval of 0.5, 1, 2 or 4 seconds. Speeds up to 2000 m/min. The maximum, minimum and peak values are stored for recall to the display.

Model	Range	Spacing	Application
DTMB-200	0.1-200.0 g	38 mm	1000 Denier
DTMB-500	0.1-500.0 g	38 mm	0.05-0.25mm
DTMB-1K	50 - 1000 g	38 mm	0.10 - 0.40 mm
DTMB-2K	200 - 2000 g	38 mm	0.30 - 0.70 mm
DTMB-2.5KB	250 - 2500 g	100 mm	0.30 - 0.70 mm
DTMB-5KB	500 - 5000 g	100 mm	0.50 - 1.20 mm
DTMB-10KB	1.00 - 10.00 kg	100 mm	0.70 - 1.40 mm
DTMBL-20KB*	2.00 - 20.00 kg	200 mm	1.00 - 2.00 mm
DTMBL-50KB*	5.00 - 50.00 kg	200 mm	1.50 - 3.00 mm

INDUSTRIAL LABORATORY EQUIPMENT COMPANY, INC.

3210 Piper Lane – Charlotte, NC 28208 – U.S.A.

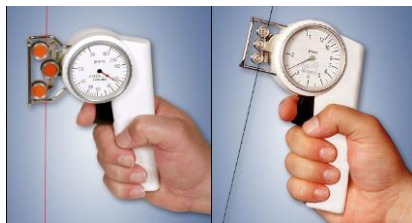
PO Box 220245 – Charlotte, NC 28222 – U.S.A.

Phone: 704-357-3930 – Email: ile@ile-textiles.com



Warp Tension Meter

To determine correct tension for particular fabric qualities in weaving and preparation. Accurate and robust mechanical operation, dial readout 0-100 centesimal scale.



Mechanical Tension Meter (Pistol grip)

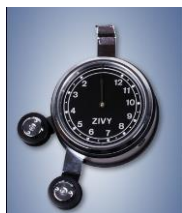
Mechanical tension meter with plastic housing.

Model: ILE-ZD2-(range)

Available ranges: 30 (3-30g), 50 (5-50g), 100 (10-100g), 150 (20-150g), 200 (20-200g), 300 (20-300g)

Model: ILE-ZF2-(range)

Uses miniaturized rollers ideal for delicate fibers, low tensions or when access space is limited. Available ranges: 5 (1-5.0g), 10 (1-10g), 12 (1-12g) 20 (2-20g), 30 (3-30g), 50 (5-50g), 100 (10-100g)



Mechanical Tension Meter –

Model: ILE-TEN-(range)

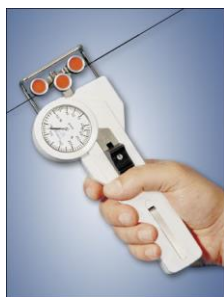
Zivy Mechanical tension meter.

Available ranges. 0.5-3g, 1-5g, 2-10g, 2-12g, 5-20g 5-30g, 10-40g, 10-50g, 10-60g, 10-70g, 20-120g, 50-170g.



Mechanical Tension Meter – Model: ILE-TR-(range)

The Trigger Tension Meter measures tensions on wires, yarns, fiber optics, films, tapes, narrow fabrics and flat materials. The contact elements are recessed into the trigger shield, which stops material from snagging and/or breaking behind the rollers. Internal magnetic dampening assures an accurate tension reading no matter which position the meter is held in. Available ranges. 25g, 125g, 250g, 1000g, 2000g, 4000g, 5000g.



Mechanical Tension Meter – Model: ILE-DX2-(range)

A precise jeweled movement, rugged cast aluminum housing makes the DX2 ideal for the toughest production floor application. Built-in mounting holes permit fixed installation for continuous in-line use. Built-in material thickness compensator maximizes accuracy when using filaments of different diameters. (Standard on model DX2-SP and higher ranges)

Model	Range	Roller Spacing c:c	Model	Range	Roller Spacing c:c
DX2-3	3-30 g	38 mm	DX2-EX	100-1000 g	38 mm
DX2-5	5-50 g	38 mm	DX2-200	200-2000 g	100 mm
DX2-12	20-120 g	38 mm	DX2-500	400-5000 g	100 mm
DX2-20	20-200 g	38 mm	DX2-1K	2-10 Kg	100 mm
DX2-40	20-400 g	38 mm	DX2L-2K	5-20 Kg	150 mm
DX2-SP	20-1000 g	38 mm	DX2L-3K	5-30 Kg	250 mm
			DX2L-5K	5-50 Kg	250 mm

OTHER MODELS AND RANGES AVAILABLE.

INDUSTRIAL LABORATORY EQUIPMENT COMPANY, INC.

3210 Piper Lane – Charlotte, NC 28208 – U.S.A.

PO Box 220245 – Charlotte, NC 28222 – U.S.A.

Phone: 704-357-3930 – Email: ile@ile-textiles.com



Stroboscopes & Tachometers



ILE-DT-311

Digital stroboscope 40-35,000 flashes per minute.
Specify power requirement:
115 Volt AC or 220 Volt AC.



ILE-DT-315A

Portable digital stroboscope with internal rechargeable battery for up to 2- hour continuous use. 40-35,000 flashes per minute.

Specify power requirement for charger:
115 Volt AC or 220 Volt AC.



ILE-DT-315AEB

Portable digital stroboscope with external rechargeable battery for up to 3-hour continuous use. 40-35,000 flashes per minute.

Specify power requirement for charger:
115 Volt AC or 220 Volt AC.

INDUSTRIAL LABORATORY EQUIPMENT COMPANY, INC.

3210 Piper Lane – Charlotte, NC 28208 – U.S.A.
PO Box 220245 – Charlotte, NC 28222 – U.S.A.
Phone: 704-357-3930 – Email: ile@ile-textiles.com



DT-205L (LCD)



DT-207L (LED)

Digital Tachometer –

Model: ILE-DT-205L

Non-contact (or contact with included adapter) digital tachometer with memory for last, maximum, minimum, and four intermediate readings. 6 to 99,999 RPM. LCD display.

