# Vortex-d

# Mecmesin's powerful yet easy-to-use Vortex-d motorised torque measurement system guarantees product quality from the R&D laboratory to the production floor.

Across a broad range of manufacturing industries, the Vortex-d sets the standard for precision torque testing, offering repeatability and accuracy at an affordable price. If you wish to measure torque as a way of assuring quality in production, conforming to relevant industry standards, optimising design, minimising waste and reducing costs, the Vortex-d offers a versatile and user-friendly solution.

# Build the system that is right for you...

Each module is sold separately, so you only need to purchase the parts you require. Choose from the following modules, together with the Vortex-d, to build a complete system.







Static torque transducer (Choose from 1.5, 6 or 10N.m capacities)

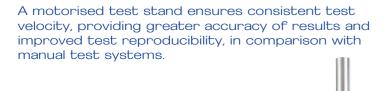


Adjustable upper mounting table 10 - 78mm opening (use with 6 & 10N.m tranducers only)



mounting table

# Why use a motorised test stand?



Choose from a selection of 'Smart' torque transducers 1.5N.m, 6N.m and 10N.m

#### Versatile Mounting Tables fully adjustable to accommodate a wide range of forms. Custom designed fixtures are also available upon request.

New design and Solid build quality, carries the CE mark. Robustness makes it suitable for both production and R&D laboratory conditions.

> Emergency Stop for immediate test termination.

> > Control Knob digitally sets speed and 'locks



#### Adjustable crosshead to accommodate a variety of samples up to 450mm in height.

AFTI Digital Torque Display with integrated peak torque capture, pass/fail alarms and overload warning. Data may be stored internally or transmitted live to a PC running Emperor™ Lite software for graphical analysis.

> Large, clear LCD screen displays speed and angular displacement

Direction to apply or release torque.

Zero key to reset the degrees of rotation displayed to zero

Mode kev used to set clockwise & counter-clockwise speeds, revs or degrees

### Vortex-d System Technical Specifications

Measurement range (1.5N.m loadcell)	0 - 1.5N.m	0 - 15kgf.cm	0 - 13lbf.in
Measurement range (6N.m loadcell)	0 - 6N.m	0 - 60kgf.cm	0 - 52lbf.in
Measurement range (ION.m loadcell)	0 - 10N.m	0 - 100kgf.cm	0 - 90lbf.in
Speed range	0.1 - 20 revs/min		
Display resolution (torque)	1:5000 (e.g. 10N.m x 0.002N.m)		
Internal sampling rate	5000 Hz averaged down to 80Hz (medium) or 2000Hz (high) peak capture (user selectable)		
Peak hold (torque)	Ist & ultimate peak capture at 2000Hz or 80Hz (user-selectable)		
Accuracy (torque)	±0.5% of full scale		
Battery life (AFTI Display)	Approx 20 hours between charges		
Data output	Torque or torque & angle via RS232		
Calibration temperature	20°C ± 2°C		

### **Applications**

- Screw closures
- Child-resistant closures (CRC)
- Automotive and aerospace controls
- Medical device testing
- All rotary components requiring torque analysis



# Improve your test assessment with Emperor™ Lite

Fully assess your products performance by transforming your test results into meaningful graphs including results and report with Emperor™ Lite.



Graphical representation of a typical test

- View test 'live' on PC screen
- Perform multiple calculations
- Easily identify and label critical measurement values
- Summary test report with graphical traces
- 'One-click' activation to automatically configure the software for the Vortex-d







# Over 30 Years Experience in Force & Torque Technology

Formed in 1977, Mecmesin Limited is today widely regarded as a leader in force and torque technology for quality control testing in design and production. The Mecmesin brand stands for excellent levels of performance and reliability, guaranteeing high quality results. Quality control managers, designers and engineers working on production lines and in research laboratories worldwide rely upon Mecmesin force & torque measurement systems for a range of quality control testing applications, which is almost limitless.

> Visit us on the web at www.mecmesin.com



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# Vortex-d Digital motorised torque testing system

# **Torque Test Solutions**







The ideal test solution for any rotary components requiring torque analysis