

**IS YOUR
PRODUCTION
TOOL BECOMING
LESS EFFICIENT?**

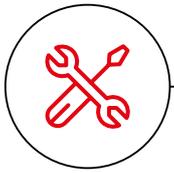
**CHAUVIN ARNOUX,
YOUR PARTNER
FOR YOUR INDUSTRIAL
PERFORMANCE.**

With Chauvin Arnoux
measurement instruments,
anticipate problems
for uninterrupted production.

When maintenance fails, the consequences are far-reaching



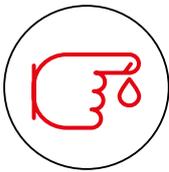
Production downtime
Loss of revenue



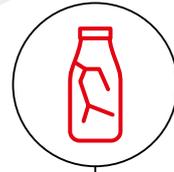
Urgent repairs
Cost 2 to 5 times higher than planned maintenance



Damaged machinery
sometimes irreversibly



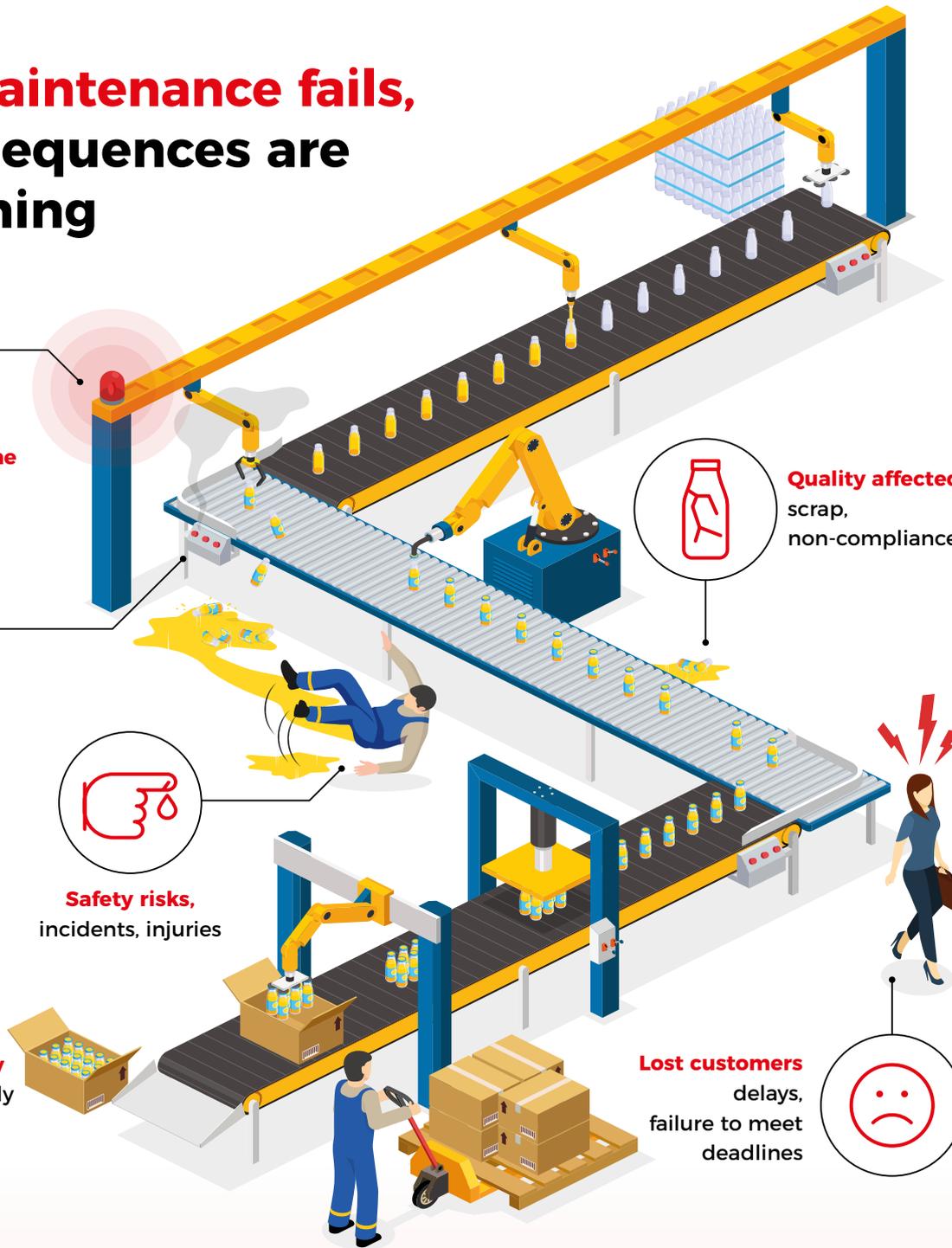
Safety risks,
incidents, injuries



Quality affected
scrap, non-compliance



Lost customers
delays,
failure to meet deadlines



Impact of maintenance failures



Predictive maintenance: an effective solution



Electrical network analyser

Qualistar+
CA 8336

Analyse,
diagnose,
optimise!

A clear
and instant
view of your
electrical
network

The **Qualistar+ CA 8336** is the benchmark tool **for maintenance and testing services for industrial electrical installations.**

It provides **comprehensive, real-time analysis** of power quality, enabling you **to control your electrical networks** and guarantee **service continuity.**

An essential ally for your industrial maintenance tasks