****ILE-DT-207L** with LED display also available.



DT-105A (LCD)



DT-107A (LED)

Digital Tachometer –

Model: ILE-DT-105A

Contact digital tachometer with memory for last, maximum, minimum, and four intermediate readings. Multi-mode speed selection. 0.1 to 25,000 RPM. LCD display.

****ILE-DT-107A** with LED display also available.



Yarn Length Indicator –

Model: ILE-YSL-2000

Accurately measures the speed and length of yarns, wires, and other filaments using the unique roller that guides the filament onto a “u-grooved” wheel that insures maximum contact and eliminates slippage and breakage of filaments. It also can be used as either a contact or non-contact Tachometer.

Made in Germany.

INDUSTRIAL LABORATORY EQUIPMENT COMPANY, INC.

3210 Piper Lane – Charlotte, NC 28208 – U.S.A.

PO Box 220245 – Charlotte, NC 28222 – U.S.A.

Phone: 704-357-3930 – Email: ile@ile-textiles.com



Force Testing

The Yarn splice tester is able to capture the highest force peaks. With variable display update rate and superior accuracy, these gauges feature unique 180 degree flip displays, permitting the user to read the display right-side up. Additional enhancements are; dual direction keypad, variable baud rate for SPC applications, selectable force direction indication, and selectable power on/off settings. Designed to ergonomically fit in the palm of your hand; the rugged all metal construction permits accurate measurement and display of compression and tension forces up to 100 pounds.



Features

1000 Hz update rate
Highly accurate ($\pm 0.2\%$ f.s.)
Peak measurement
Reversible keypad
Variable display rate
Overload capacity: 200% F.S.
Heavy duty load sensor
Variable units of measure (Oz., lbs., Kg, N)
Rugged die-cast aluminum construction
Measures and records compression and tension tests
Dual power capable
Selectable, automatic on/off ability
Low battery indicator
One year warranty

Benefits

Ability to capture the highest compression/tension force
Ideal of for strict tolerances
Captured with a single push button
Easy to read upside down or right side up when stand mounted
Slow display update rate for operator ease
High overload protection leads to fewer repairs
Designed for over 1 million operations
One button selection
Exceptional durability, production floor capable
True "push-pull" tests are permitted
Rechargeable battery or AC line voltage
Prolongs battery life , provides 24/7 testing with no off time when powered by AC
Provides warning to complete tests when on battery power
Provides peace of mind, (Optional: NIST certs with data)

Available Ranges:

.5X	1X	2X	5X	10X	20X	50X	100X
0.5x.001 lb	1x.001 lb	2x.001 lb	5x.001 lb	10x.01 lb	20x.01 lb	50x.01 lb	100x.1 lb
200 x.1 g	500 x.1 g	1000 x1 g	2 x.001Kg	5 x.001Kg	10 x.01Kg	20 x.01Kg	50 x.01Kg
2 x.001 N	5 x.001 N	10 x.01 N	20 x .01 N	50 x .01 N	100 x .1 N	200 x .1 N	500 x .1 N

INDUSTRIAL LABORATORY EQUIPMENT COMPANY, INC.

3210 Piper Lane – Charlotte, NC 28208 – U.S.A.
PO Box 220245 – Charlotte, NC 28222 – U.S.A.
Phone: 704-357-3930 – Email: ile@ile-textiles.com

ILE-ET-1.5 Series Tensile Tester



ILE testers are designed for testing that requires high accuracy on a tight budget. The ILE-ET1.5 provides general purpose testing to ASTM, ISO, BS and other world standards. The system includes a Test stand, S-Block load cell. Sample Holders are sold separately.

The variable speed stand has up/down/stop motor control, crosshead jog, emergency stop, speed dial, and high speed return. Test Stand capacities available to 500 pounds with Speed range to 20 inches per minute. All stands offer up to 31 inches of travel.

Displays force, elongation, test stand direction and speed, limit switch warnings, and error messages. Force and elongation can be displayed at either peak or break value. Force can be set to readout in pounds, kilograms, Newtons, grams, or ounces. Elongation can be set to read out in inches, centimeters, or millimeters. Limits can be set to stop the test at a specific force or certain distance.

Additional features:

- Real-time display of force, elongation, and speed during test
- Pretension the sample to a force before the test starts
- Test data output through a RS-232 serial port or analog connection
- Adjust the point at which the test terminates in relation to % of peak
- Variable start force to avoid getting a false peak at test beginning
- Automatic return can be set on, off, or on with time delay
- Ability to reset all setup settings to a default to prevent tampering
- Calibrated to a system accuracy of 0.1% full scale
- Calibration is in accordance with ASTM E74 and traceable to NIST

Power requirement: specify 120 Volt 60 Hz. or 230 Volt 50 Hz.

ILE reserves the right to modify and change specifications and other improvements.

INDUSTRIAL LABORATORY EQUIPMENT COMPANY, INC.

3210 Piper Lane – Charlotte, NC 28208 – U.S.A.
PO Box 220245 – Charlotte, NC 28222 – U.S.A.
Phone: 704-357-3930 – Email: ile@ile-textiles.com

ILE-ET-3 Series Tensile Tester



ILE testers are designed for testing that requires high accuracy on a tight budget. The ILE-ET3 provides general purpose testing to ASTM, ISO, BS and other world standards. The system includes a Test stand, Menu driven handheld touchpad, and S-Block load cell. Sample Holders are sold separately.

The variable speed stand has up/down/stop motor control, crosshead jog, emergency stop, speed dial, and high speed return. Test Stand capacities available to 5000 pounds with Speed range to 30 inches per minute. All stands offer an 8 inch working width with an unlimited working depth and up to 40 inches of travel.

The Menu driven handheld touchpad displays force, elongation, test stand direction and speed, limit switch warnings, and error messages. Force and elongation can be displayed at either peak or break value. Force can be set to readout in pounds, kilograms, Newtons, grams, or ounces. Elongation can be set to read out in inches, centimeters, or millimeters. Limits can be set to stop the test at a specific force or certain distance.



