

DRAW FORCE TESTER - HT

LH-160 DFT-HT



HIGH TEMPERATURE & HIGH SPEED DFT

INSTRUMENT FEATURES

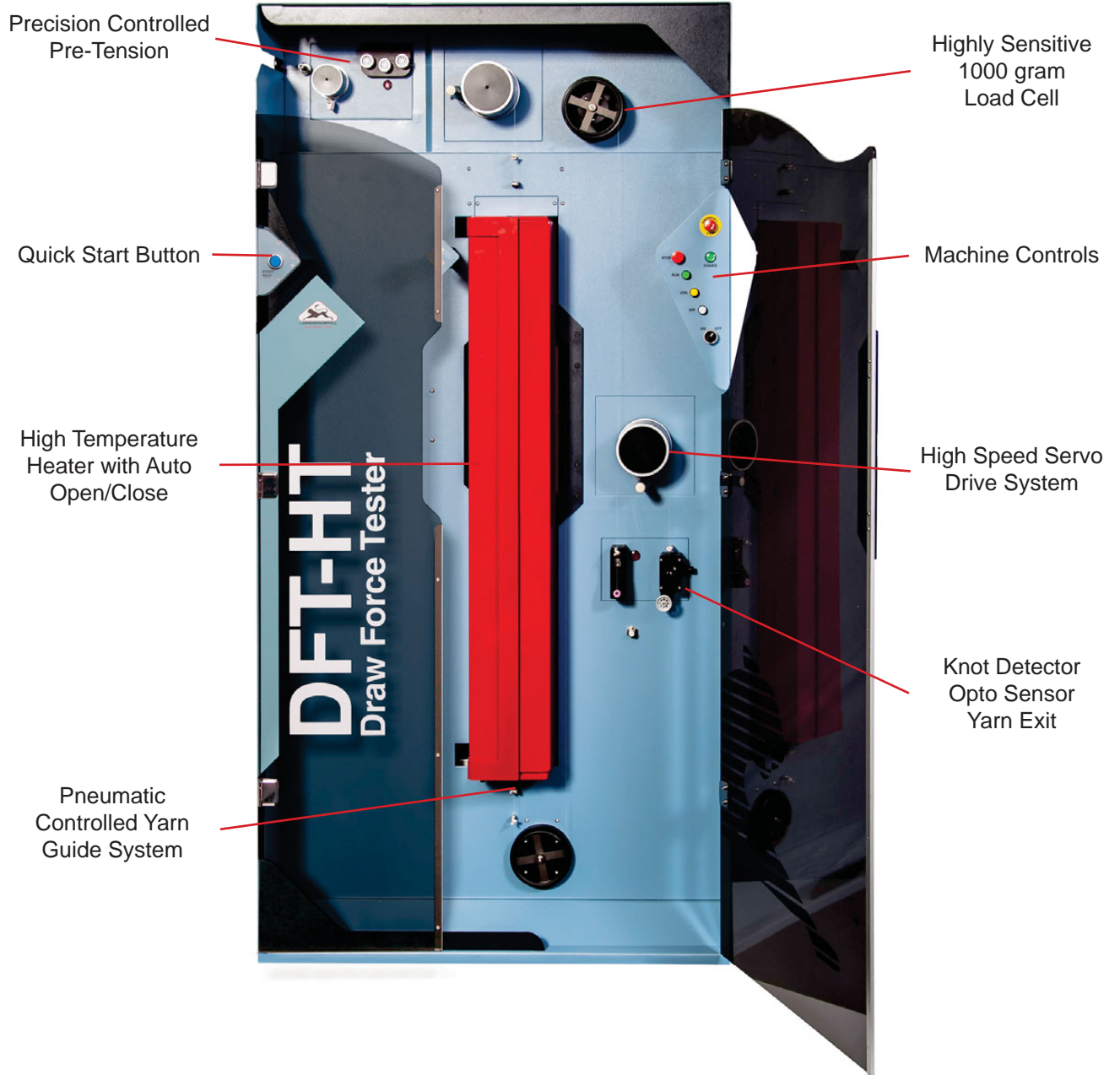
- High Speed and High Temperature precision Draw Force Tester with Electronic Drive System
- Testing Speeds between 20-1000 meters/minute with electronic servo motors
- Heater Temperature between 25-500°C
- Real-time Draw Force Measurement for partially oriented yarn under constant extension
- Software controlled, Electronic Pre-tension applied for the entire duration of the yarn testing
- Automatic Yarn Guides to move the yarn in and out of the heater after test
- Continuous operation with Automatic or Manual Splice Yarn Package Changers for maximum test efficiency
- Ability to start the test from both sides of the machine
- Closed door application for maximum safety
- Effectively used to test POY, MOY and LOY
- DFT-HT complies with ASTM D5344

