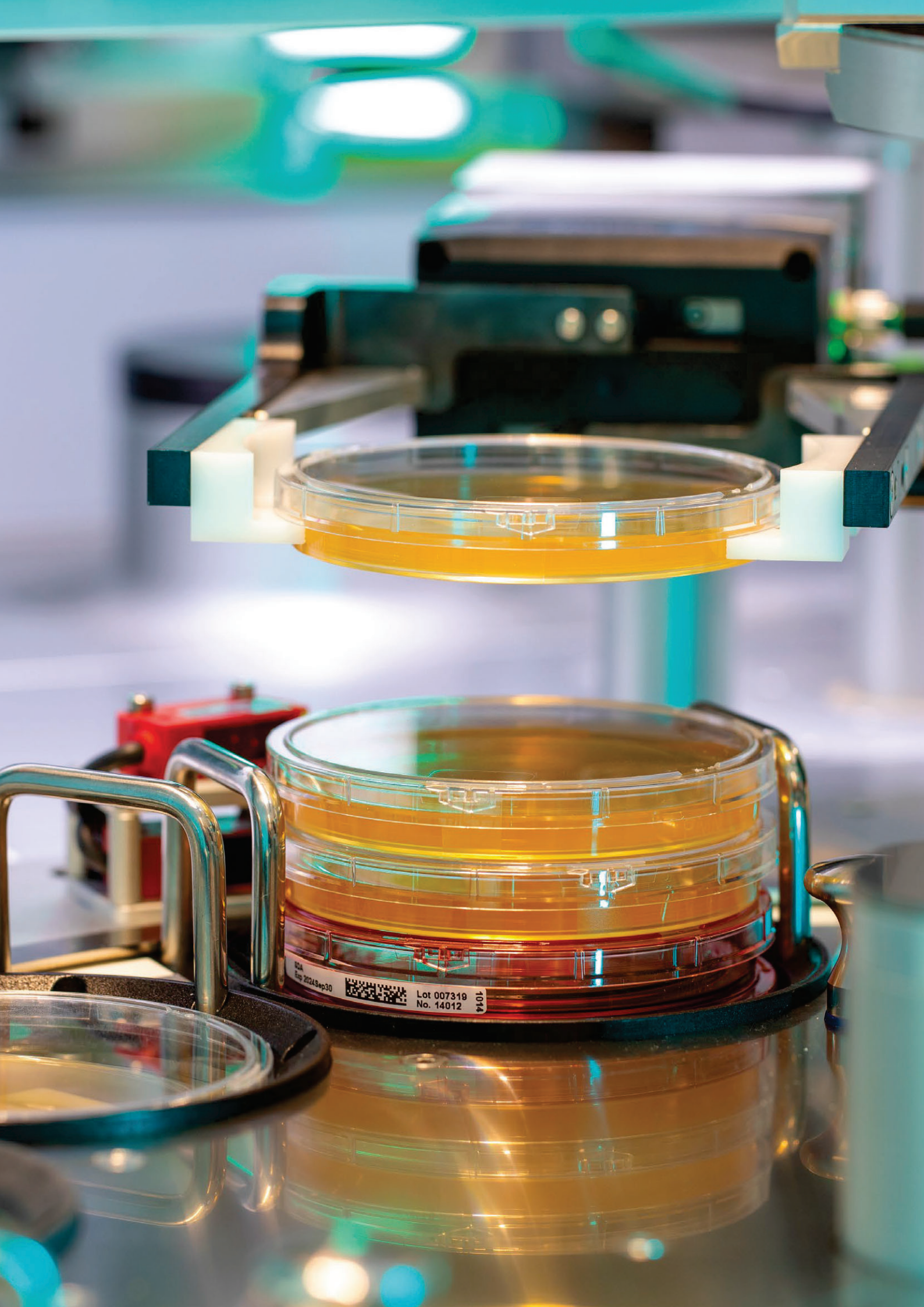
PharmaLab™

We do the count, you do what counts

Streamline the microbiological quality control and secure the safety of your products



Copan
innovating together


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Exp 2024Sep30
Lot 007319
No. 14012
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PHARMALab™