Additional features:

- Real-time display of force, elongation, and speed during test
- Pretension the sample to a force before the test starts
- Various levels of security to prevent users from changing setup
- Hook up a parallel printer to print a report directly, without a PC
- Test data output through a RS-232 serial port or analog connection
- Adjust the point at which the test terminates in relation to % of peak
- Variable start force to avoid getting a false peak at test beginning
- Automatic return can be set on, off, or on with time delay
- User can set the time/date/day setting
- Ability to reset all setup settings to a default to prevent tampering
- Calibrated to a system accuracy of 0.1% full scale
- Calibration is in accordance with ASTM E74 and traceable to NIST

Power requirement: specify 120 Volt 60 Hz. or 230 Volt 50 Hz.
Made in U.S.A.

INDUSTRIAL LABORATORY EQUIPMENT COMPANY, INC.

3210 Piper Lane – Charlotte, NC 28208 – U.S.A.
PO Box 220245 – Charlotte, NC 28222 – U.S.A.
Phone: 704-357-3930 – Email: ile@ile-textiles.com

ILE-ET-4 Series Tensile Tester



ILE testers are designed for testing that requires high accuracy on a tight budget. The ILE-ET4 provides general purpose testing to ASTM, ISO, BS and other world standards. The system includes a Test stand, Menu driven handheld touchpad, and S-Block load cell. Sample Holders are sold separately.

These variable speed testers can perform compression tests and tensile tests without the need of special adapters or cages and include adjustable travel limit switches. Sturdy twin ball screw drives allow for smoother operation and precise crosshead positioning. Test Stand capacities available to 20,000 pounds with Speed range to 30 inches per minute. All stands offer an 18 inch working width with an unlimited working depth and up to 48 inches of travel.

The Menu driven handheld touchpad displays force, elongation, test stand direction and speed, limit switch warnings, and error messages. Force and elongation can be displayed at either peak or break value. Force can be set to readout in pounds, kilograms, Newtons, grams, or ounces. Elongation can be set to read out in inches, centimeters, or millimeters. Limits can be set to stop the test at a specific force or certain distance.



Additional features:

- Real-time display of force, elongation, and speed during test
- Pretension the sample to a force before the test starts
- Various levels of security to prevent users from changing setup
- Hook up a parallel printer to print a report directly, without a PC
- Test data output through a RS-232 serial port or analog connection
- Adjust the point at which the test terminates in relation to % of peak
- Variable start force to avoid getting a false peak at test beginning
- Automatic return can be set on, off, or on with time delay
- User can set the time/date/day setting
- Ability to reset all setup settings to a default to prevent tampering
- Calibrated to a system accuracy of 0.1% full scale
- Calibration is in accordance with ASTM E74 and traceable to NIST

Power requirement: specify 120 Volt 60 Hz. or 230 Volt 50 Hz.

Made in U.S.A.

INDUSTRIAL LABORATORY EQUIPMENT COMPANY, INC.

3210 Piper Lane – Charlotte, NC 28208 – U.S.A.

PO Box 220245 – Charlotte, NC 28222 – U.S.A.

Phone: 704-357-3930 – Email: ile@ile-textiles.com

Elmendorf Tester

Digital Elmendorf Tearing Tester –

A microprocessor controlled falling-pendulum instrument with digital display for determination of the average force required to propagate a single-rip tear starting from a cut in paper, cardboard, plastics, nonwovens, knitted and woven fabrics. Supplied with a template, knife, and cutting board for cutting test specimens. **Pendulum and calibration weights for 800, 1600, 3200 and 6400 grams are included.**

Elmendorf Tearing Tester (Manual) –

To determine the ballistic tearing strength of textiles, paper or board. Range from 8000 to 64000 Millinewtons with suitable pendulum.

Pendulums not included.

Pendulum Type A –

For use with Elmendorf Tearing Tester - 8000 Millinewtons max.

Calibration Weight – For pendulum type A.

Pendulum Type B –

For use with Elmendorf Tearing Tester - 16000 Millinewtons max.

Calibration Weight – For pendulum type B.

Pendulum Type C –

For use with Elmendorf Tearing Tester - 32000 Millinewtons max.

Calibration Weight – For pendulum type C.

Pendulum Type D –

For use with Elmendorf Tearing Tester - 64000 Millinewtons max.

Calibration Weight – For pendulum type D.

Spare Cutting Blade –

For Elmendorf Tearing Tester.



INDUSTRIAL LABORATORY EQUIPMENT COMPANY, INC.

3210 Piper Lane – Charlotte, NC 28208 – U.S.A.

PO Box 220245 – Charlotte, NC 28222 – U.S.A.

Phone: 704-357-3930 – Email: ile@ile-textiles.com



Thickness Gauges



THICKNESS GAUGE

Model: ILE-TG-2-D

Digital Thickness Gauge incorporates an easy to read digital display with an accuracy of .001". Complete with 1.129" diameter presser foot and loading weight to provide a load of 0.6psi. Compliant with ASTM D1777-option 1.

Other Configurations available.

MANY STYLES AND RANGES AVAILABLE
CALL FOR DETAILS



INDUSTRIAL LABORATORY EQUIPMENT COMPANY, INC.

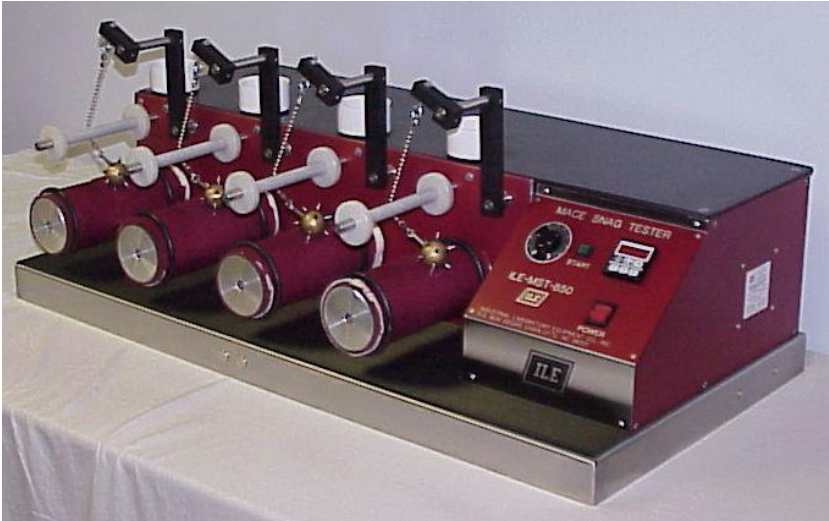
3210 Piper Lane – Charlotte, NC 28208 – U.S.A.