With its **intuitive ergonomics** and **user-friendly interface**, the CA 8336 is perfectly suited to **maintenance requirements.** It supports you in all your electrical diagnostics with high accuracy.

With the CA 8336, you can:



Quickly identify anomalies: harmonics, imbalances, dips and voltage swells, etc.



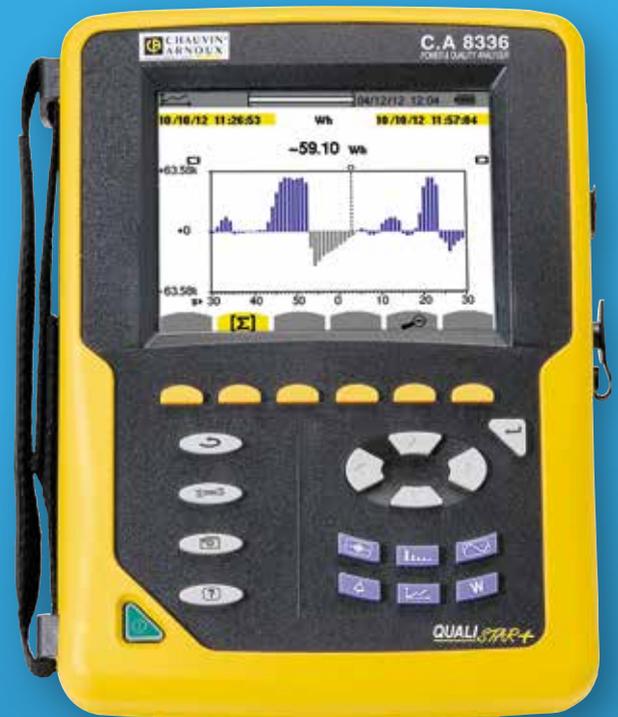
Accurately diagnose the causes of disturbances or malfunctions.



Precisely evaluate loads and requirements for **optimal system sizing.**



Perform a **complete energy audit** to identify areas for optimisation.



The **Qualistar+ CA 8336** transforms your measurement campaigns into decision-making tools. More than just an analyser, **it is a partner for optimising the electrical performance** of your installations.



To find out more
about the CA 8336,
scan me and go

to page 31 of the catalogue

Megohmmetry

The basics



A megohmmeter is an instrument used to measure electrical insulation resistance, particularly in motors, cables, transformers, etc. It sends a high voltage (500 V, 1 kV, 5 kV, etc.) to detect current leakage through the insulation.

The DAR, PI and DD indices are time ratios based on this measurement, used to assess the condition of the insulation over time (and therefore its cleanliness, humidity or degradation).