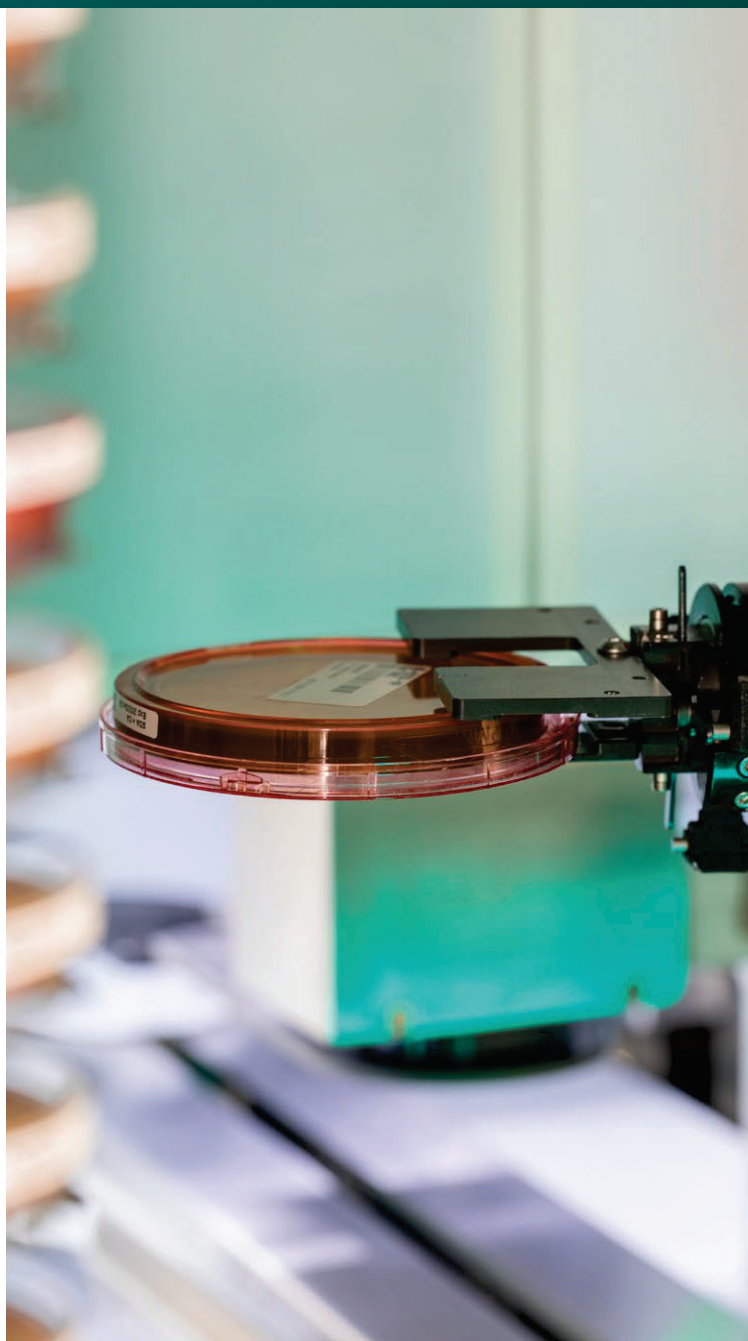
All-in-one-incubation and reading

PharmaLab™ is a fully automated AI-based platform that takes care of the quality control process for the pharmaceutical industry. From plate handling to incubation, from image analysis to reporting.



Product Overview

- Compendial method, no need for full revalidation
- Streamline the CCS, supporting the Annex 1 compliance
- Compatible with Ø 60 mm and Ø 90 mm plates simultaneously
- Open Platform: major plate brands tested and validated
- Controlled temperature and humidity monitoring
- Fully automatimatized plate reading and image storage
- Early warnings available in case of unexpected growth
- Plates can be released before the end of the incubation time if early warnings occur, based on operator decision
- Results digitalization ensuring data integrity and full traceability
- Audit trail available: ensuring the preservation, control, and electronic archiving of documents and records in compliance with CFR 21 Part 11 guidelines
- User-friendly graphical interface available for setup and plate reading



BARCODE READING

Barcode readers able to read labels either on the side or on the bottom of a plate, retrieving protocols from LIMS

