

# FORNEY TEST MACHINES

LA-270-FL MANUAL BEAM MACHINE

## BEAM TESTER COMPRESSION MACHINE

### LOAD CAPACITY

30,000lb

### FRAME

Standard (F)

### CONTROL SYSTEM

Manual

### TEST TYPES

Compression, Flexural

### TESTING MATERIALS

Cubes, Grout Prism, Beams

### DESIGNED & BUILT BY FORNEY

Exceeds ACI  
Recommendations

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## HARDWARE

### FRAME

These machines are ideal for flexural testing of concrete beams and compression testing of small specimens, of low strength concrete, cement, and other building materials. Standard Testing Machines have frames manufactured from solid steel into a one-piece, welded unit that exceeds ACI recommendations. Easily adjustable for testing 6" beams with a span of 12", 18" and 24" in either center point or third point loading and offers an optional accessory that allow testing of 2" cubes.

The load frame is manufactured from rectangular steel tubing welded to a solid steel plate top crosshead and a steel channel lower crosshead. The hydraulic cylinder assembly is mounted to the top crosshead, with force being applied in a downward direction. This design eliminates foreign material build-up around the piston cylinder area.

The LA-0270 can be configured as an add-on to our standard compression testing machines to utilize the hydraulics and readout on the compression machine to create a two-frame tester

that addresses a wide testing range with unprecedented accuracy.

### HYDRAULIC

The hydraulic unit is supplied as a complete, fully integrated assembly. The unit is pre-piped and pre-wired. It incorporates hydraulic valves.

Single unit design permits easy installation and provides portability without disassembling of hydraulic or electrical components.

### SAFETY FEATURES

Several safety features are incorporated to protect both operator and testing machine:



- ▲ Fragment Safety Guard: Fragment guards with latches and hinges are mounted to both the front and rear of the compression frame. Fragment guards are made of Lexan® and permits clear viewing of the test in process.
- ▲ \*Optional Overextension Protection: A piston over-extension limit switch system protects against piston extension beyond maximum travel.

## SOFTWARE

### DIGITAL READOUT SYSTEM

Setup of testing protocol, real-time display of test data, and post-test data transfer is accomplished through the ForneyLink touchscreen HMI. The operator can navigate options for:

- ▲ Test Run
- ▲ Test Setup
- ▲ Machine Setup
- ▲ Calibration
- ▲ Reporting and Data Transfer
- ▲ Diagnostics

Provides a simultaneous display of force, stress and rate of load, along with a real time graph of load or stress vs time. Standard functionality includes data collection by the ForneyLink touchscreen HMI for printing and transfer.

### ADD FORNEYVAULT TO YOUR MANUAL MACHINE

Make your machine smart – enable two-way data communication by accessing information and making it available for the testing process. Connect your machine seamlessly to LIMS packages, QC software, and other third-party software participating on the ForneyVault platform. ForneyVault enabled machines help control the workload, and make your technicians smarter and more productive, with fewer costly errors.

A smart machine can:

- ▲ Enable intelligent workflows
- ▲ Enable Bar Code Scanning capability to identify the specimen to be tested
- ▲ Validate specimen geometry
- ▲ Calculate proper preload settings – based on actual and/or expected strength
- ▲ Calibration Monitor provides notification of impending calibration requirements
- ▲ Discard Dashboard provides context enabled specimen management for untested specimen disposal decisions.
- ▲ Notify you that a correction factor should be used
- ▲ Notify you of individual low breaks
- ▲ Notify you of excessive variance among several specimens

### REMOTE SUPPORT

With a user-provided Internet connection (either Wi-Fi or Ethernet), all ForneyLink equipped machines are capable of real-time, online support from the Forney Support Team for basic settings and test setup to advanced troubleshooting, fault finding, and software updates.

We offer unlimited Remote Technical Support for all Forney Testing Machines during the two-year warranty period.

For ForneyVault® subscribers, post-warranty remote technical support fees are waived for the life of your subscription.

Please refer any special requirements to a Forney sales representative.

**\* Specifications are subject to change without notice.**



ACCESSORIES	
Cylinder Compression (4" Dia x 8" L with Pad Caps) (100mm x 200mm)	TA-0101 Cylinder Top Platen Assembly
	TM-0095 Bottom Platen
	TM-2035 Centering Stud
Cylinder Compression (4" Dia x 8" L with Capping Compound or Ground Ends) (100mm x 200mm)	TA-0101 Cylinder Top Platen Assembly
	TA-0151 Bottom Platen
	TM-2035 Centering Stud
Cube (2") (50mm)	TAG-0071 Cube (2") Accessory Kit
Flexural Beam (6" x 6" x 18") (150mm x 150mm x 450mm)	included
Grout Prism (3" x 3" x 6") (75mm x 75mm x 150mm)	TA-0101 Cylinder Top Platen Assembly
	TM-0095 Bottom Platen
	TA-0172 Spacer, 3" H
	(2) TM-2035 Centering Stud

FACTORY INSTALLED OPTIONS	
Voltage	110/220VAC Single Phase
Capacity Options	none
Frame Options	Second Frame Capability (AB)
Travel Limit Switch	Not Applicable

SPECIFICATIONS	
Load Capacity Range	300lbf - 30,000lbf
Vertical Opening	15.375"
Horizontal Opening	9"
Ram Diameter	2"
Piston Stroke	2"
Platen Hardness	50 HRC (rollers)
Lower Platen Dimension	NA
Upper Platen Dimension	NA
Oil Reservoir Capacity	2 Gallons
Overall Width	27"
Overall Depth	25"
Overall Height	56"
Unit Weight	200lbs
Test Standard Ready	ASTM C78, C293 Flexural Beams in Third or Center Point ASTM E4
Test Standard Capable	ASTM C39, C78, C293, C109, C1019 AASHTO T 22, T 97, T 106 BS 1610, BS 1881, EN ISO7500-1, EN 12390-3, EN 12390-4

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