

Factsheet, 25.02.2021, Version 1

Watchtest Quality 32

Production T1 T2, Laboratory, Quality
M Manual, FA Full automatic







32 carriers at the service of your parts

WTQ32.Net measures the precision of your parts by reproducing the wearing conditions. It allows simultaneous measurement of daily rate for up to 32 mechanical movements, while varying their orientation in space. A test consists of a succession of programmable phases, configured in a dedicated software: WTQ Commander. This high-performance solution allows advanced control of the produced movements, with item-level traceability. Its programming flexibility also makes it a laboratory tool.

Uses

Tabletop machine, network of machines

FUNCTIONS

Functions of the unit

- Acoustic measurement of the state over the duration of the test
- Running measurement in multiple positions
- Amplitude, knock and power reserve measurement
- · Wearing simulation, lantern, reserve
- Storage of measurement data
- Transmission of measurement data (network)
- Rotations along two axes
- Mechanical break-in

Functions of WTQ Commander software

- Visualization of measurements (rate, amplitude, knock, state) and slow disturbances (date passage, barrel discharge)
- Recording / transmission of measurements (databases)
- Generation of measurement reports
- Item-level traceability
- Tests setup and adjustments
- Controlled manual movements
- Management of one or more stocks of WTQ32.Net

BASE ELEMENTS AND CONFIGURATION

Standard

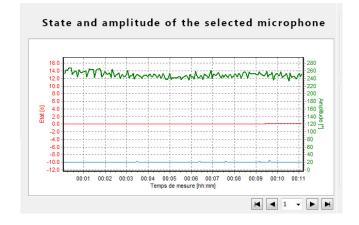
- Unit WTQ32.Net
- Software WTQ Commander

Options / Accessories

- Doors specially adapted for bigger space inside each acoustic measurement unit
- · WTQ Archive: results analysis software
- WTQ Cover: Dust and ambient noise reduction enclosure
- Atmosphere: Thermal enclosure allowing measurement under controlled temperature conditions (8 to 38 ° C)

Services

- · Calibration of devices on site
- Configuration and programming of both test cycles and archiving of results
- Other types of sensors: magnetic, optical, ...



SPECIFICATIONS

Measuring system

Accuracy of the time base	± 1 ppm / year
Accuracy of the rate measurement	0.2 s/d
Accuracy of the amplitude measurement	± 3 %, depends on the precision of the lift angle
Accuracy of the guide-mark measurement	0.1 ms
Cycle time	Variable according to the measure

Unit WTQ32.Net

Composition	32 microphone units with 2 axes, programmable in speed and position
Housing	For watch with bracelet or movement in calotte
Dimensions	1000 x 500 x 500 mm
Weight	36 kg
Absolute positioning of parts along two axes	Bench: 315° Turrets: 305°
Standard housing for one part	12 x Ø42 mm max.
Bigger housing for one part	On request
Acoustic sensor	Piezoelectric

Environmental conditions

Ambient noise level	55 dB
Temperature	18-25 °C
Relative humidity	30-70%

REQUIREMENTS AND CONNECTIVITY

Power supply WTQ32.Net

Tension	230 VAC
Max power	50 W
Connector	IEC 14

Required computer system

Operating	Windows 7/10
system	(32 bits / 64 bits),
Database	MSSQL

Connectivity WTQ32.Net

Network	RJ45 Ethernet