PO Box 220245 – Charlotte, NC 28222 – U.S.A.

Phone: 704-357-3930 – Email: ile@ile-textiles.com



Mace Snag



Mace Snag Tester (ICI), Model: ILE-MST-850

Rapidly determines the tendency of fabrics to snag in normal wear. Provided with 4 rotating cylinders fitted with sleeves of test fabric, mace balls and controlled by a predetermined electronic counter. Meets ASTM D-3939 Standard

OTHER CONFIGURATIONS AVAILABLE UPON REQUEST

INDUSTRIAL LABORATORY EQUIPMENT COMPANY, INC.

3210 Piper Lane – Charlotte, NC 28208 – U.S.A.
PO Box 220245 – Charlotte, NC 28222 – U.S.A.
Phone: 704-357-3930 – Email: ile@ile-textiles.com



Mace Snag Tester Viewing Cabinet

Model: ILE-MST-VC-120

Includes photographic standards and viewing cabinet with light source.
Meets ASTM D-3939 Standards

OTHER CONFIGURATIONS AVAILABLE UPON REQUEST

INDUSTRIAL LABORATORY EQUIPMENT COMPANY, INC.

3210 Piper Lane – Charlotte, NC 28208 – U.S.A.
PO Box 220245 – Charlotte, NC 28222 – U.S.A.
Phone: 704-357-3930 – Email: ile@ile-textiles.com



Abrasion Testers

ILE MARTINDALE ABRASION TESTER

Model: ILE-MAT 250



To determine the abrasion resistance of all kinds of textile structures. Samples are rubbed against known abrasants at low pressures in continuously changing directions and the amount of abrasion is compared against standard parameters. The unique design allows removal of individual sample holders for examination without lifting the top motion plate or stopping the test. The equipment is supplied complete with electronic predetermined batch and totalizing counters as well as all sample holders, 9kpa & 12kpa weights and loading devices to carry out standard tests. Tester with 4 sample positions. Also available in 6 position. Specify Power Supply: 120 Volt 60 HZ., 220 Volt 50 Hz.

Standards: ASTM D4966 Abrasion Test & ASTM D4970 Pilling Test.

INDUSTRIAL LABORATORY EQUIPMENT COMPANY, INC.

3210 Piper Lane – Charlotte, NC 28208 – U.S.A.

PO Box 220245 – Charlotte, NC 28222 – U.S.A.

Phone: 704-357-3930 – Email: ile@ile-textiles.com



Wyzenbeek Tester

The Wyzenbeek Tester is a four station abrasion device. It abrades the surface of textiles or leather to determine the amount of marring and wear of the surface finish. Operation of the machine is simple. Each sample is held under measured tension and measured pressure. Securely fastened the samples are subjected to the abrasive material clamped on the oscillating drum operating underneath the samples. Cycle speed is adjusted with the variable speed control on the front panel. The number of test cycles desired is entered on the pre-set cycle counter on the front panel indicating when the test will be completed. A vacuum unit is built into the machine. Two slotted vacuum pipes are suspended over the abrasive drum. The large volume of air being sucked over the abrasive surface keeps it free from lint and dust during operation.

Standards: ASTM D3597; ASTM D4157; FED-STD-191/5304; SAE J 948; SAE J 1530; GM 2756M; Toyota TSL 5101G 3.9.4



Random Tumble Pilling Tester

Used to determine the pilling and fuzzing characteristics of textile fabrics. Stainless steel impellers rotate within individually lit aluminum chambers constantly tumbling test fabrics against cork liners for a pre-determined time controlled by a timer and audible alarm. Compressed air is also injected into the chamber to assist in the tumbling action. Tester is available with 2 or 4 test chambers. Laboratory standard compressed air supply required.

Standards: ASTM D3512; DIN 53867; JIS L 1076

INDUSTRIAL LABORATORY EQUIPMENT COMPANY, INC.

3210 Piper Lane – Charlotte, NC 28208 – U.S.A.

PO Box 220245 – Charlotte, NC 28222 – U.S.A.

Phone: 704-357-3930 – Email: ile@ile-textiles.com

CROCKMETERS



Crockmeter Hand Operated – Model: ILE-HCM-400

Manual operated with counter, 1000 pieces of 2 in x 2 in. white crocking cloth, 2 pieces of abrasive paper, sample holder and one spring clip. Conforms to AATCC standards.



Crockmeter Motorized - Model: ILE-MCM-500

Electric motorized operated with automatic stop counter up to 99,999 provided with standard 15.875mm dia. crocking finger (or 18mm) with downward force of 9N. Metal holder ensures fixed place of fabric during testing. Can accommodate for extra weights for non-standard tests (please specify). Also includes 1000 pieces of 2 in. x 2 in. white crocking cloth, 2 pieces of abrasive paper, and one spring clip. Conforms to AATCC standards. Specify power requirement: 110 V 60 Hz or 220 V 50 Hz.



ROTARY CROCKMETER Model: ILE-RCM-400

To determine the color fastness of textiles to dry or wet rubbing particularly for printed fabrics. Applies 1134 grams of pressure on a 16mm finger and rotates 1.125 turns clockwise then counter-clockwise. The operating handle is, however, turned in one direction only. Conforms to AATCC standards.

INDUSTRIAL LABORATORY EQUIPMENT COMPANY, INC.

3210 Piper Lane – Charlotte, NC 28208 – U.S.A.

PO Box 220245 – Charlotte, NC 28222 – U.S.A.

Phone: 704-357-3930 – Email: ile@ile-textiles.com



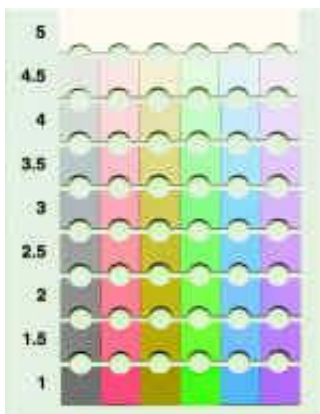
Gray Scale for Color Change – Model: ILE-GS-CC

For assessment of change in color to meet AATCC Standards. Gray Scale for Color Change is used to visually evaluate change in color due to colorfastness tests as described in Evaluation Procedure 1 which is included in the purchase of a Gray Scale for Color Change.