Here is what they are used for:

1 DAR (Dielectric Absorption Ratio)

DAR = Insulation resistance at 1 min / at 30 s

- Used to detect the presence of moisture or contamination.
- Used for small equipment or quick tests.
- Typical value

😊 ≥ 1.4: good insulation.

😞 < 1.25: insulation questionable.

2 PI (Polarization Index)

PI = Resistance at 10 min / at 1 min

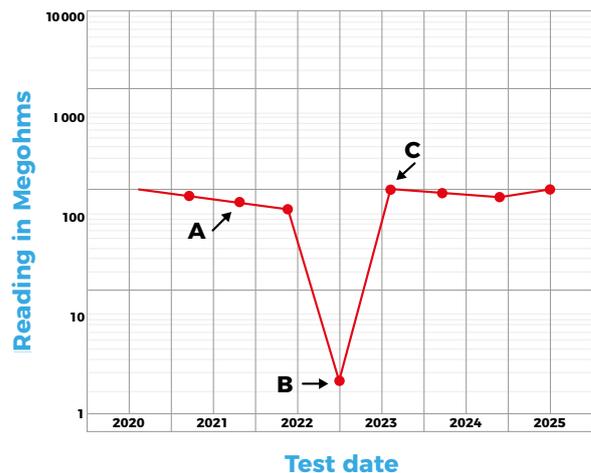
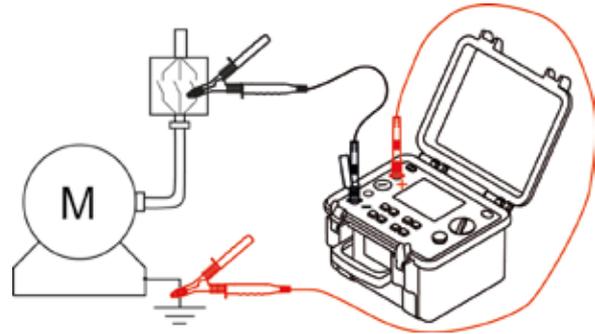
- Evaluates the capacity of the insulator to 'polarise', i.e. to block leakage currents over time.
- More reliable than DAR for thick insulation (e.g. high-voltage motors, transformers).
- Typical value

😊 ≥ 2.0: good insulation.

😞 < 1.0: degraded or damp.

3 DD (Dielectric Discharge)

- Less common than PI or DAR.
- Measures the depolarisation current once the voltage has been removed.
- Used to detect conductive contamination or ageing of the insulation, even if PI is good.
- Reported in μA or residual current.
- Used in advanced analysis tests, particularly for transformers.



During period **A**, the insulation resistance decreases due to ageing and dust accumulation.

In **B**, the rapid decrease indicates an insulation fault.

In **C**, the fault has been repaired (motor rewinding) and the insulation resistance returns to a high level with a stable trend over time.

Why measure these ratios?

Unlike a simple insulation resistance measurement (e.g. 500 M Ω), these ratios allow you to:

- Detect slow or hidden degradation.
- Take into account the effects of temperature, humidity and dirt.
- Make comparisons over time (preventive maintenance).

5 kV insulation tester

CA 6549

I Test insulation, secure your installations

In industrial environments, **insulation failure** can cause **production stoppages**, **critical breakdowns** or safety incidents. The **CA 6549** insulation tester, rated up to 5 kV, is designed to meet these challenges with **accuracy, robustness and reliability**.

The **CA 6549** is much more than just an insulation tester. It provides you with comprehensive, reliable and long-lasting analysis of your high-voltage equipment. Thanks to its advanced technology, it is an essential tool for preventive and predictive maintenance.

Designed for maintenance professionals:



Anticipate invisible faults: the CA 6549 can detect **gradual or hidden insulation deterioration** before it becomes critical.



Real conditions taken into account: humidity, temperature; the CA 6549 provides reliable results **even in harsh industrial environments**.



Preventive maintenance made easy: track measurements over time and **identify signs of ageing** before an incident occurs.