IMAGE ACQUISITION

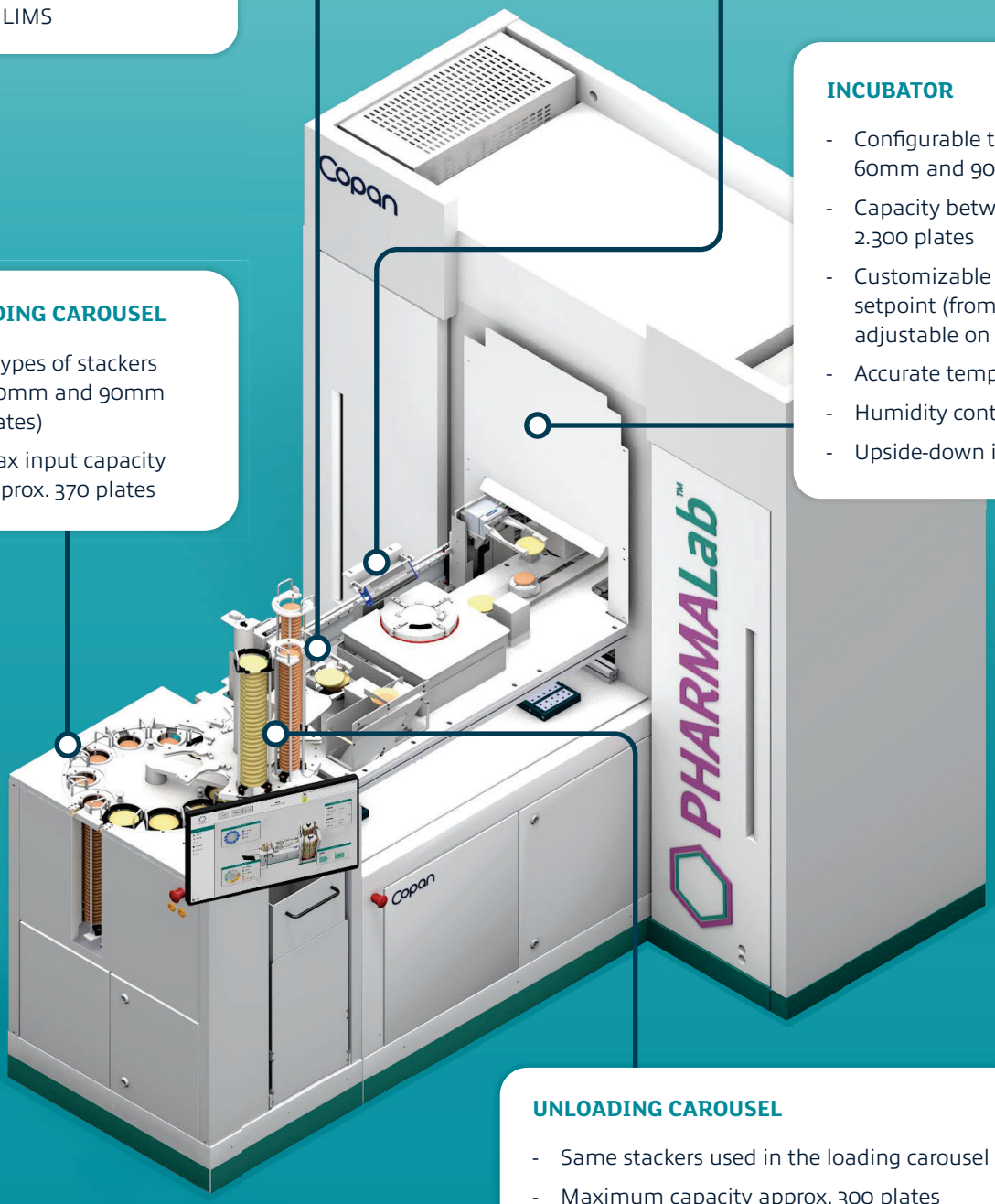
Camera system capable of capturing and digitizing plates using various angles and lighting techniques

INCUBATOR

- Configurable to adapt both to 60mm and 90mm plates
- Capacity between 1.500 and 2.300 plates
- Customizable temperature setpoint (from 22.5°C to 32.5°C, adjustable on customer need)
- Accurate temperature control
- Humidity control
- Upside-down incubation

LOADING CAROUSEL

- 2 types of stackers (60mm and 90mm plates)
- Max input capacity approx. 370 plates