Gray Scale for Staining – Model: ILE-GS-ST

For assessment of staining to meet AATCC Standards. Gray Scale for Staining is used to visually evaluate staining on multifiber samples due to colorfastness tests as described in Evaluation Procedure 2 which is included in the purchase of Gray Scale for Staining.



Chromatic Transference Scale – Model: ILE-CTS-CM AATCC

9 Step scale for various colorfastness tests to meet AATCC Standards.

This scale is used to visually evaluate color transfer or staining. The five hues, red, yellow, green, blue and purple, were selected from the Munsell Book of color. The neutral gray chips were selected to correspond to the gray chips on the Gray Scale for Staining. The Chromatic Transference Scale may facilitate evaluations of staining, especially when used by a less experienced technician.

INDUSTRIAL LABORATORY EQUIPMENT COMPANY, INC.

3210 Piper Lane – Charlotte, NC 28208 – U.S.A.

PO Box 220245 – Charlotte, NC 28222 – U.S.A.

Phone: 704-357-3930 – Email: ile@ile-textiles.com



Light Cabinet



Verivide cabinet with 4 light sources:

D65 – Artificial Daylight.
TL84 – Philips fluorescent.
F – Filament.
UV – Ultra Violet.
(other options available).

Model: ILE-CC-210B

Dimensions:	Width	Height	Depth
Overall:	1290mm	755mm	620mm
Viewing Cavity:	1260mm	545mm	590mm

Model: ILE-CC-210C

Dimensions:	Width	Height	Depth
Overall:	1560mm	755mm	620mm
Viewing Cavity:	1530mm	545mm	590mm

Call for other Color Assessment Equipment & Accessories

INDUSTRIAL LABORATORY EQUIPMENT COMPANY, INC.

3210 Piper Lane – Charlotte, NC 28208 – U.S.A.
PO Box 220245 – Charlotte, NC 28222 – U.S.A.
Phone: 704-357-3930 – Email: ile@ile-textiles.com

ILE Series MACROSCOPES



These unusual low cost portable macroscopes offer many advantages over traditional units making them useful not only in typical laboratory applications but also in a variety of non traditional fields.

The exceptionally wide field of view coupled with the positionally correct image make MACROSCOPE units easy to use even for those untrained in microscopy. The simple, lightweight design makes them ideal for use in the field as well as the laboratory. These features coupled with their camera adaptability make MACROSCOPE units the instrument of choice for serious professionals in many fields.

MACROSCOPE 25 provides 25X magnifications over a wide 8 mm (5/16") field of view. The positionally correct image includes an interchangeable scale. The A scale provides measurements in inches and millimeters and the B scale provides measurements in inches and mills. With the close-up lens removed the unit can be used for distance viewing.

MACROSCOPE 45 provides 45X magnification over a wide 4.8mm (3/16") field of view. It incorporates a measuring scale providing measurements in inches or millimeters. With the close-up lens removed the unit can be used for distance viewing.

MACROSCOPE 18-36 ZOOM provides variable magnification of 18X to 36X. The unit incorporates a measuring scale that provides measurements in inches or millimeters that is valid at either maximum or minimum magnification.

INDUSTRIAL LABORATORY EQUIPMENT COMPANY, INC.

3210 Piper Lane – Charlotte, NC 28208 – U.S.A.
PO Box 220245 – Charlotte, NC 28222 – U.S.A.
Phone: 704-357-3930 – Email: ile@ile-textiles.com

COMPOUND DIGITAL MICROSCOPE SYSTEM

– Model: ILE-DMS-C

Precision Trinocular Microscope with wide field 10X eyepieces and achromatic super contrast objectives for total magnification of 40X, 100X, 400X and 1000X. Precision mechanical stage, 20W halogen illumination with intensity control, white balance switch supplied with blue, green, yellow and frosted filters, eyecups, spare bulb, calibration slide and dust cover. Built-in high resolution CCD Camera (specify NTSC or PAL system) and video capture card allows output to suitable PC via USB port (cable included). Includes powerful image analysis software capable of capturing images, on-screen measurement, storage and retrieval. Minimum computer requirements 500MHZ, 64MB Ram, 200MB hard drive space, Windows 98, SVGA color, CD Rom, USB port.



- Siedentopf trinocular phototube 30° inclined. The vertical tube has a built in 1/3" CCD camera.
- The ball bearing mounted reversed quintuple nosepiece has a ribbed grip for easy rotation and is positioned back closer to the microscope body for easy access to the specimen.
- The ASC "Achromatic Super Contrast" objectives provide brilliant sharp images with excellent contrast.
- The precise graduation of the low position coaxial control mechanical stage allows quick finding and marking of specific areas on your slide. The travel range of the stage is 76mm x 50mm (X-Y) and graduated to 1 mm with vernier reading to 0.1 mm.
- Slide-in center able Abbe Condenser N.A. 1.25 offers maximal flexibility required for any laboratory application.
- The built in field of view diaphragm ensures correct positioning of the condenser according to Kohler for perfect illumination of the specimens.
- A bright and efficient 12v/20W halogen illumination with intensity control allows viewing of difficult light absorbing specimens.
- White balance switch to help show the real background color of the slide to the CCD, regardless of the color temperature.

Designed for textiles from fiber to fabrics, identification, structure, contamination analysis and measurement

Compound precision and stereo zoom digital microscopes with built-in CCD cameras and video capture cards allow use with any suitable computer or monitor, magnification 5x-1000x.

Images for windows software and all necessary cables included. Allows image capture, measurement, storage and email with text or soundtrack addition.

INDUSTRIAL LABORATORY EQUIPMENT COMPANY, INC.

3210 Piper Lane – Charlotte, NC 28208 – U.S.A.

PO Box 220245 – Charlotte, NC 28222 – U.S.A.

Phone: 704-357-3930 – Email: ile@ile-textiles.com



Microscopes



Stereo Zoom Microscope

Model: ILE-2-62-1

Binocular Stereo Zoom Microscope.

Magnification range 7X to 45X.

Light source: Upper halogen, lower fluorescent.



