

# ForneyLink™ Touchscreen User Interface

## Digital Readout with Full Data Acquisition

### Digital Readout

ForneyLink™ is an intuitive, comprehensive, digital display of significant, relevant material testing data and specimen information. It can be supplied with new Forney machines, or retrofit to most conventional testing machines. ForneyLink™ devices are also capable of utilizing ForneyVault™ for the ultimate in data management capability and transparency.

In addition to display of specimen type and size data, break information, and real time graphing, the system gathers all test parameters and test data, compiling the results into a database format. The user can transmit the data to any accessible location. Along with detailed individual test data, summary shift reports can be compiled and processed. This is achieved without the need for an intermediate computer or further operator manipulation of data.

The system can automatically print a specimen test report, including load vs time graph, after each test. It can also automatically generate a PDF version of the report that is transmitted to a user defined location.



If selected at the operator's console, the system queries the operator as to the "break type" observed before proceeding to set up for the next test. The observed "break type" is recorded against the test id number.

Systems can be equipped with bar code or RFID readers to identify specimens by ID instead of specimen number. The ID can also be manually entered.

## Interface

1. A Human Machine Interface (HMI) allowing all setup, data logging, calibration, and password protection.
2. The HMI incorporates “touchscreen” technology. Manual pushbuttons or switches are limited to those necessary for safety precautions (E-Stop).
3. The HMI is a fully functional computer with:
  - Intel E3845, Fanless 1.91GHz Quad Core CPU
  - 10” Wide Super Video Graphic Array, 1024 x 600 px
  - 4GB RAM, 32GB Hard Drive
  - 802.11 WIFI
  - RS-232, (2) Dual Intel 82574L Gigabit Ethernet ports, (5) USB 2.0 ports
  - VESA Compliant
  - WINDOWS 7 EMBEDDED 64-bit
4. At the operator’s discretion, the system allows for a hard copy printout of individual test data including the following:
  - Machine make, model, and capacity
  - Machine serial number
  - Calibration date
  - Manufacturer name, address and contact information
  - Test Operator’s name, business address and contact information
  - Test ID
  - Date
  - Time
  - Test type
  - Specimen Dimensions
  - Correction Factor
  - Ramp Rate
  - Load at Break
  - Stress at Break
  - Break Type
  - Graph of load versus time, or stress versus strain if so equipped
5. The operator also has the option of printing test data from a previous test with the information listed above.
6. The system prints to a printer via USB, LAN, or Wi-Fi, located either at the machine, or in a nearby office.
7. The operator can transfer summary or test data to a portable “flash” drive storage device, or a customer-supplied, shared network folder.
8. The HMI system provides the capability for remote troubleshooting and the addition of factory supported system updates.
9. The system can incorporate password protection to prevent unauthorized use.

## Data Acquisition

During the test, the system buffers data at the HMI for printing. The HMI is capable of storing several gigabytes of data. The data is transferrable to other, operator-selectable storage media via a USB flash drive or Ethernet connection.

Data can be printed to a network or Wi-Fi capable printer, depending on configuration, located either at the machine or in a nearby office. This option removes the printer from the often dusty and humid conditions found in concrete testing labs.

Electrical Requirement: 100-240VAC, 50/60Hz, 1.5Amps

Accuracy: 1.0% over calibrated range (from 1% of full scale to full scale)

Compliance: The system is in compliance with ASTM C39, C78, C109, C293, C-469, 370 and E-4 ASTM specifications.

Typical printouts and Operator Interface Screens shown below.

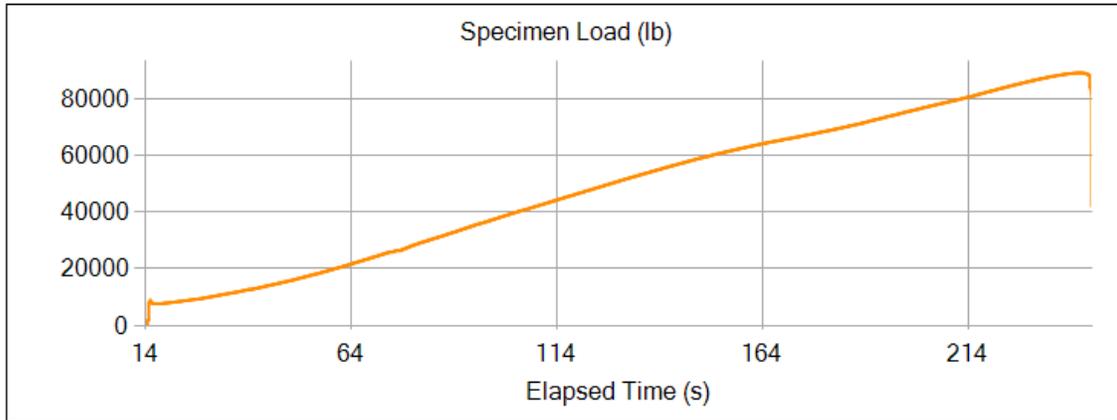
Specifications subject to change without notice.



ForneyLink Touchscreen User Interface

Serial number: 17xxx  
Calibrated: 11/1/2017  
Forney, L.P. (800) 367-6397  
2050 Jackson's Pointe Court [www.FORNEYonline.com](http://www.FORNEYonline.com)  
Zelienople, PA 16063

Test ID:	10016	Age (days):	7
Date Tested:	5/4/2016	Weight (lb):	23
Time:	08:22	Break Type:	2
Test Type:	Cylinder	Ramp Rate (psi/s):	30.85
Diameter (in):	4	Load at Break (lbf):	89269
Cyl. Corr. Factor:	1	Stress at Break (psi):	7104
Height (in):	8		



[www.FORNEYonline.com](http://www.FORNEYonline.com)

Sample hard copy printout of individual test data

Tare Load

Show Graph

Load **10** lbf

Stress **0.76** psi

Max Load **0** lbf

Stress at Break **0** psi

Ramp Rate **0.0** psi/s

± 20 %

This Test **0**

Next Test **1**  Auto

Cylinder

DiamAvg **4** in

Height **8** in

Weight **12** lb

Age **7** days

Break **70** %

Ramp Rate **35.0** psi/s

Preload **2,000** lbf

Use Correction Factor  Correction Factor: **1**

Ask for Break Type?

Start Test

Stop Test

3:31:06 PM  
8/18/2016

English

User Info

Machine Setup

Calibrate

Generate Report/Transfer

Tare Load

Hide Graph

Load **44** lbf

Stress **3.46** psi

Max Load **45,148** lbf

Stress at Break **3,592.79** psi

Ramp Rate **33.0** psi/s

± 20 %

Cylinder

DiamAvg **4** in

Height **8** in

Weight **12** lb

Age **7** days

Break **70** %

Start Test

Stop Test

3:39:51 PM  
8/18/2016

English

Load vs. Time Chart

Elapsed Time (s)	Specimen Load (lb)
0	0
10	10000
20	15000
30	20000
40	25000
50	30000
60	35000
70	38000
80	40000
90	45000
91	30000