



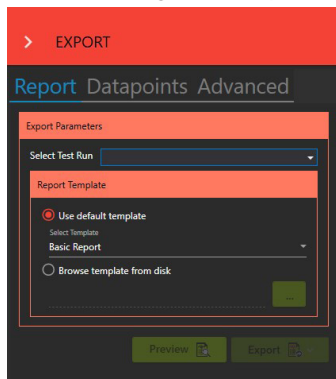
# ForceTest™ 3.0

## Force & Torque Testing Software

# Overview

**A Test Readings** The Test Readings are enabled when a test run is complete. The Test Readings table shows the Force or Displacement (with TCM test stand) values and the Time interval based upon the data capture rate from a test run. Test Readings are hidden by default; pressing the Readings label icon will display the Test Readings table. The Test Readings display will change to show values for the selected test row in the Test Record table under the graph.

**B Test Parameters** The Test Parameters are accessible by clicking on the ForceTest icon and can be viewed or configured in just 4 steps. Blue highlighted text indicate progress made through each step.



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



**D The Graph** The graph plots a live running test or the previous test run selected. Once a test run is completed, the graph display 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 create an overlay of test runs to allow comparison between them.

**E The Test Controls** The Test Controls in the cockpit allow a reset simultaneously to the load displays for both ForceTest and Gauge readings 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.

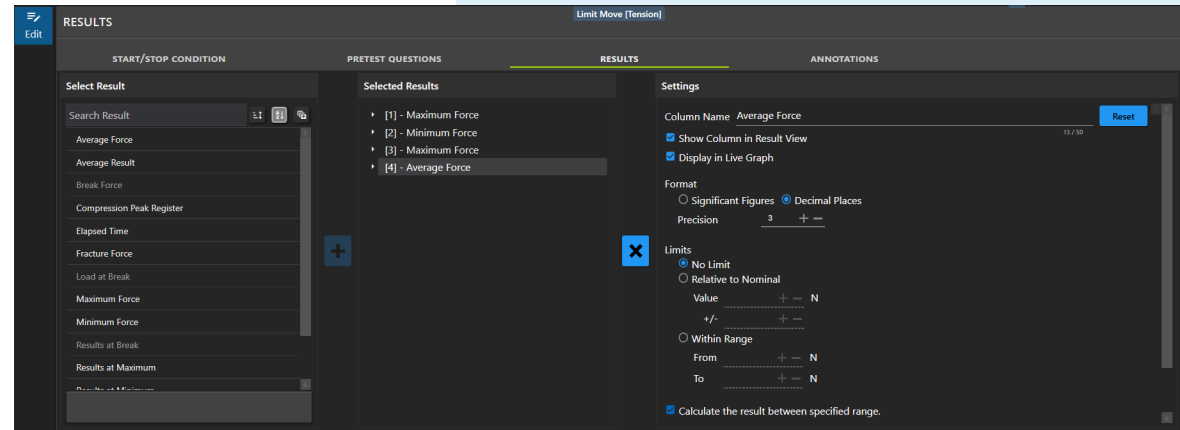
**F Live Display** The Live Display shows the current Force reading from a connected gauge. The units are accessible in the Preference tab. For convenience, the units on the force gauge can be set separately from the units in ForceTest.

# Overview

## Library of Results

Select results from the extensive library. Library results can be selected more than once if renamed, to create multiple results names based upon the same calculated test point. Other features include:

- ▶ 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 calculations offered:

	Maximum	Minimum	Mean $\bar{X}$	Median	CV (σ)	CV (n-1)	E-TYPE σ	E-TYPE S(n-1)	$\bar{X} + (3*\sigma)$	$\bar{X} - (3*\sigma)$	$\bar{X} + (3*S(n-1))$	$\bar{X} - (3*S(n-1))$
Maximum Force	3.724N	1.914N	2.903N	2.987	22.579%	26.073%	0.655	0.757	4.869	0.937	5.174	0.632
Minimum Force	0.939N	-0.950N	0.124N	0.254	360.383%	647.074%	0.697	0.804	2.214	-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	1.10N	1.955N	2.091	27.225%	31.436%	0.532	0.615	3.552	0.358	3.799	0.111

# Specifications

Chatillon® ForceTest is a Microsoft Windows™ 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:

- ▶ 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
- ▶ Compression Insertion testing
- ▶ Compression Top Load testing

Included with the purchase of a DFS3 gauge



## 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 ForceTest 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:

- ▶ Intel i3 Processor (or equivalent)
- ▶ 4 GB RAM
- ▶ 2 GB available hard disk space
- ▶ 1024 by 768 px display
- ▶ 2 USB ports
- ▶ Chatillon DF2 (version 1.07 or later) 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  
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**Chatillon**  
force measurement

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