Stereo Microscope –

Model: ILE-2-62-11

Binocular Stereo Microscope. 10X Eyepieces,

1X and 2X Objectives, Total Magnification,

10X and 20X; Binocular Head rotates 360°,

Halogen and fluorescent lamp illumination;

Stage plate with clips; rack-and-pinion focus.

Includes: Stand, head, eyepieces, objectives, dual illumination systems, dust caps, dust cover and spare lamp.

OTHER MODELS AND RANGES AVAILABLE.

INDUSTRIAL LABORATORY EQUIPMENT COMPANY, INC.

3210 Piper Lane – Charlotte, NC 28208 – U.S.A.

PO Box 220245 – Charlotte, NC 28222 – U.S.A.

Phone: 704-357-3930 – Email: ile@ile-textiles.com

LINEN TESTERS



ILE-LT-1 LINEN TESTER

1" x 1" folding glass with case, 5X lens. Reads in inches and centimeters.



ILE-LT-2 LINEN TESTER

1/2" x 1/2" folding glass with case, 9X lens



ILE-LT-3 LINEN TESTER

1" x 1" with traveling pick needle, 6X lens

Handheld Thread Counters (Optical Gratings):

To instantly determine the number of yarns per (cm or inch) in knitted and woven fabrics.
Available Ranges:

L-1 Thread Counters (10-44 Counts/In 4-17 Counts/Cm)

B-1 Thread Counters (25-66 Counts/In 10-23 Counts/Cm)

S-2 Thread Counters (35-80 Counts/In 13-31 Counts/Cm)

INDUSTRIAL LABORATORY EQUIPMENT COMPANY, INC.

3210 Piper Lane – Charlotte, NC 28208 – U.S.A.

PO Box 220245 – Charlotte, NC 28222 – U.S.A.

Phone: 704-357-3930 – Email: ile@ile-textiles.com

Large Manual Fabric Punch

– Model ILE-B-36

Cutter Dies Sold Separately.



Specifications:

Capacity	5000 lbs
Max. Lineal cutting edge	30 inch
Projection	6 "
Piston stroke	1 1/8 "
Die opening	11/16 "
Die holding diam. (Pressure plate)	7 1/2 "
Table width	13 3/4 "
Table depth	11 1/2 "
Machine height	23 "
Machine width	16 "
Machine depth	17 "
Net weight	100 lbs
Shipping weight	150 lb

The NAEF B-36 Punch Press is mostly used in Laboratories, Quality Control and R & D Dept. The B-36 cuts soft material including textile, carpets, paper, plastic, rubber etc. The maximum sample thickness is 1/2 inch. The die is supported securely to the die holder (Pressure plate) and stays in place during cutting and removal of the samples. Changing dies is a matter of seconds. All NAEF dies come with an expulsion, so that the samples will be found on the table. The depth gauge restricts penetration into the table top surface.

INDUSTRIAL LABORATORY EQUIPMENT COMPANY, INC.

3210 Piper Lane – Charlotte, NC 28208 – U.S.A.

PO Box 220245 – Charlotte, NC 28222 – U.S.A.

Phone: 704-357-3930 – Email: ile@ile-textiles.com



Fabric Yield



Pneumatic Sample Press

Heavy duty table top press with 125mm (5 in) bore air cylinder, 50mm (2 in) cutting depth and 125 x 125mm (5 x 5 in) cutting table. Pneumatic activation at 100 PSI (7 Bars) produces 887 kg (1950 lb) of cutting force. Ejection device removes samples from the cutting die. Completely air operated - no wiring required. Two hand control for safety and regulator filter. OSHA approved air supply shut off valve can be locked in "OFF" position. Supplied with standard Die for U.S. Fabric Yield (oz/sq. yd). Special die sizes available.

Laboratory standard compressed air supply required.

Fabric Punch – Model ILE-FSC-688

Hand punch furnished with cutter die that is designed to read directly in ounces per square yard when used with 8 samples. For North American testing Standards the fabric is folded in a way that allows the 8 samples to be cut in one operation, and more important ensures the samples are taken from uniformly spaced locations throughout the fabric.

METRIC FABRIC PUNCH –

Model ILE-FSC-600M

Hand punch furnished with cutter die that is designed to read directly in grams per square Meter when used with 4 samples. For North American testing Standards the fabric is folded in a way that allows the 4 samples to be cut in one operation, and more important ensures the samples are taken from uniformly spaced locations throughout the fabric. Produces (4) 25 sq. cm. samples.



Metric Circular Fabric Sample Cutter

Model: ILE-CFC-100

113mm diameter x 5mm cutting depth – Produces 100 sq. cm samples. Complete with cutting board and 12 spare blades.

CALL FOR FABRIC PUNCH ACCESSORIES: (BLADES, CUTTING PADS ETC.)

INDUSTRIAL LABORATORY EQUIPMENT COMPANY, INC.

3210 Piper Lane – Charlotte, NC 28208 – U.S.A.

PO Box 220245 – Charlotte, NC 28222 – U.S.A.

Phone: 704-357-3930 – Email: ile@ile-textiles.com

Portable Balance – Model ILE-2-OSP-200

Electronic balance with standard units: grams (g), ounces (oz).
Capacity 200 x .01 gram. Powered by AC adapter included or batteries.



when used with the ILE
Standard Punch reads in
ounces per square yard
Capacity:
200 x .01 oz/yard²

when used with the ILE-
Metric Punch or Circular
Cutter reads in grams per
square meter; Capacity:
20000 x 1 g/meter²

ILE FABRIC YIELD BALANCES

Fabric Yield Balance – Electronic balance when used with the ILE-Punch reads in ounces per square yard, and grams per square meter plus standard units: grams (g), ounces (oz), pounds (lb), grains (GN). Powered by AC adapter included or batteries.
Capacity 210 x .01 gram

Programmed for use with: **Standard Punch**

**Metric Punch or
Circular Cutter**



Model
ILE-FY-LT-210
Capacity:
210 x .01 oz/yard²
7120 x 1 g/meter²

Model
ILE-FY-LT-210-M
Capacity:
20000 x 1 g/meter²
619 x .05 oz/yard²

CONTINUED ON NEXT PAGE

INDUSTRIAL LABORATORY EQUIPMENT COMPANY, INC.

