

Vortex-*í*

Computer-Controlled Torque Testing System

Vortex-*i*

SETTING NEW STANDARDS FOR

TORQUE TESTING SYSTEMS

**EVALUATING QUALITY BY MEASURING
RESPONSE OF PRODUCTS TO APPLIED LOAD
IS:**



Upper and lower peg grips shown
(not supplied as standard)

- COST-EFFECTIVE
- WELL-PROVEN IN MANY INDUSTRIAL SECTORS
- APPROPRIATE FOR LABORATORY OR PRODUCTION USE

HELPING PRODUCTION AND PROCESS ENGINEERS TO:

- OPTIMISE PRODUCT DESIGN AND DEVELOPMENT PROCESSES
- MINIMISE COST OF PRODUCTION, REWORKING/WASTAGE

THE VORTEX-*i* SYSTEM:

- MOTORISED, FOR IMPROVED TESTING REPRODUCIBILITY
- COMPUTERISED, ALLOWING CONTROL OF VIRTUALLY EVERY ASPECT OF TEST PROCEDURES
- DRIVEN BY EMPEROR, FLEXIBLE, POWERFUL AND USER-FRIENDLY WINDOWS SOFTWARE
- SUITABLE FOR USE WITH UNIVERSAL OR CUSTOM-DESIGNED GRIPS

Test

Applying co

Testing

Measuring on

Upper grips



ing child-resistant closure



mpressive load during torque test



'feel' of automotive control



off torque & angles for rotary switch



specially moulded for specimen



Double vee' lower grip

EMPEROR PROGRAMMING:

- RUN TO TORQUE, ANGLE, TIME OR 'BREAK'
- DELAY/RESUME AND OPERATOR PROMPT
- USE OF VARIABLES SUPPORTED
- CYCLING, LOOPING AND CONDITIONAL BRANCHING
- OPTIONAL AUTOMATIC RETURN TO ZERO ANGLE

EMPEROR ANALYSIS:

- MAXIMUM, MINIMUM AND AVERAGE TORQUE
- PASS/FAIL ANALYSES
- BATCH REPORTS AND STATISTICS
- DATA EXPORT
- SUMMARY REPORT
- USE OF VARIABLES SUPPORTED
- GLOBAL 'OUT OF TOLERANCE' WARNING

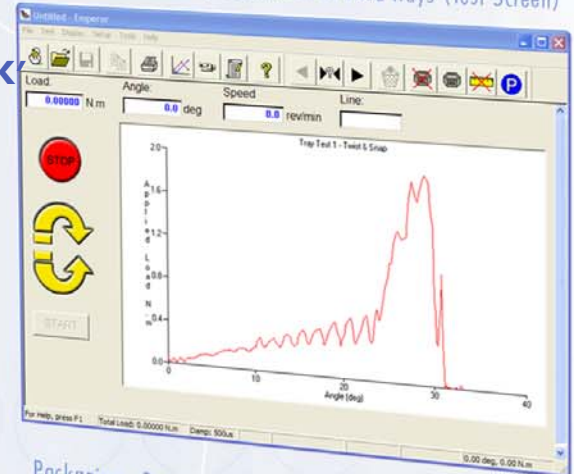
EMPEROR DISPLAY:

- REAL-TIME TEST REPLAY
- AUTO-SCALING AND ZOOMING
- MULTIPLE CURVES
- OPTIONAL AUTOMATIC DISPLAY OF RESULTS
- TOLERANCE BAND
- INTERROGATION ANNOTATION OF RESULTS

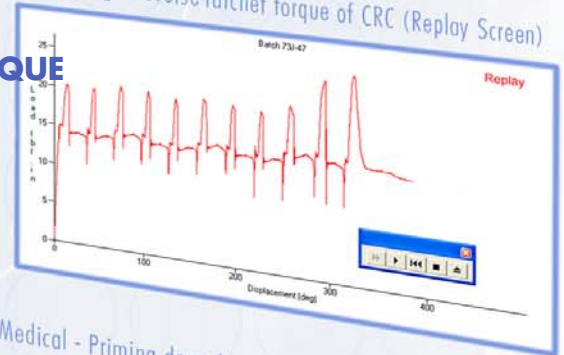
EMPEROR SAFETY & SUPPORT

- EMERGENCY STOP (HARDWARE)
- 'MASTER' OR 'OPERATOR' ACCESS
- OVERLOAD PROTECTION - FRAME AND LOADCELL
- AUTOMATIC CONFIGURATION FOR SUITABLE HARDWARE
- AUTOMATIC REJECTION OF UNSUITABLE HARDWARE
- REMOTE SUPPORT AND DIAGNOSIS VIA EMAIL

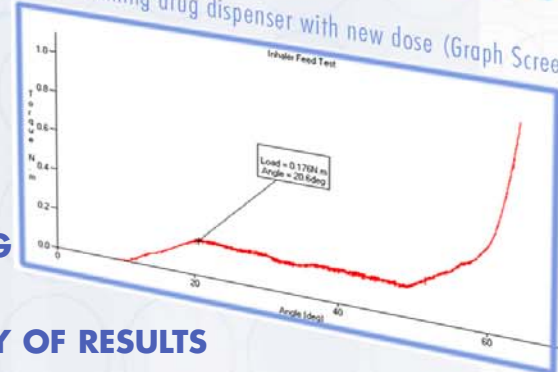
Plastics - Twist & snap separation of food trays (Test Screen)