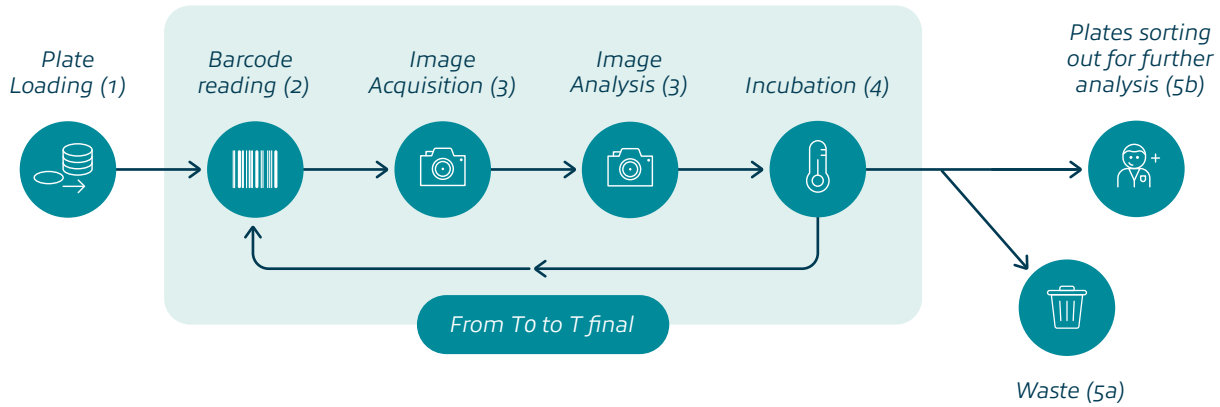


UNLOADING CAROUSEL

- Same stackers used in the loading carousel
- Maximum capacity approx. 300 plates
- Waste Bin for plates with no growth

Let's go through all steps managed by PharmaLab™. Watch the video!

PharmaLab™ process



1. LOADING CAROUSEL

- Plates are placed into the dedicated carousel and divided into 11 extractable stackers, suitable for both 60mm and 90mm plates
- Each column can be adjusted to be compatible with both 60mm and 90mm plates
- Capacity: up to 370 plates

2. BARCODE READING

- Plates are immediately scanned after loading to get protocol information from the LIMS
- Barcode can be read either on the side or on the bottom
- Traceability is automatic and digitalized with no possibility of data manipulation

3. IMAGE ACQUISITION

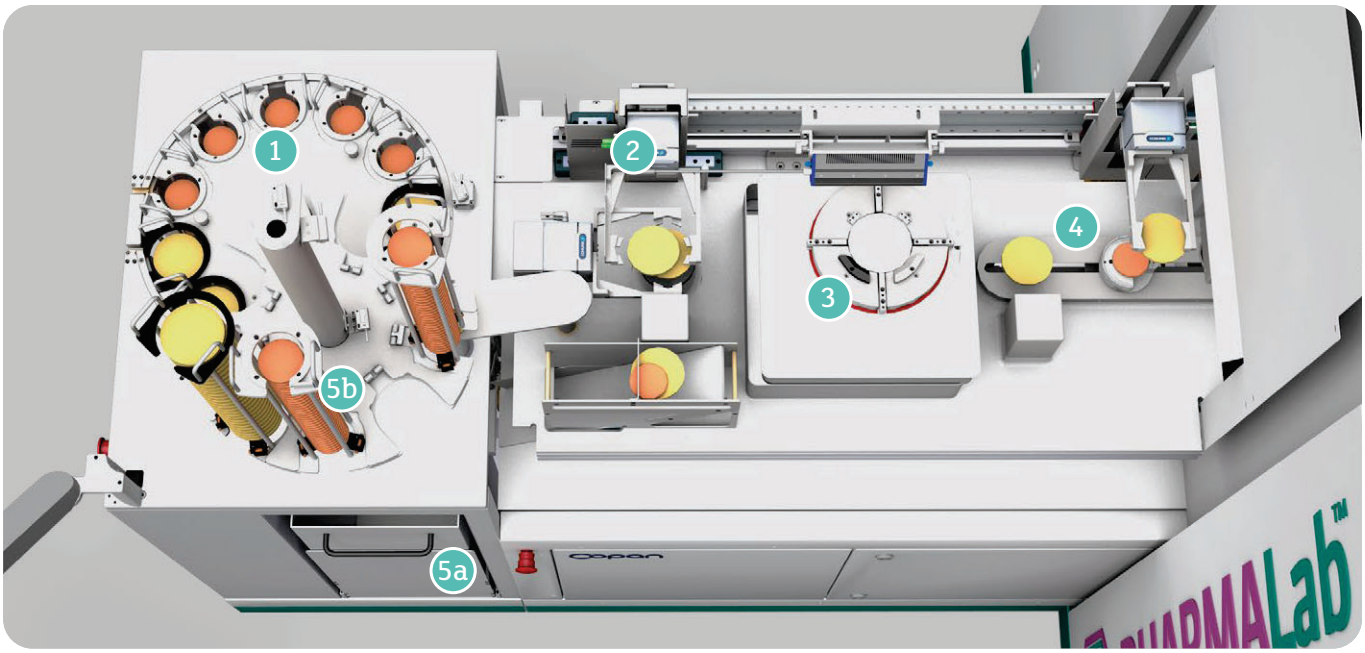
- Plates are acquired by the camera at time zero to enable the detection of artifacts
- Plates are then recalled from the incubator at customizable time intervals to detect growth
- Colonies are automatically counted and displayed on the integrated software interface