3210 Piper Lane – Charlotte, NC 28208 – U.S.A.
PO Box 220245 – Charlotte, NC 28222 – U.S.A.
Phone: 704-357-3930 – Email: ile@ile-textiles.com

ILE FABRIC YIELD BALANCES

Each of the following Precision Fabric Yield Balances have an additional set of units when programmed for the Standard Fabric Punch; this allows for testing using a single layer sample when material is limited.

Fabric Yield Balance – Electronic balance when used with the ILE-Punch reads in ounces per square yard, and grams per square meter plus standard units: grams (g), ounces (oz), pounds (lb), grains (GN). Powered by AC adapter included.

Programmed for use with:	Standard Punch	Metric Punch or Circular Cutter
	Model ILE-FY-PT-51 Capacity: 51 x .001 oz/yard ² 1729 x .1 g/meter ² 51x.001 grams	Model ILE-FY-PT-51-M Capacity: 5100 x .1 g/meter ² 150 x .005 oz/yard ² 51x.001 grams
	Model ILE-FY-PT-210 Capacity: 210 x .001 oz/yard ² 7120 x .1 g/meter ² 210 x .001 grams	Model ILE-FY-PT-210-M Capacity: 20000 x .1 g/meter ² 619 x .005 oz/yard ² 210 x .001 grams
	Model ILE-FY-AT-65 Capacity: 65 x .0001 oz/yard ² 2200 x .01 g/meter ² 65 x .0001 grams	Model ILE-FY-AT-65-M Capacity: 6500 x .01 g/meter ² 190 x .0005 oz/yard ² 65 x .0001 grams

INDUSTRIAL LABORATORY EQUIPMENT COMPANY, INC.

3210 Piper Lane – Charlotte, NC 28208 – U.S.A.
 PO Box 220245 – Charlotte, NC 28222 – U.S.A.
 Phone: 704-357-3930 – Email: ile@ile-textiles.com

Cup-Type Viscometers

For quick measurement of the viscosity of liquids such as paint, lacquer, varnish, syrup, and oil. One-piece, corrosion-resistant stainless steel. Portable cups measure the viscosity of a liquid in Zahn seconds (the amount of time required for a steady stream to flow from the orifice in the bottom of the cup). Capacity, 1-1/2 oz. (44mL); length, 13-3/4 in. (35cm)



Orifice Diameter	No.	Uses	Centistroke
<u>Range</u>			
0.078 in. (2.0mm)	1	Very thin oil	18-56
0.108 in. (2.7mm)	2	Thin oil or lacquer	40-230
0.148 in. (3.8mm)	3	Medium oil or mixed paints	150-790
0.168 in. (4.3mm)	4	Heavy Mixtures	220-1100
0.208 in. (5.3mm)	5	Very Heavy Mixtures	460-1725+

Dial Viscometer:



MODEL	VISCOSITY RANGE cP(mPa•s)		SPEEDS	
	Min.	Max.	RPM	Number of Increments
LVT	1†	2M	.3-60	8
RVT	100††	8M	.5-100	10
HAT	200††	16M	.5-100	10
HBT	800††	64M	.5-100	10

† 1 cP achieved with UL Adapter accessory. 15 cP on LV with standard spindles.

†† Minimum viscosity is achieved with optional RV/HA/HB-1 spindle.

M = 1 million

cP = Centipoise

mPa•s = Millipascal/seconds

Digital Viscometer:



MODEL	VISCOSITY RANGE cP(mPa•s)		SPEEDS	
	Min.	Max.	RPM	Number of Increments
LVDV-E	1†	2M	.3-100	18
RVDV-E	100††	13M	.3-100	18
HADV-E	200††	26M	.3-100	18
HBDV-E	800††	104M	.3-100	18

† 1 cP achieved with UL Adapter accessory. 15 cP on LV with standard spindles.

†† Minimum viscosity is achieved with optional RV/HA/HB-1 spindle.

M = 1 million

cP = Centipoise

mPa•s = Millipascal/seconds

INDUSTRIAL LABORATORY EQUIPMENT COMPANY, INC.

3210 Piper Lane – Charlotte, NC 28208 – U.S.A.

PO Box 220245 – Charlotte, NC 28222 – U.S.A.

Phone: 704-357-3930 – Email: ile@ile-textiles.com

Automatic Temperature Compensated Hand Refractometers

Measure Brix, Industrial Fluids, Starch and Adhesives and Concentration of other solutions. These automatic temperature compensated refractometers eliminate the bother of making manual temperature corrections to your measured results when solution's temperature deviates from 20° C. The high contrast blue filter systems and adjustable eyepiece give easy-to-read scale readings. Unit has a rubber sleeve that protects sample from body heat, and a rubber eye shield that prevents excess light from entering field of vision. Price includes carrying case and manual.



SPECIFY RANGE:

Model ATC-10 (0 - 10% x 0.1%)

Model ATC-18 (0 - 15% x 0.1%)

Model ATC-32 (0 - 32% x 0.2%)

Model ATC-58 (58-90% x 0.5%)

Model ATC-62 (28-62% x 0.2%)



pH/mV/Temperature Meter, model: HI8314

Small casing pH meter and with DIN connector. Manual 2 point calibration. Automatic temperature compensation.

Range: 0.00 to 14.00pH; +/-1999mV; 0.0 to 100.0°C

Resolution: 0.01pH; 1mV; .1°C

Accuracy: +/-0.01pH; +/-1mV; +/-0.4°C

Includes: 1) Probe, model: HI 1217D Combination pH electrode, gel filled, double junction, internal temperature sensor, DIN connector and 1 m (3.3') cable.



Plating Bath pH Meter – Model: HI 99131

Waterproof, portable pH/temperature meter supplied complete with HI 62911 pH electrode with internal temperature sensor, pH 4 and pH 7 buffer sachets, HI 700661 electrode cleaning solution (2 x 20 mL), batteries, rugged carrying case and instructions.

Calibration: Automatic; 1 or 2 point Manual

Automatic temperature compensation.

Range: -2.00 to 16.00pH; -5.0 to 105.0°C

Resolution: 0.01pH; .1°C. Accuracy: +/-0.02pH; +/-0.5°C

Probe, model: HI62911, amplified, with titanium cage, internal temperature sensor and Matching-Pin (included).