DFT-HT is the newest addition to Lawson Hemphill line of Draw Force Testers. The instrument features 1000 meters/minute test speed and 500°C hot air temperature on the running yarn. It complies with ASTM D 5344.

The system is Software Controlled to set the required Draw Ratio and Pre-Tension while maintaining constant air test temperature throughout the test. It is equipped with yarn guides that move the yarn in-out of the heater when testing is completed. For maximum safety, DFT-HT doors remain closed during the test.

The operator can start the test from either side of machine by pressing Quick Start Blue button or a single keyboard click. When equipped with Automatic or Manual Splice Package Changers, the DFT-HT operates continuously.

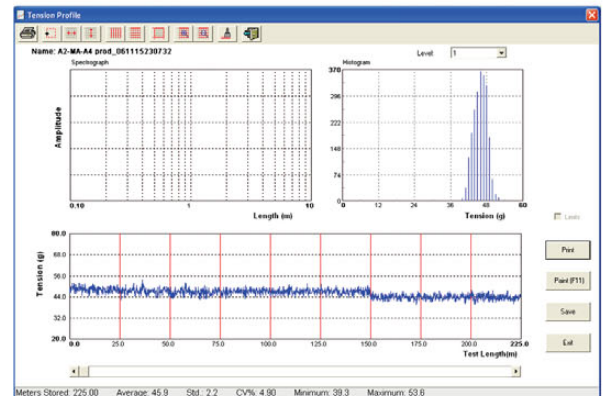
ULTIMATE DRAW FORCE TESTER
for your high speed testing needs



SOFTWARE FEATURES

- Continuous monitoring and detection of changes in yarn draw tension with real time tension graph display
- Automatic application of the Draw Ratio and Pre-tension
- Draw Force statistics for Average, Minimum and Maximum Tension readings, Standard Deviation and CV%
- Production or Continuous modes of operation for group or single package analysis
- Accept/Reject limits to sort out the yarn packages
- Knot Detector input to begin data collection
- Simple File Structure and automatic saving of test settings, results and yarn tension graphs
- Export all test data automatically or operator initiated
- Data archiving of multiple or single package test data
- Auto Export function for sharing tension data with factory main database

View Tension Data for each Package



Tension Graph, Histogram and Spectrograph for each package

The main screen displays various test parameters on the left, a 'Test Data' table in the center, and a 'Summary Data' table below it. The 'Test Data' table lists individual packages with their respective statistics. The 'Summary Data' table provides an overview of all packages tested.

#	Sample	#	Avg. (g)	SD	CV%	Min	Max	Speed	Temp(C)
Test 9		9	43.6	0.74	1.69	42.1	44.8	120	150
25	44.4	8	43.6	0.59	1.36	42.3	44.5	120	150
24	43.1	A4	43.6	0.64	1.47	42.3	44.7	120	150
23	43.5	6	46.8	0.71	1.53	45.4	48.0	120	150
22	42.5	5	46.8	0.55	1.17	46.0	48.0	120	150
21	42.5	MA	46.8	0.49	1.04	45.7	47.8	120	150
20	43.1	3	46.4	0.84	1.81	45.0	48.4	120	150
19	43.9	2	47.1	0.86	1.83	45.9	50.0	120	150
18	44.2	A2 vpr	48.0	0.64	1.33	47.0	49.4	120	150
17	43.1								

Total	#	Avg. (g)	SD	CV%	Min	Max
GOOD	9	45.9	1.75	3.81	43.6	48.0
ALL	9	45.9	1.75	3.81	43.6	48.0