4. SLIDE TO INCUBATOR

- Plates are automatically sent to the incubator after each acquisition, and recalled for intermediate pictures
- Condensation on the plate lids is prevented by ensuring a uniform temperature within the equipment
- Plates are always kept closed to avoid any cross-contamination phenomena

5. PLATES SORTING OUT

After the incubation the system has a general waste (approx. 200 plates) if no growth is detected (5a), otherwise plates are stacked into a dedicated output carousel ready to be analysed (5b - approx. 300 plates)



Imaging expertise

Copan, here we are!

With over 1.300 automated systems installed worldwide in the clinical, food, and forensic sectors, we are now expanding into the pharmaceutical industry. The highlight of our technology is image analysis, powered by an AI-driven neural network system, which processes high-quality images to deliver precise results.

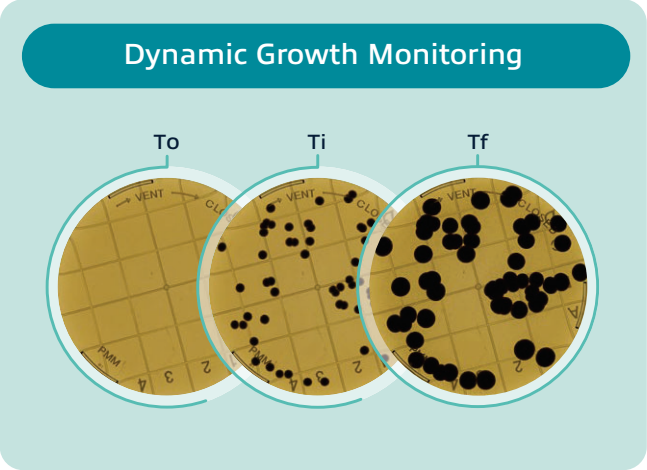
Open platform
The system can manage commercially available plates

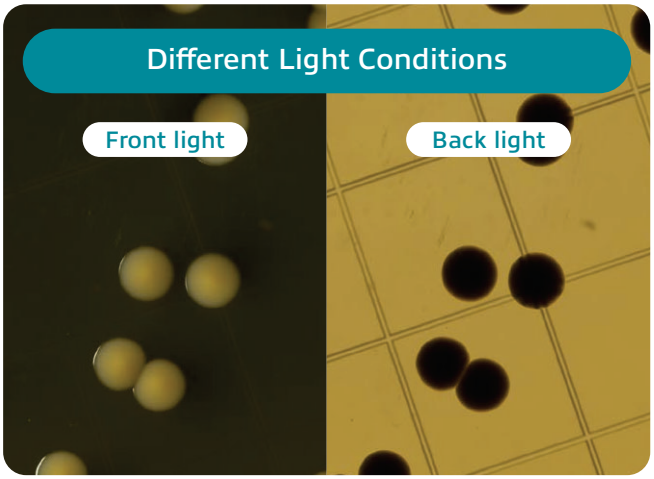
High resolution images
Tag colonies your naked-eye would overlook. Images are taken from several points of view and with multiple lights