Packaging - Reverse-ratchet torque of CRC (Replay Screen)



Medical - Priming drug dispenser with new dose (Graph Screen)



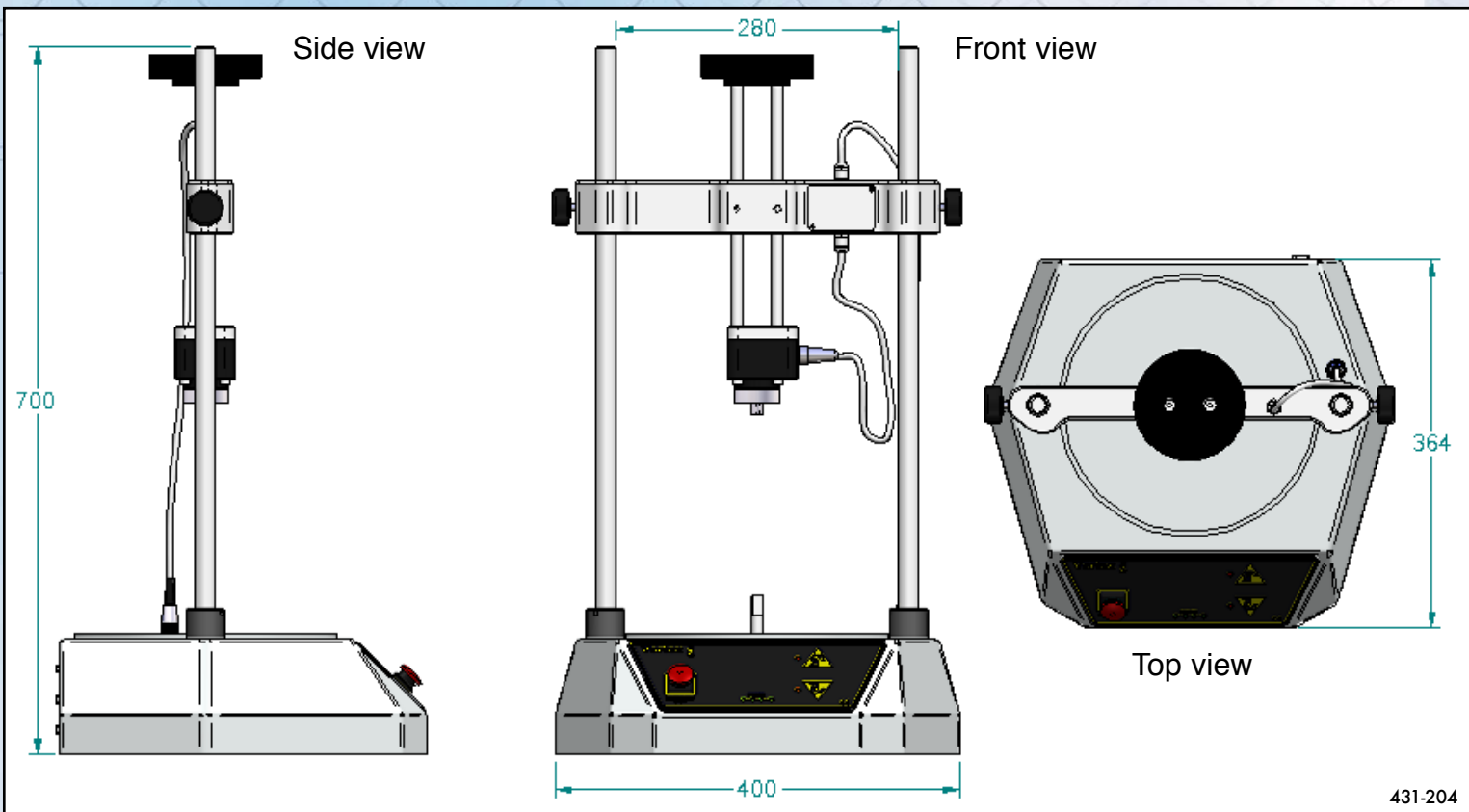
TECHNICAL DATA

Maximum stand capacity	10N.m (100kgf.cm, 90lbf.in)
Loadcell capacities	0.3, 1.5, 6 and 10N.m capacities
Load accuracy	±0.5% of full scale
Load resolution	1:6500
Load units	mN.m, N.m, kgf.cm, gf.cm, ozf.in, lbf.in, lbf.ft, N.cm
Speed range	0.1 - 20 revs/min (clockwise or anticlockwise)
Speed accuracy	±1% of indicated speed
Speed resolution	±0.1 revs/min
Maximum displacement	2500 revs
Displacement accuracy	0.2° per 36,000°
Displacement resolution	±0.001 revs (±0.2°)
Data acquisition speed	2000Hz
Operating temperature	10 - 35°C
Loadcell calibration temperature	20 ±2°C
Power	100W
Weight	20.4kgs (45lbs)
Maximum headroom*	350mm (13.8in)
Capacity of lower universal grip**	10 - 160mm (0.79 - 7.70in)
Capacity of upper universal grip***	8 - 55mm (0.79 - 7.70in)

* with upper and lower universal grips fitted

** as illustrated, available at extra cost (Part 432-232)

*** as illustrated, available at extra cost (Part 432-158)



431-204