

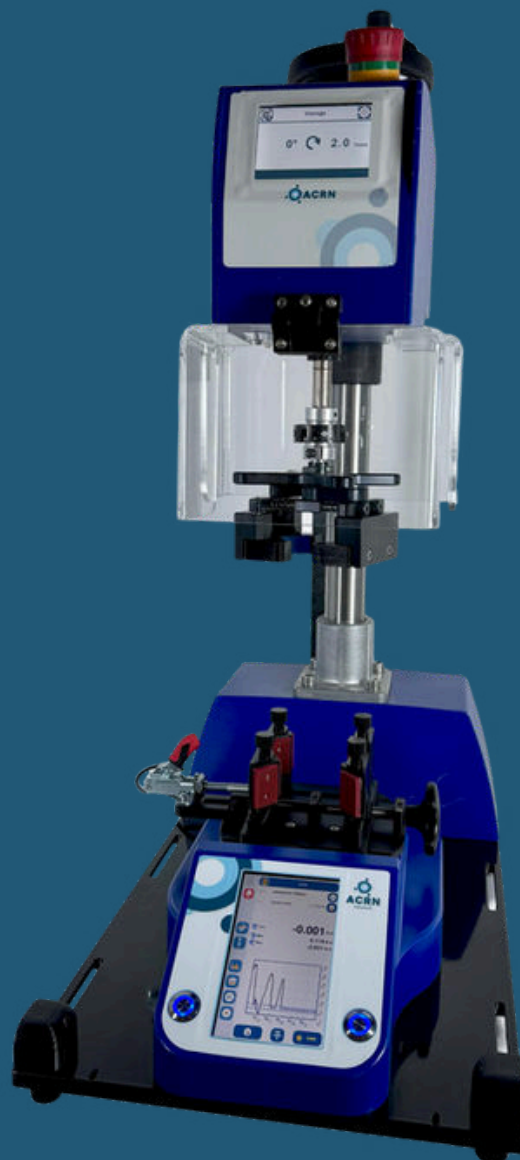
MOTORIZED ELECTRONIC TORQUE
TESTER

REPEATORK

THE COMPLETE TORQUE
TESTER, WITH A MOTORIZED
ARM THAT PERFORMS THE
OPERATION.

REPEATORK combines a precision torque tester, advanced software as standard (programs, batches, statistics, connectivity) and a motorized arm that screws and unscrews in place of the operator.

- A complete torque tester: 1 → 25 N·m, unlimited programs, batches, statistics; ALCOA+ optional
- A motorized arm: constant speed 0.1 → 60 rpm, angle measurement, torque stop
- One workstation: the operator positions the sample and starts the cycle; the machine does the rest, without effort or MSD risk



0 %

HUMAN FACTOR

0,1→60

RPM · CONSTANT SPEED

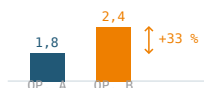
1 → 25

N·M · TORQUE CAPACITY

IMPROVE TORQUE CONTROL WITH THE REPEATORK.

LIMIT 01 · HUMAN EFFECT

Two operators, two results.



Same cap, same instruction: the torque measured depends on the force and movement of the person unscrewing.

LIMIT 02 · DISPERSION

A standard deviation that is the subject of debate.



Even with a single operator, the dispersion remains high: results are discussed between customer and supplier, and internally between quality, production and methods.

LIMIT 03 · MUSCULOSKELETAL DISORDERS & OCCUPATIONAL DISEASES

The gesture was repeated all day long.



Manual screwing and unscrewing in an assembly line: wrist, elbow, and shoulder bear the brunt of the strain. Musculoskeletal disorders (MSDs) eventually lead to occupational illnesses, sick leave, job reassignments, and workstation reorganization.

WHAT THE REPEATORK CHANGES

Centering, speed and grip become identical in each trial, the gap between operators is greatly reduced, as is the effort.

DESIGNED FOR THE OPERATOR

An ergonomic machine, not just a precise one.

Zero effort required to unscrew

The motor provides the torque. The operator positions, locks, starts; he never forces it.

Adjustable working height

Column 300, 400 or 500 mm: the sample arrives at the correct height, with the back and shoulders at rest.

One-motion clamping

FAST upper clamping and lower toggle clamp: one lever instead of screw-tightening for every test.

A quick test

Place, lock, launch: the cycle is short, sustainable all day without fatigue.

ROTATION SPEED

0.1 → 60 rpm

MAXIMUM TORQUE

**10 N.m ·
25 optional**

ANGLE MEASUREMENT

0 → 10 000°

COLUMN

**300 / 400 / 500
mm**

SWITCH TO MOTORIZED TESTING

MAKE YOUR LOOSENING-TORQUE MEASUREMENTS RELIABLE.