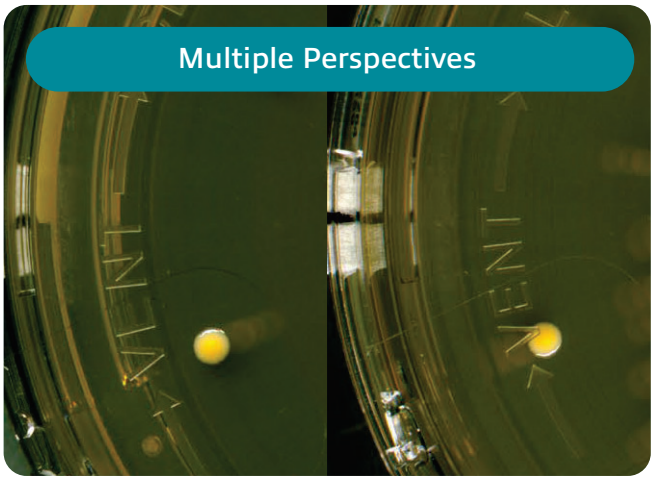
User friendly interface
Turn, pinch, flip, reverse, light up the pics better than in your smartphone

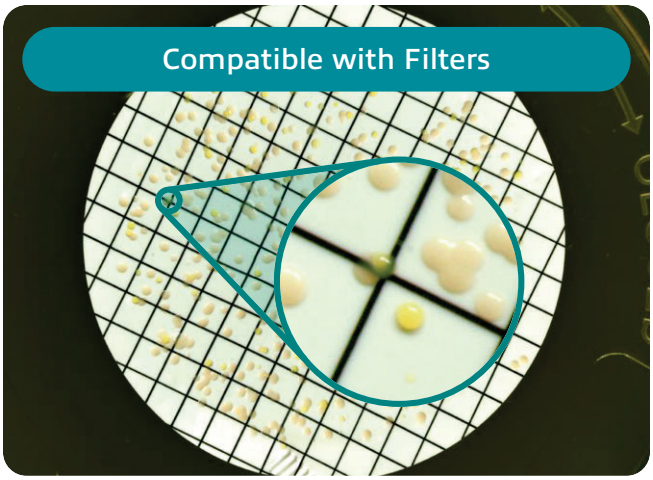
See PharmaLab™ software in action!