With the CA 6549, you move from a repair mindset to a **proactive strategy**. **Fewer breakdowns. Greater availability.**



To find out more about the CA 6549, scan me and go

to page 22 of the catalogue

Micro-ohmmeter

CA 6240



Accuracy at the heart of your electrical maintenance

Measure,
test,
secure

Measure, test, secure

The **CA 6240** is a **precision micro-ohmmeter**, essential for all industrial maintenance operations requiring the measurement of **very low electrical resistances**. Compact, robust and easy to use, it is an effective companion in the field, workshop or laboratory.

An essential tool for industrial maintenance

1. Testing electrical connections



Detecting poor contacts on terminal blocks, busbars, cable junctions, etc.



Identifying potential hot spots linked to abnormal contact resistance.



Checking tightness after assembly or servicing – essential for preventing future faults.



2. Maintenance of power equipment



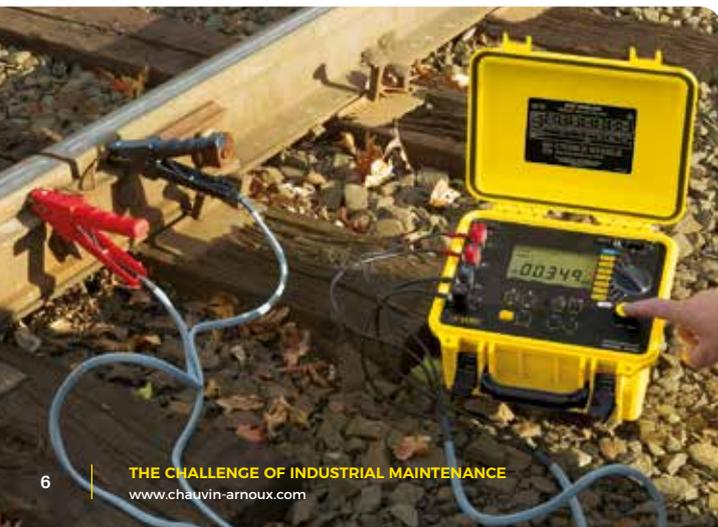
Accurate analysis of **contacts on circuit breakers, isolating switches and contactors**.



Detection of **internal component wear** without dismantling.



Prevention of faults related to **high contact resistance** that can lead to critical overheating.



The **CA 6240** is your warranty for **reliable connections, secure equipment and optimised preventive maintenance**. An essential investment to **improve the availability and performance** of your electrical installations.



To find out more about the CA 6240, scan me and go

to page 29 of the catalogue

Earth tester

CA 6472

Control your earthing, secure your installations

In any industrial environment, **reliable earthing is essential** to guarantee personnel safety, protect equipment and ensure **continuity of operation**. The **CA 6472** a versatile and high-performance earth measurement instrument, allows you to **diagnose, test and anticipate** any earthing faults.

The essential tool for industrial electrical safety



Why integrate the CA 6472 into your maintenance strategy?

1. Verification of earth connection effectiveness

- Accurately measure **earth resistance** to ensure compliance with safety thresholds (generally required to be $< 10 \Omega$).
- Perform **periodic tests in accordance with standards** such as NFC 15-100 and IEC 60364.
- Validate the compliance of new or renovated installations.

2. Prevention of electrical risks

- **Personal safety:** a faulty earth connection can prevent differential circuit breakers from working properly.
- **Equipment protection:** against atmospheric voltage swells or leakage currents.
- **Reduced fire risk:** by correctly evacuating earth faults.

3. Monitoring over time for predictive maintenance

- Monitor changes in earth resistance to detect **invisible damage:** corrosion, broken conductors, poor burial, etc.
- Anticipate interventions **before any critical failure occurs** and guarantee business continuity.



With the **CA 6472**, you move from simple compliance testing to **a genuine risk prevention strategy**. Safety, reliability, performance: **good earth starts with good measurement.**



To find out more about the **CA 6472**, scan me and go

to page 26 of the catalogue



Avoid hidden costs



Gain reliability



Invest in prevention for a more profitable and safer industry

Turn maintenance into a performance lever

Chauvin Arnoux gives you its expertise to help you transform your maintenance constraints into opportunities for optimisation.

Request a demonstration from a professional.

Your distributor



To find out more about our maintenance instruments, scan me!

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