ACRN, with 25 years of experience working with industrial companies, supports you from the transition from manual to motorized (impact study, target torques, custom clamps).

ACRN

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THE REPEATORK IN ONE PAGE

A SINGLE PIECE OF EQUIPMENT. EVERYTHING IS IN THERE.

The REPEATORK is a motorized torque tester supplied complete: measurement, advanced software and motorization are in the same machine, from the factory installation. ALCOA+ pharma compliance and advanced communication are optional.



1 MOTORIZED ARM

MOTORIZATION

Constant speed 0.1 → 60 rpm, angle measurement 0 → 10,000°, stop on torque. Columns 300 / 400 / 500 mm.

2 UPPER CLAMPING

MOTORIZATION

$\frac{3}{8}$ " square drive, choose from 3 configurations: helical clamp, concave screws, custom-made.

3 LOWER CLAMPING

MEASURE

4 toggle-clamp pins as standard; grip cubes, risers, cup and custom tray available as options.

4 TORQUE SENSOR

MEASURE

1 → 25 N·m, clockwise and counterclockwise, accuracy $\pm 0.3\%$ of full scale, 5000 Hz.

5 SCREEN & SOFTWARE

MEASUREMENT & SOFTWARE

5" touchscreen, Pass / Fail verdict. Unlimited programs, batches, statistics and web server as standard. ALCOA+ optional.

ONE POSITION, ONE TAKEOVER

The program displayed on the screen sets the speed, direction, and thresholds of the arm. The operator places the sample and starts the cycle.

MEASUREMENT & SOFTWARE pages 05 → 07

MOTORIZATION pages 02 and 04

THE WHOLE page 08: information sheet

UPPER CLAMPING · MODULAR SYSTEM

THREE UPPER-CLAMPING CONFIGURATIONS, DEPENDING ON YOUR CAPS.

The upper part of the arm ends with a $\frac{3}{8}$ " male square: each configuration is mounted there with a $\frac{3}{8}$ " female drive. The clamping can be changed without tools, without disassembling the arm.



CONFIGURATION 1 · QUICK

Helical clamp

Two-position helical clamp: open / closed

Equipped with cylindrical jaws the same diameter as the cap

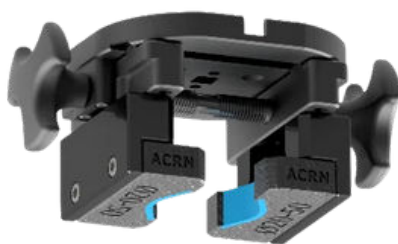
ADVANTAGES

- Ergonomics and time saving
- Grip repeatability

LIMITS

- One jaw per cap diameter, to within ± 5 mm

REPEAT PRODUCTION RUNS · THROUGHPUT



CONFIGURATION 2 · FLEXIBLE

Open screw clamp

Screw clamping with 4 concave jaws

Concave jaws matched to the cap diameter

ADVANTAGES

- Covers a very wide range of diameters
- The most flexible configuration

LIMITS

- Screwing/unscrewing at each sample
- Limited stripping torque

VARIED PRODUCT RANGES · LABORATORY



CONFIGURATION 3 · CUSTOM

Custom ribbed jaw

Machined profile to the exact shape of your cap

Direct fixing via $\frac{3}{8}$ " square

ADVANTAGES

- Perfect grip, no slipping
- Ideal for long runs of the same product

LIMITS

- Dedicated to a single reference
- Manufacturing lead time required

COMPLEX SHAPES · PRODUCTION

JAW EXAMPLES



CHOOSING THE CLAMPING SYSTEM

Send us a sample of each reference to be checked: we validate the upper configuration, and machine the jaw if the shape requires it.

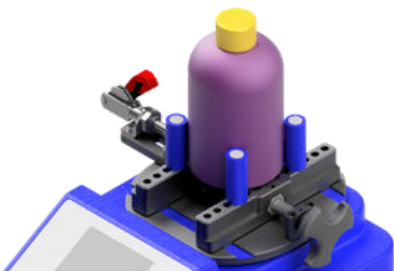
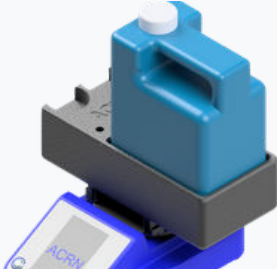
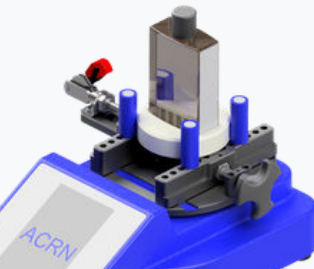
LOWER CLAMPING

THE RIGHT CLAMPING SOLUTION FOR EVERY SHAPE.

