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# Force & Torque Testing Software



## **Overview**

A **Test Readings** The Test Readings are enabled when a test run is finished. The Test Reading table shows the Force and Time raw readings from a test run with a time stamp. Test Readings is hidden by default; pressing the Readings label icon will display the Test Readings table. The Test Readings change to the readings for the test run selected in the Test Record table under the graph.

**B Test Setup** The Test Setup is accessible by clicking on the ForceTest icon and to complete in just 4 steps. Blue highlighted text indicate progress made through each step.



**C Test Record Table** The Test Records table displays the runs already performed for a loaded test. By default, the test record displays the Status, SNo, Color, Started on, Direction, and Note fields. When results are selected, the table will grow to include the results as well.



**D** The Graph The graph plots a running test run or the test run selected in the Test Record table. Once a test run is finished, the graph can be zoomed in and out using the CTRL key on the keyboard and a mouse wheel. When multiple test runs are selected in the Test Record table, the graph will overlay test runs to allow comparison between test runs.

**E** The Test Controls The Test Controls in the cockpit allow to reset simultaneously the load of both ForceTest and the Gauge to zero.

The controls also command the Start / Stop test functions manually of the test in progress. When connected to a keyboard, the function key F5 will start a test and F7 will end the test.

**F** Live Display The Live Display shows the current Force reading from a connected gauge. The units are accessible in the Preference tab. For convenience, the units on the force gauge can be set separately from the units in ForceTest.



# Overview

## **Library of Results**

Select the results from our extended library. Each result can be selected and renamed several times.

A visual area of the graph supports quick analysis and calculations.

A label with the results value can be added.

Pass / fail limits can be added.





## **Statistics**

Extended statistics calulations offered:

	Maximum	Minimum	Mean X	Median	CV (σ)	CV (n-1)	Ε-ΤΥΡΕ σ	E-TYPE S(n-1)	x̄ + (3*σ)	Ā - (3*σ)	X + (3*S(n-1))	X - (3*S(n-1))
Maximum Force	3.724N	1.914N		2.987	22.579%	26.073%		0.757	4.869	0.937	5.174	0.632
Minimum Force	0.939N	-0.950N		0.254	560.383%	647.074%		0.804		-1.965	2.537	-2.289
Maximum Force (B)	4.339N	1.964N	3.092N	3.032	27.354%	31.585%	0.846	0.977	5.629	0.555	6.021	0.162
Average Force	2.537N	1.101N	1.955N	2.091	27.225%	31.436%	0.532	0.615	3.552	0.358	3.799	0.111



# **Specifications**

C hatillon® ForceTest is a Microsoft Windows<sup>™</sup> based data analysis package for Chatillon DFE and DFS Series 2 and 3 gauges. This software is designed to enhance the capabilities of your force gauge by allowing you to record and analyze data on your computer. ForceTest can be used to test, acquire data and analyse results for:

Included with the

purchase of a

DFS3 gauge

- Pull to Break testing
- ▶ Pull to Force or Time Limit testing
- End test in both Tensile and Compression directions
- ► Tension Friction testing
- Tension Peel testing
- Torque testing



#### **System Requirements**

#### **Operating System Requirements**

The following Microsoft Windows operating systems are supported:

Microsoft Windows 10

#### **Software Requirements**

ForceTest requires the following dependencies be installed to operate. If they are not installed, the Force-Test installer will install them during the ForceTest installation.

- Microsoft .NET Framework
- Microsoft Report Viewer 2010 SP1

#### **Minimum Hardware Requirements**

The following minimum computer requirements are required to run ForceTest:

- 1 gigahertz (GHz) 32-bit (x86) or 64-bit (x64) processor
- ▶ 1 gigabyte (GB) RAM (32-bit) or 2 GB RAM (64-bit)
- > 2 GB available hard disk space
- ▶ 1024 by 768 px display
- 1 USB port
- Chatillon DF2 and DF3 Series Force Gauge

## Easy Export and Reporting

Test results are presented in a spreadsheet format allowing you to analyze data and perform common mathematical and statistical calculations.

Results may be displayed graphically versus time or calculated over distance travelled. Tabular results are displayed and can be used to create relationships, queries or used to produce reports. Test results can be exported as a PDF, Word, RTF, Image, CSV. Text, XLS, XLSX, HTML, and MHT format.



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For detailed specifications go to the Data Sheet at <u>ametektest.com</u>

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