AATCC Perspiration Tester

Includes:

- Stainless Steel Frame (20 sample capacity)
- Loading Weight (10 Lb – AATCC, 5 Kg – ISO)
- Acrylic Plates (set of 21)

INDUSTRIAL LABORATORY EQUIPMENT COMPANY, INC.

3210 Piper Lane – Charlotte, NC 28208 – U.S.A.

PO Box 220245 – Charlotte, NC 28222 – U.S.A.

Phone: 704-357-3930 – Email: ile@ile-textiles.com



OVENS

Premium Lab Ovens; Model: ILE-FSI-OVEN

Full-feature ovens available in three sizes as gravity-flow or forced-air models. Power supply 120 Volt-60 Hz.

Operating Features

- Intuitive microprocessor controls with touch keypad, LED digital display and on-screen prompts
- Variable temperature control from 50° to 275°C in 1°C increments
- Automatic over temperature protection at 5°C above set point with visual alarm
- Last settings retained in memory
- Built-in safety backup and circuit breaker to protect oven from power surges



Cabinet Features

- Easy-to-clean stainless-steel chambers
- Enamel-painted steel exterior with coated aluminum trim
- Low-watt-density, long life heating elements
- Thick 21/2 in. (6.4cm) all-around fiberglass insulation keeps exterior cool
- Gasketed door has stay-cool latch; opens 180° for easy access
- Adjustable chrome-plated steel wire shelves (163/4 x 173/8 in. [44 x 42.5cm])
- Nonskid rubber feet elevate cabinet for ventilation

Three Sizes

- Small: 2.5 cu. ft. chamber volume; supplied with one shelf (hold up to 5)
- Medium: 3.75 cu. ft.; with one shelf (hold up to 8)
- Large: 5.0 cu. ft.; with two shelves (hold up to 11)

Forced-Air Ovens

- Deliver more uniform heating for better temperature control and faster drying
- Blower circulates air throughout chamber; fresh air is mixed in and re-circulated
- Used air vented through top of oven

Gravity-Flow Ovens

- Vertical airflow for uniform sample heating
- Used air expelled through top-mounted vent

INDUSTRIAL LABORATORY EQUIPMENT COMPANY, INC.

3210 Piper Lane – Charlotte, NC 28208 – U.S.A.

PO Box 220245 – Charlotte, NC 28222 – U.S.A.

Phone: 704-357-3930 – Email: ile@ile-textiles.com

All-Purpose Laboratory Oven, Model: ILE-TSP-OVEN

Operating Features

- Temperature control to 250°C (482°F), sensitivity: $\pm 0.3^{\circ}\text{C}$ or better
- Built-in timer (12 hours, electronic models; 99 hours, microprocessor-control models)
- Class II user-adjustable safety thermostat with flashing indicator light (electronic control models) or with audio/visual alarm (microprocessor-control models)

Cabinet Features

- Require only 3.5 sq. ft. of bench space
- Corrosion- and contamination-resistant stainless-steel chamber
- Steel exterior with gasketed door
- Top vent for optimal venting
- With two adjustable, non tip nickel-plated shelves



Mechanical Ovens

- Solid chamber floor that resists spills and protects heating elements
- Balanced centrifugal blower for uniform air distribution

Microprocessor-controlled Models

- Digital set points and LED display
- RS-232-C knockout for data port

Specifications & Ordering Information:

Small & Medium Models available for 115 or 230 Volt operation.

Large Model Only available in 230 Volt-50/60 Hz.

Three Sizes

- Small: 2.5 cu. ft. chamber (15-1/2", 18-1/2", 15")
- Medium: 4.5 cu. ft. chamber (15-1/2", 18-1/2", 27")
- Large: 5.5 cu. ft. chamber (15-1/2", 18-1/2", 33")

INDUSTRIAL LABORATORY EQUIPMENT COMPANY, INC.

3210 Piper Lane – Charlotte, NC 28208 – U.S.A.

PO Box 220245 – Charlotte, NC 28222 – U.S.A.

Phone: 704-357-3930 – Email: ile@ile-textiles.com

**Mechanical Convection Oven;
Model: DKN-810**

Temperature range: from 5°C above ambient to 260°C

Store 10 preset temperatures and up to 10 set temperatures. Settings can be locked. PID controller compensates for temperature changes caused by fluctuating loads and setting changes to ensure accuracy. Built-in diagnostics include automatic shutoff and audible/visual alarms. Corrosion-resistant Type 304 stainless steel interior. Cold-rolled carbon steel exterior with baked melamine finish.

Includes: 4 Removable Type 304 stainless-steel shelves.



OTHER MODELS AND RANGES AVAILABLE.

INDUSTRIAL LABORATORY EQUIPMENT COMPANY, INC.

3210 Piper Lane – Charlotte, NC 28208 – U.S.A.

PO Box 220245 – Charlotte, NC 28222 – U.S.A.

Phone: 704-357-3930 – Email: ile@ile-textiles.com



ILE ST-101

Digital Shrinkage Tester

Yarns – Narrow Fabrics



For determining the shrinkage of yarns, twines, narrow fabrics,
and tire cords.

Temperature range is adjustable from room temperature to 245
degrees centigrade / 473 degrees Fahrenheit.

Digital readout of temperature and shrinkage in imperial or
metric systems. Temperature controlled.

Conforms to A.S.T.M. D4974
110-120 VAC.

INDUSTRIAL LABORATORY EQUIPMENT COMPANY, INC.

3210 Piper Lane – Charlotte, NC 28208 – U.S.A.

PO Box 220245 – Charlotte, NC 28222 – U.S.A.

Phone: 704-357-3930 – Email: ile@ile-textiles.com

Note

INDUSTRIAL LABORATORY EQUIPMENT COMPANY, INC.

3210 Piper Lane – Charlotte, NC 28208 – U.S.A.

PO Box 220245 – Charlotte, NC 28222 – U.S.A.

Phone: 704-357-3930 – Email: ile@ile-textiles.com



INDUSTRIAL LABORATORY EQUIPMENT COMPANY, INC.

3210 Piper Lane – Charlotte, NC 28208 – U.S.A.
 PO Box 220245 – Charlotte, NC 28222 – U.S.A.
 Phone: 704-357-3930 – Email: ile@ile-textiles.com