Accurate measurement starts with a firm grip: a container that turns or deforms distorts the torque reading.

The REPEATORK accepts every ACRN clamp, from the standard one supplied to a clamp machined to your reference.

CLAMPING SOLUTIONS

	INCLUDED AS STANDARD WITH THE DEVICE Quick 4-pin clamp Four adjustable locking blocks with a lever action: immediate centering, quick opening between two samples. Cylindrical and square bodies.
	OPTION Grip-cubes Grip cubes for soft, deformable or slippery bodies.
	OPTION Grip-cube risers They raise the grip on the upper bodies: the stopper remains at measuring height.
	CUSTOM OPTION Tray for water bottle For jerrycans, even with an off-center cap: 3D printed cup based on your reference.
	CUSTOM OPTION hit 3D printed to the shape of your bottle, it holds it perfectly during measurement.

ACRN HISTORICAL STORIES: STILL AVAILABLE

	HISTORICAL V-jaw clamp Self-centering by V-jaws, cylindrical bodies.		HISTORICAL Jaw clamp Firm grip for enhanced support.		OPTION Maneuvering tool For knurled caps, with T-bar and matching jaw
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CUSTOM
MADE

Send us your samples, the largest and the smallest, we will propose the appropriate clamping and validate the grip before manufacturing.

MEASUREMENT PROGRAMS

A TEST PROCEDURE, NOT JUST A SIMPLE RECORD.

Outside of Basic mode, everything is based on configurable programs built on predefined models, conforming to your internal criteria or control standards.

Unlimited number of programs.

Series programs

INCLUDED

MODEL 01

Basic

Direct measurement of torque, without a program: tighten, read the peak value.

SPOT CHECK



MODEL 02

Essential

Simple program with high and low thresholds: Pass/Fail verdict at each measurement.

ROUTINE CHECK-UP



REMINDER

Unlimited number

As many programs as there are references: each one is listed on the screen before the test.

ENTIRE EQUIPMENT FLEET

Advanced programs

SERIES

MODEL 03

Single peak

Detection of the single peak of opening or closing, with its value and time.

STANDARD CAPS



MODEL 04

Double peak

Two distinct peaks were observed in the same test: breach of tamper protection followed by unscrewing.

TAMPER-EVIDENT RINGS



MODEL 05

Multiple peaks

Up to 10 peaks in a single cycle, each time-stamped and compared to its threshold.

COMPLEX CLOSURES



MODEL 06

Between two thresholds

The torque is evaluated over a defined angular range, not at an isolated point.

SCREWED ASSEMBLIES



MODEL 07

ASTM / ISO standards

Models compliant with control standards, deployable across the entire fleet.

NORMATIVE REQUIREMENT



CUSTOM MADE

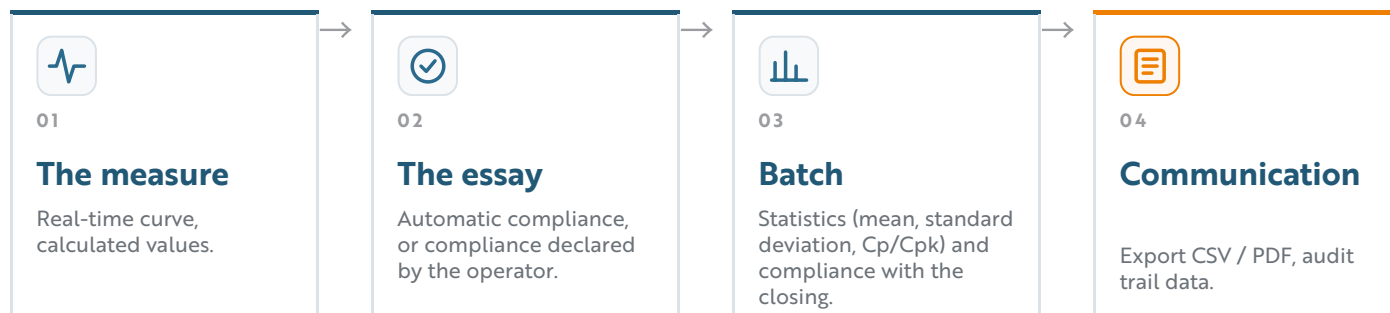
A program template tailored to your company

A test plan written with you, based on your internal criteria, then deployed across all your devices. Example: dual torque + force sensor for a CRC test.

PROPRIETARY METHOD

QUALITY ASSURANCE

IT DOESN'T JUST MEASURE. HE MAKES THE DECISION, AND HE ENSURES TRACEABILITY.



