



SKYLAB

Off-line measurement and sample characterization

SKYLAB is the system for measuring and characterizing off-line blown film samples according to laboratory standards.



OPERATING PRINCIPLE

Samples, which would normally be brought to a laboratory and measured by hand, are inserted into the slot of the cabinet on the machine. The system automatically detects the sample insertion and starts the sample measurement procedure. The film is simultaneously measured using two sensors: a mechanical micrometer and a capacitive sensor. The micrometer measures the average thickness and standard deviation according to the standards for characterizing samples in the laboratory, the capacitive sensor creates a verified and calibrated profile on the results of the micrometer.

MAIN FEATURES

CERTIFIED MEASUREMENT

The SkYlab's measurement and micrometer follow all regulations for the certification of plastic film thickness measurements in the laboratory. The sample can be conveniently retrieved at the end of the measurement.

PRODUCTION VERIFICATION

Thanks to the two sensors, two results are obtained simultaneously: the micrometer analyses the average value and the thickness deviation characterizing the sample, while the capacitive sensor creates a profile that, being calibrated on the certified results of the micrometer, can be compared with those obtained on line to verify its reliability.

INTEGRATION INTO THE CABINET

SkYlab is integrated into the cabinet dedicated to the existing supervisor system and control of the automatic loop, saving space and allowing the sample analysis procedure to be conducted directly next to the line without having to move to the laboratory.

AUTOMATED PROCEDURE

Once the sample profile has been measured, the system is able to compare it with the profile measured online, suggesting a series of troubleshooting operations if the two measurements differ from each other.

AUTOMATED PROCEDURE

The entire procedure of sample measurement analysis and result printing is fully automated, freeing the operator from the task of making measurements manually.

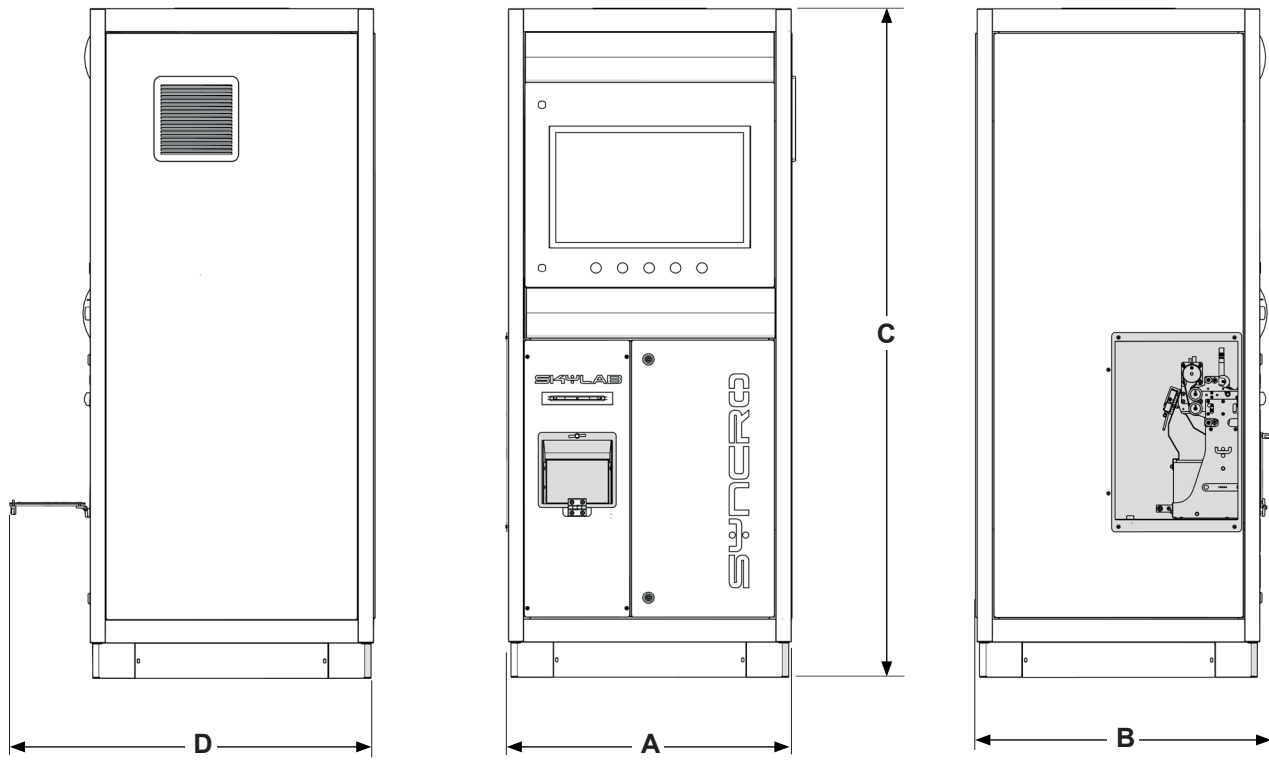
ACCESSIBILITY

Maintenance of the SkYlab is facilitated via a special access door on the cabinet.

INDUSTRY 4.0 & IoT

All SYncro machines are ready to be integrated with third party supervisory controls and ERP systems using the latest generation of OPC-UA protocols as standard.

TECHNICAL DATA



| | A | B | C | D |
|-------------------------------------|---------------------------|--------|---------|---------|
| Dimensions | 800 mm | 830 mm | 1900 mm | 1030 mm |
| Sample width | 150 mm | | | |
| Maximum measurable thickness | 1000 micron | | | |
| PC | 15" \ 21" | | | |
| Weight | 200 Kg | | | |
| Temperature range | 5°C - 40°C (41°F - 104°F) | | | |