Image Analysis Features



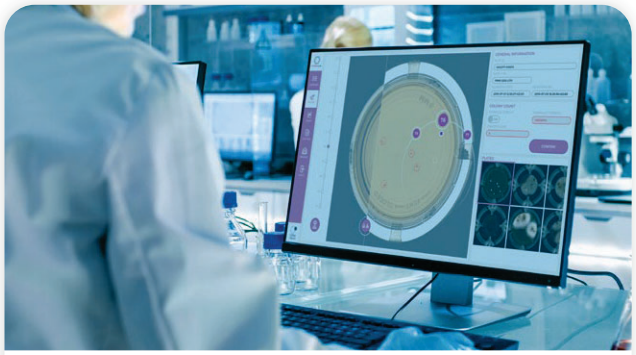






A coordinated network

Components



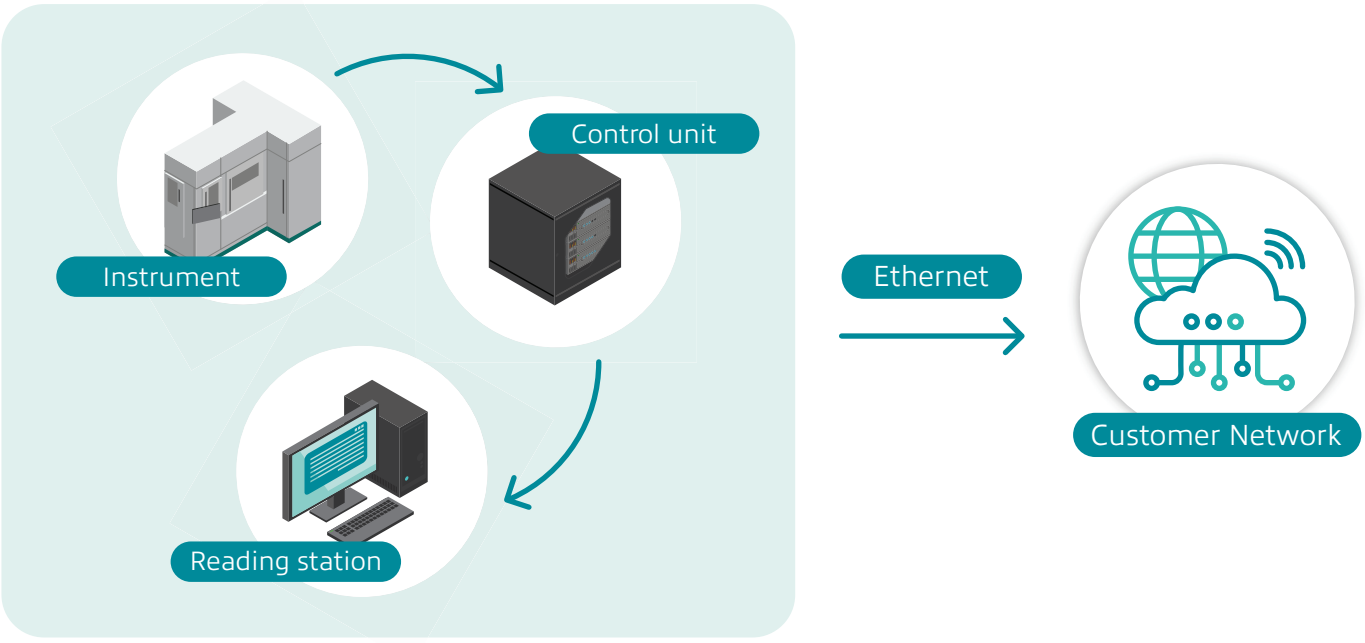
The Reading Station enables users to review the neural network's analysis on the Petri dishes processed by PharmaLab™ and to access and export digitalized data.



The Control Unit serves as the central hub of the system, managing and coordinating all components. It powers the image analysis neural network and acts as the primary interface between the system and the customer network.