Trace your batch numbers, 3 levels

YOUR CHOICE

- 01 Without batch**
Isolated measurement, time-stamped and attributed to its user.
- 02 Simple batch**
The batch number is entered once and repeated on each measurement.
- 03 Advanced batches**
Created, closed, several in parallel, with batch statistics.

Manage access by user, 3 modes

YOUR CHOICE

- 01 None**
Free access: the device is open to all operators of the station.
- 02 Simple**
Operator · Key user · Administrator, by password.
- 03 Nominal**
Unique named login, or via Active Directory.

Customizable free field

AT YOUR HAND

A field that you name, "Team", "Line", "Position", "OF No.", attached to each measurement and included in the export. Each program retains its own value.

Ability

WITHOUT LIMIT

8 GO

ONBOARD STORAGE

∞

TESTS &
BATCHES

PHARMACY REQUIREMENTS · COMPLIANCE & TRACEABILITY

OPTION

ALCOA+ · FDA 21 CFR PART 11

For the pharmaceutical and healthcare industries, where every measurement must remain attributable, legible and tamper-proof until the audit.

- Access**
Unique named login, or via Active Directory.
- Audit trail**
Value before/after, not modifiable.
- Export**
CSV and PDF files from the web server.
- Data**
Preservation guaranteed, deletion blocked.
- Hour**
NTP time server.
- Backup**
Configuration, programs and results can be restored.

PRODUCT INFORMATION SHEET

INFORMATION SHEET.

**25 N·M**

MAXIMUM SENSOR

60 RPM

ROTATION SPEED

5"

TOUCH SCREEN

3

MOTORIZED MODES

COMES WITH

One lower clamp

User manual

Power cord

Calibration certificate

METROLOGY & COMPLIANCE

COFRAC-traceable calibration certificate supplied with the device. Programmable calibration overrun reminder.

MEASUREMENT & SOFTWARE

Torque capacity **1 / 2 / 5 / 10 / 25 N·m**Measurement direction **Clockwise & Counter-clockwise**Measurement method **Ridge · follower · ridge + auto reset**Precision **±0.3% of the full scale**Resolution **0,001 N·m**Sampling frequency **5000 Hz**Maximum sample diameter **120 mm**Screen **5" touchscreen · 800×600 · curve & bar graph**Programs **Unlimited · 7 models · ASTM / ISO standards**Batch management **Without batch · simple · advanced · statistics**Users **Rights · Password · Name**Compliance **ALCOA+ · 21 CFR Part 11 (optional)**Connectivity **2×USB · WiFi · Ethernet · RS232**Communication **Webserver · CSV / PDF · OPC / Modbus / VNC (optional)**LANGUAGES **FR · EN · ES · IT · DE + on request**

MOTORIZATION

Rotation speed **0.1 → 60 rpm**Maximum torque **10 N·m · 25 (optional)**Angle measurement **0 → 10 000°**Column height **300 / 400 / 500 mm**Simple mode **Standard screwing/unscrewing**Advanced mode **Control by angle or by torque**Quality mode **Opening torque + retightening**Upper clamping **3/8" male square drive · choose from: helical clamp, concave screws, custom-made**Lower clamping **4 toggle-clamp supports · ACRN range**Repeatability **± 0,3 %**

EQUIPMENT & SERVICE

Food **12V mains**Operating conditions **5 → 35 °C · humidity < 90%**Services **Installation · DQ / IQ / OQ qualification**Guarantee **2 years**

THE REPEATORK IN PICTURES

INSTALLED, CONFIGURED, IN PRODUCTION.



The entire team in place

OVERVIEW



Upper clamping

DETAIL



Lower clamping

DETAIL



In cycle

OPERATOR



The measure

SCREEN



Pump bottle

QUICK-RELEASE BIT RISER

ACCESSORIES & OPTIONS

COMPLETE YOUR INSPECTION STATION.

Printing, traceability, protection and sample holding: ACRN accessories can be added to the REPEATORK with the order or later. Installation and qualification services support the start-up.

PRINTING & TRACEABILITY

OPTION

Safescan thermal printer

Measurement ticket printed at the station, with value, verdict and batch.

OPTION

Epson dot matrix printer

Printing on paper roll, for durable paper archiving.

OPTION

Barcode scanner

Wireless USB laser scanner: enter the batch or product without a keyboard.

PROTECTION & SETTING

OPTION

Screen protection visor

Protects the touchscreen from splashes and impacts.

OPTION

Digital height gauge

Measures and marks the column height to find the right setting for each batch.

SAMPLE HOLDING

OPTION

Silicone pins H20 / H60 / H90

Sets of 4 pins to adapt the grip to the height and shape of the container.

OPTION

Small sample riser

With adjustment knob, for small bottles.

SERVICES

Start-up by video call or on site with an ACRN technician
On-site IQ / OQ / QC qualification