

## VORTEX-I AUTOMATED TORQUE METER



**THE OPTIMIZED MODEL  
WITH UNLIMITED POSSIBILITIES**

# VORTEX-I AUTOMATED TORQUE METER

THE OPTIMIZED MODEL  
WITH UNLIMITED POSSIBILITIES

## FUNCTION

The Vortex-I is a **high-end torque meter controlled by software running on a PC**. Precise, easy to use, and optimized by the choice of its materials and features, it allows **the measurement of static torque up to 10 Nm**. The leading flexible solution for automated torque testing on a wide range of plugs and components.

A simple and efficient solution to simulate your daily torque applications in many sectors.

A rugged two-post frame capable of applying torque up to 10 Nm (90 lbf.in). Large and wide enough to accept a variety of test specimens, yet compact for use as laboratory equipment.



### ● Gripping plate

fully adjustable multi-purpose stand (optional) for positioning and mounting a wide range of samples. Custom accessories also available upon request.

### ● Solid construction

Robust and waterproof base, ideal for use in production and laboratory environments. Designed in a controlled environment with CE marking to meet European safety and environmental protection standards.

### ● Emergency Stop Bottle

For safety and CE conformity.

### ● «Axial load» function

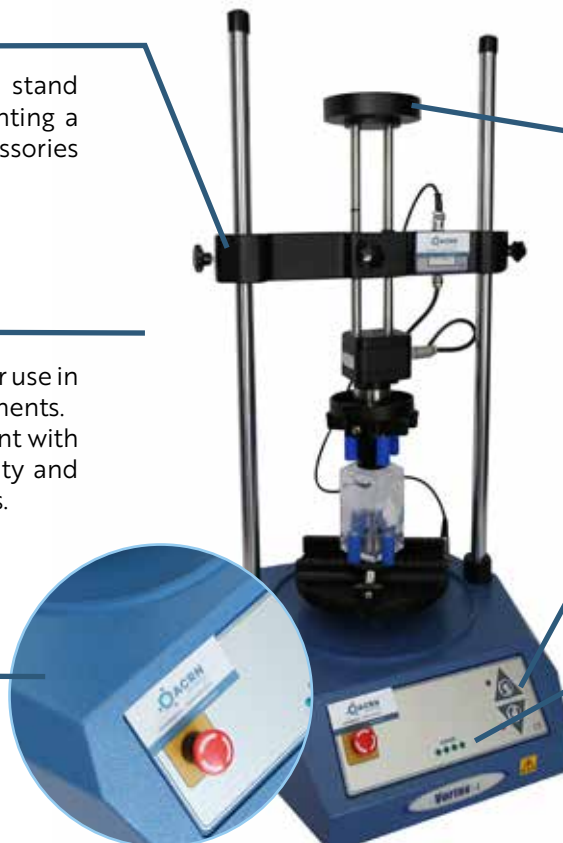
For applying a fixed load while performing torque tests. Ideal for testing child-resistant caps (CRC).

### ● Direction of the couple

or moving the motor in manual mode.

### ● Power indication LED

Fuse and on/off button at the back of the machine.





## TECHNICAL INFORMATION

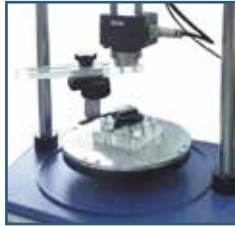
VORTEX I		0,3 N.m	1,5 N.m	3 N.m	6 N.m	10 N.m
Capacity	N.m	0 - 0,3	0 - 1,5	0 - 3	0 - 6	0 - 10
	Kgf.cm	0 - 3	0 - 15	0 - 30	0 - 60	0 - 100
	lbf.in	0 - 2,7	0 - 13	0 - 26	0 - 52	0 - 90
<b>Dimensions</b>						
Maximum crossbar travel		182 mm (7.2")				
Max. base/axis travel of the sensor		505 mm (19.9") 448 mm (17.6")*				
Width between columns		280 mm (11.02")				
Weight		19,5 kg (48lb)				
Diameter of the lower gripping plate		10 - 190 mm (0,39 - 7,5")				
Diameter of the upper gripping plate		10 - 78 mm (0,39 - 3,07")				
Maximum power required		100 W				
Voltage		230 V AC 50 Hz or 110 V AV 60 Hz				
<b>Torque measurement</b>						
Torque transducer capabilities		0,3, 1,5, 3, 6 et 10 N.m				
Accuracy		±0,5% of the full scale				
Resolution		1:6500				
Units		mN.m, N.cm, N.m, kgf.cm, gf.cm, ozf.in, lbf.ft, lbf.in				
<b>Speed</b>						
Speed range		0,1 - 20 trs / min (in both directions)				
Accuracy		±1% of the indicated speed				
Resolution		±0,1 trs/min				
<b>Rotation</b>						
Maximum rotation		2440 trs				
Accuracy		0,2" per 36,000°				
Resolution		0,001 trs (±0,2°)				
<b>Software</b>						
Digital reading of load / angle / speed		yes				
Communication with the test bench		via RS232 port or USB port (converter supplied)				
Required features		100 Mb available HD, CD-Rom + RS232/USB port available				
Operating system		Compatible with Windows® 2000, XP, Vista 7, 8 and 10				
Acquisition speed		Choice of 1000 Hz, 500 Hz, 50 Hz and 10 Hz				
Secondary input		Event input (switch), digital controls I/O ports				
Data output		RS232 port (directly or via USB/network converter in ASCII format) ASCII (Export to table, SPC software...)				

\*With two gripping plates installed

## SEVERAL APPLICATIONS



Test on Luer Lock



Headphone test



Rotary test

## LOGICIEL EMPEROR

**The Emperor software is designed to work with Traction/Compression benches. It is suitable for use in the laboratory or factory.**

It integrates 2 operating modes:

- A Console mode, which allows you to create simple programs and control the device with a minimum of buttons. Several pre-recorded tests are available. This mode is adapted to a factory use.
- A programmed test mode, more complete to push the capabilities of the traction benches even further.



### ● Create

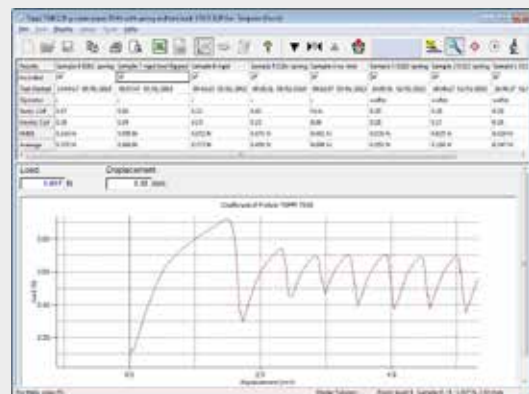
- Intuitive user interface
- Construction of step-by-step test routines
- One-click selection of preferred test procedures

### ● Test

- Real time graph
- Display of measured and calculated values
- Clear and precise indication of conformity (Pass/Fail)

### ● Reports

- Standard and customizable models
- Print results in Adobe PDF format
- Export of the results to an Excel document and SPC



---

## ACRN A GLOBAL OFFER

*for your packaging quality controls*



### Calibration and annual maintenance

ACRN is equipped with a metrology laboratory.

### Setting up tests, choice of materials, state of the art, work on repeatability

we can advise you according to your needs (tecnology, budget, ergonomics).

### Leak testing and dynamometric testing

Our skills and equipment for leak testing and dynamometric testing for packaging

---

### *Major manufacturers have trusted us for many years*