Test Results for Individual Packages with Statistics

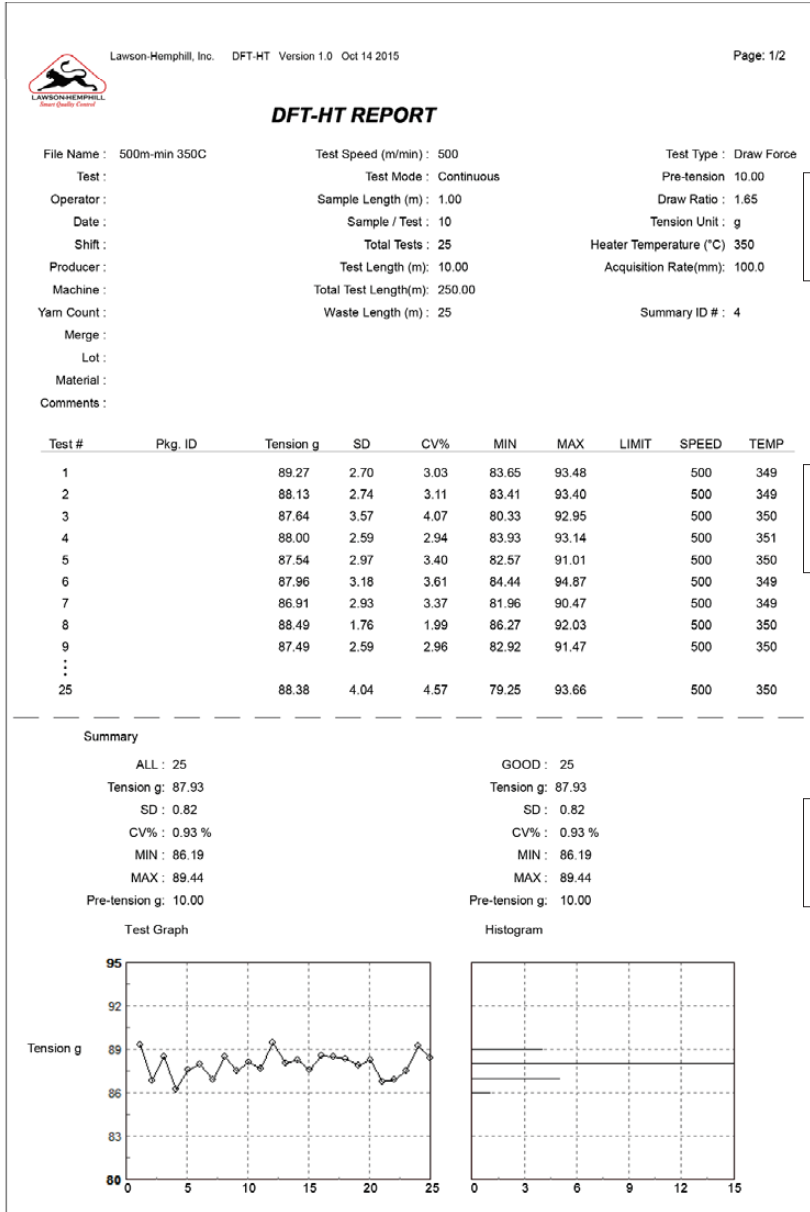
Out of Limit results are highlighted and flagged

Summary of all packages with Statistical Analysis

Tension Graph and Histogram with Limits

DFT Software Main Screen

DRAW FORCE TESTER HIGH TEMPERATURE & HIGH SPEED



Test Header, including test parameter value

Test Result, for individual packages including statistical report

Summary of GOOD and ALL packages with group statistics

DFT-HT PRODUCTION TEST REPORT

TECHNICAL SPECIFICATIONS

Machine Speed 10-1000m/min
 Heater Temperature 25-500°C
 Heater Length 1000mm
 Load Cell 1000 grams
 Pretension Range 5-50 grams
 Yarn Types POY, MOY or LOY yarns

**All specifications are subject to change.*

MODEL

LH-160
 Draw Force Tester High Temperature and High Speed
 Electrical 110-220 Vac 50-60 Hz, 3.3Kw
 Air 60 psi, clean air required
 Dimensions 940 x 673 x 1905mm
 (37 x 26.5 x 75 inches)
 Weight 295kg (650 lbs)

Contact us today for more information on any Lawson-Hemphill product!

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