



Digital Force Gauge DFE II Series

» Operating Modes

- Normal
- Peak

» Advanced Functions

- Load Limits
- Pass/Fail Limits
- Embedded SPC (Mean, CV, Std, Dev)
- Overload History

» Integral Load Cell

- Better than 0.25% FS Accuracy
- Mechanical Overload Protection to 150% FS

» Simple User Interface

- High Resolution Full Color Display
- Menus and Prompts Guide Operation
- Dynamic Function Keys
- Automatic Shutdown

» Multiple Language Interfaces

- English
- Spanish
- French
- German
- Portuguese
- Chinese

» NIST Calibration with Data

» 1 Year Warranty



The Chatillon® DFE II Series marks a new era in digital force measurement. This compact, easy-to-use force gauge is designed for economy applications without compromising functionality. Ideal for handheld or test stand applications. The DFE II Series is available with capacities from 2 lbf (10 N) to 500 lbf (2500 N). The DFE II features an integral load cell with a measurement accuracy of better than 0.25% full scale. A large, easy-to-read, high resolution dot matrix LCD full color display supports a variety of standard gauge functions including normal and peak readings, high/low limits, setpoints, pass/fail results, statistical results, load cell actuation and direction. Loads are displayed in ozf, gf, lbf, kgf and N units. The display can be inverted and displayed results may be “hidden” from the operator.

The DFE II now also includes multiple language interfaces. The DFE II is able to change the display language from English to Spanish, French, German, Portuguese, and Chinese. The user can view the screen in color and a local language.

All DFE II Series force gauges come with a carrying case, battery adapter/charger, testing accessories, RS232 cable and NIST Certificate of Calibration with data. The DFE II Series has analog, USB and RS232 serial communication.

ISO 9001 Manufacturer

Specification Sheet
SS-DFE II Series

AMETEK®
TEST & CALIBRATION INSTRUMENTS

Easy-to-Read Display.

A large, easy-to-read full color LCD can display readings, icons and visually indicate gauge or test status using various colors. The high resolution display features brightness adjustments and can be inverted when required. The display can even be “hidden” at the press of a button. A load bargraph indicating load direction, measured load and safe load and helps prevent overloads : the load bar changes from green to red to indicate proximity to load cell capacity. The integral loadcells feature mechanical overload protection at 150% Full Scale.

Single Touch Operation.

The rubber keypad features dedicated and dynamic function keys. The function keys correspond to displayed options and guide the user during operation. A navigation pod lets you navigate through the menus and to scroll and change values quickly. The innovative “i” key can be used to display critical information on the gauge such as gauge capacity and resolution, battery life remaining, loadcell overload history, even service information including last calibration date, or the location of service centers.

Dependable Measurements.

The DF II Series features an integral loadcell sensor that delivers repeatable, accurate results. The innovative load bargraph shows dynamic load, direction of load and warns you of pending overload conditions. Smart technology in the gauge even keeps track of overload history to aide in maintenance and troubleshooting.

Comprehensive Results.

The DF II Series supplies you with comprehensive results that are easy to view and understand. The gauge displays:

- Measured Result with Units
- Operating Mode
- Pass-Fail Result
- High and Low Load Results
- Saved Results
- Statistical Calculations
 - Average with MIN and MAX Results
 - Cv with Average and Standard Deviation
 - % Differentiation between Successive Results
 - Standard Deviation

Outputs

The DFE II Series comes standard with digital and analog outputs. RS232 outputs are supported with baud rates from 9600 to 115,600. Simply select the baud rate and whether or not you want to gauge to transmit with our without units. The unit also is supplied with USB communications capability. You may select the Mitutoyo output when communicating with a Mitutoyo device. Or, you may use the $\pm 2V$ analog output to drive alarms or other ancillary devices. The DFE II features protocols for Chatillon test stands, Mitutoyo devices and an Alternate protocol.

Test Stand Compatibility.

The DF II Series has a universal mounting backplate that enables you to fit the gauge to commonly used Chatillon force testers including the MT Series and LTCM Series testers.

Calibrate and Verify Status.

The DFE II Series incorporates flash memory and hosts a set of self-diagnostic functions for monitoring the display, keypad and electronics. Using the “i” key, you have immediate access to battery conditions, including estimated battery life remaining. You can also view loadcell status, including the number of overloads that have been applied to the gauge. Zero offset verification is standard and a step-by-step calibration procedure is built-in allowing you to calibrate your DFE II gauge with certified standards.