Refine your workflow

Infrastructure Connection and Operating System

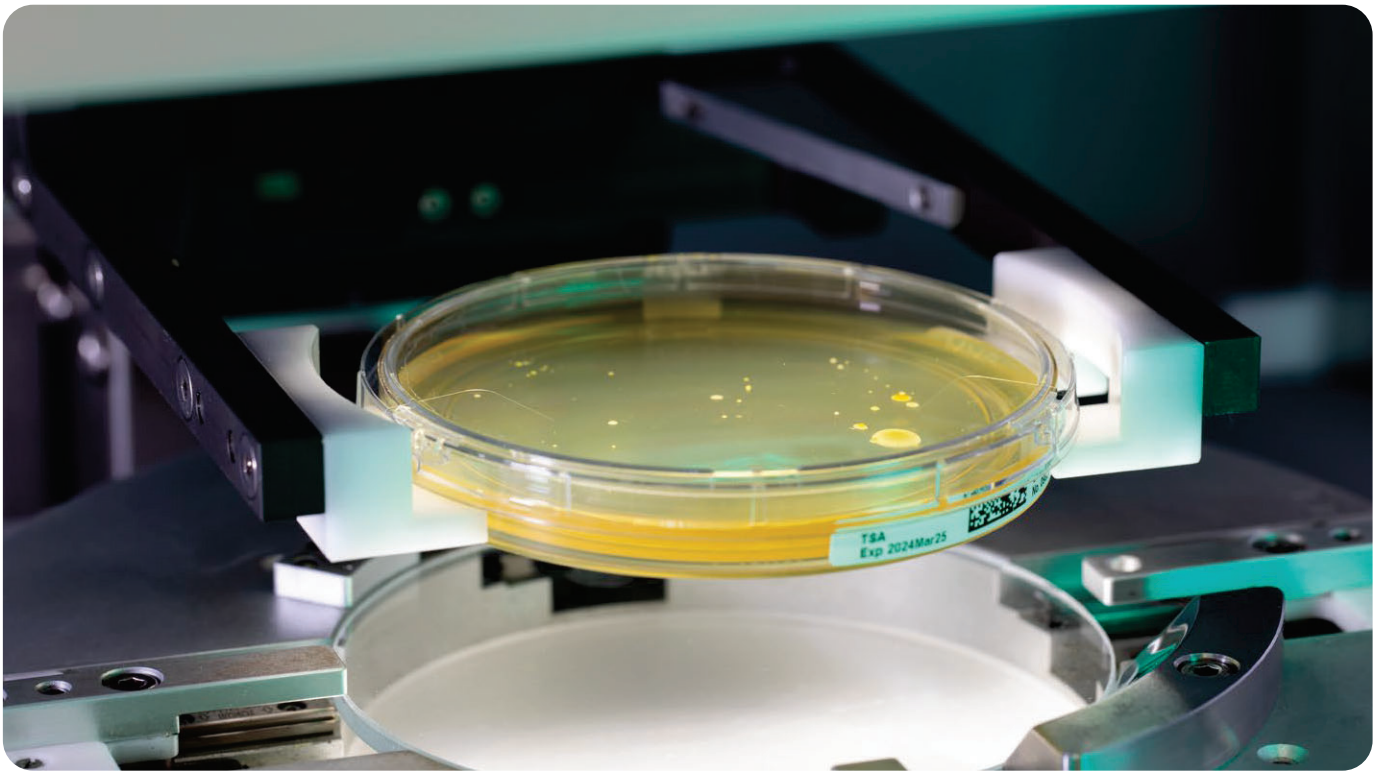


PharmaLab™ is directly connected to the Reading Station and the Control Unit (the only component capable of directly communicating with the Customer Network, if needed) and can be interfaced with any LIMS and Environmental Monitoring application software, ensuring the preservation, control, and electronic archiving of documents and records in compliance with CFR 21 Part 11 guidelines.

Results reliability: ensured.

Validations

PharmaLab™ has been tested and validated both in the laboratory and in the field for compatibility with 60mm or 90mm plates, with or without filters, in the presence of mono-microbial and polymicrobial cultures. The protocols followed during these validations demonstrated the reliability of the results produced by the reading software compared to those obtained through manual plate counting. Validation documents are available upon customer request.



Commissioning

INSTALLATION

Simple and on-site installation including IQ and OQ fully supported

TRAINING

User training is always provided by Copan after installation

VALIDATION PACKAGE

Product validation available as well as support for DQ and PQ

FIELD SUPPORT

Copan can rely on an extensive support network, covering both hardware and software aspects



Advantages

Designed for pharmaceutical quality control

Automate your workflow

By delegating your routine to PharmaLab™, you will be able to lower any risk connected with human error and reduce your staff workload, enhancing the quality of your data in a lab running 24/7. Along with this, PharmaLab™ eliminates the need for a double check of plates from the operators

Data integrity

Compliant with 21 CFR pt. 11, PharmaLab™ keeps track of every action taken with no chance to manipulate or interfere. In addition, its software is flexible and can be adapted to connect with any LIMS provider upon user request, ensuring complete data traceability, seamless integration with the laboratory network, and worry-free inspections and audits. PharmaLab™ can also operate without a LIMS connection

Operational savings

The image analysis system can detect colonies earlier, significantly reducing reaction time.

Digital efficiency

Enjoy the automatic colony count and detection. Turn, pinch, flip, reverse, and light up pictures. Scroll backward and forward through growth phases. PharmaLab™ accurate software brings your lab unparalleled efficiency and sensitivity

Open and modular platform

PharmaLab™ is compatible with your brand and type of plates. Based on your requirements, Copan specialists can quickly size the number of equipments to cover the laboratory workload

GENERAL SPECIFICATIONS

DIMENSION	2.633 mm x 1.930 mm x 2.165 mm
WEIGHT	1.450 kg
MAIN POWER SUPPLY	208-240 VAC 300mA Earth Leakage Current Breaker (ELCB) Fuse class C or D
FREQUENCY	50/60 Hz
POWER	3xIndustrial socket single phase NEMA L6-20P (North America) IEC60309-16A (EU)
NETWORK	Ethernet up to 1 Gbit
COMPONENTS	- PharmaLab - Reading Station - Control Unit

CONDITIONS OF USE

HUMIDITY	Maximum relative humidity of 80% for temperatures up to 31°C, decreasing linearly to a relative humidity of 50% at 40°C
ROOM TEMPERATURE	From 5°C to 40°C
PLATES COMPATIBILITY	Round sterile lockable Petri plates, whose diameters fit 60 and 90mm and height between 14 and 18mm


CLOSED
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Copan

innovating together

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