



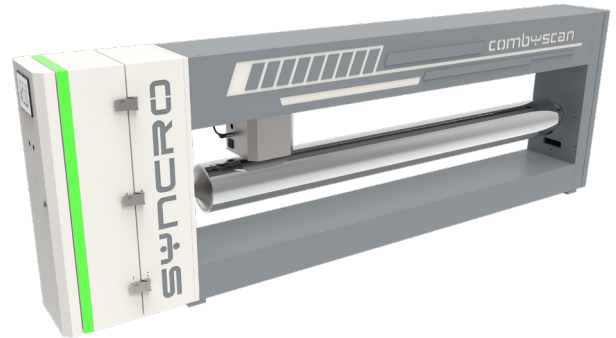
# combyscan

## Combined Capacitive & Inductive

**COMBYSCAN** is a measuring system based on non-contact inductive/capacitive technology. The new sensor allows the measurement of sheet or film thicknesses using the cylinder as a datum.

### PRINCIPLE OF OPERATION

**COMBYSCAN** uses inductive technology to measure the distance between the sensor and the cylinder. The second capacitive sensor measures the dielectric of the material and combined with the first, provides a more accurate thickness value. **COMBYSCAN** is used on **FLAT DIE** lines or **BLOWN FILM** lines.



### MAIN FEATURES

#### NON CONTACT

The sensor is positioned with a film gap from 4 mm to 6 mm without air cushioning.

#### INDUSTRY 4.0 & IoT

COMBYSCAN is equipped with a PLC integrated with OPC-UA protocol for industry 4.0.

#### SYNTROL CONTROL

COMBYSCAN is equipped with a control cabinet along with PC touch screen, keyboard, mouse and printer.

#### PROCESSES

COMBYSCAN is used on FLAT DIE lines or BLOWN FILM lines. On Blown Film lines, COMBYSCAN is installed after the haul off and thanks to a special SYNCRO patented software design, it is able to measure the collapsed film and calculate the reel profile quickly, avoiding the need to wait for a complete haul off rotation.

#### IDEAL FOR BARRIER FILM IN BLOWN LINE

COMBYSCAN can work with complex film structures such as barrier films because the measurement is not influenced by material composition.

#### HEAVY DUTY STRUCTURE

The heavy duty construction ensures no deflection of the main frame and guarantees perfect measurement stability.

#### EASY ACCESS FOR MAINTENANCE

The COMBYSCAN has been designed to allow easy access for maintenance operations.

#### 3D ROLL MAPPING

Thanks to the 3D mapping of the cylinder, a high resolution measurement scan is guaranteed with all possible variances eliminated.

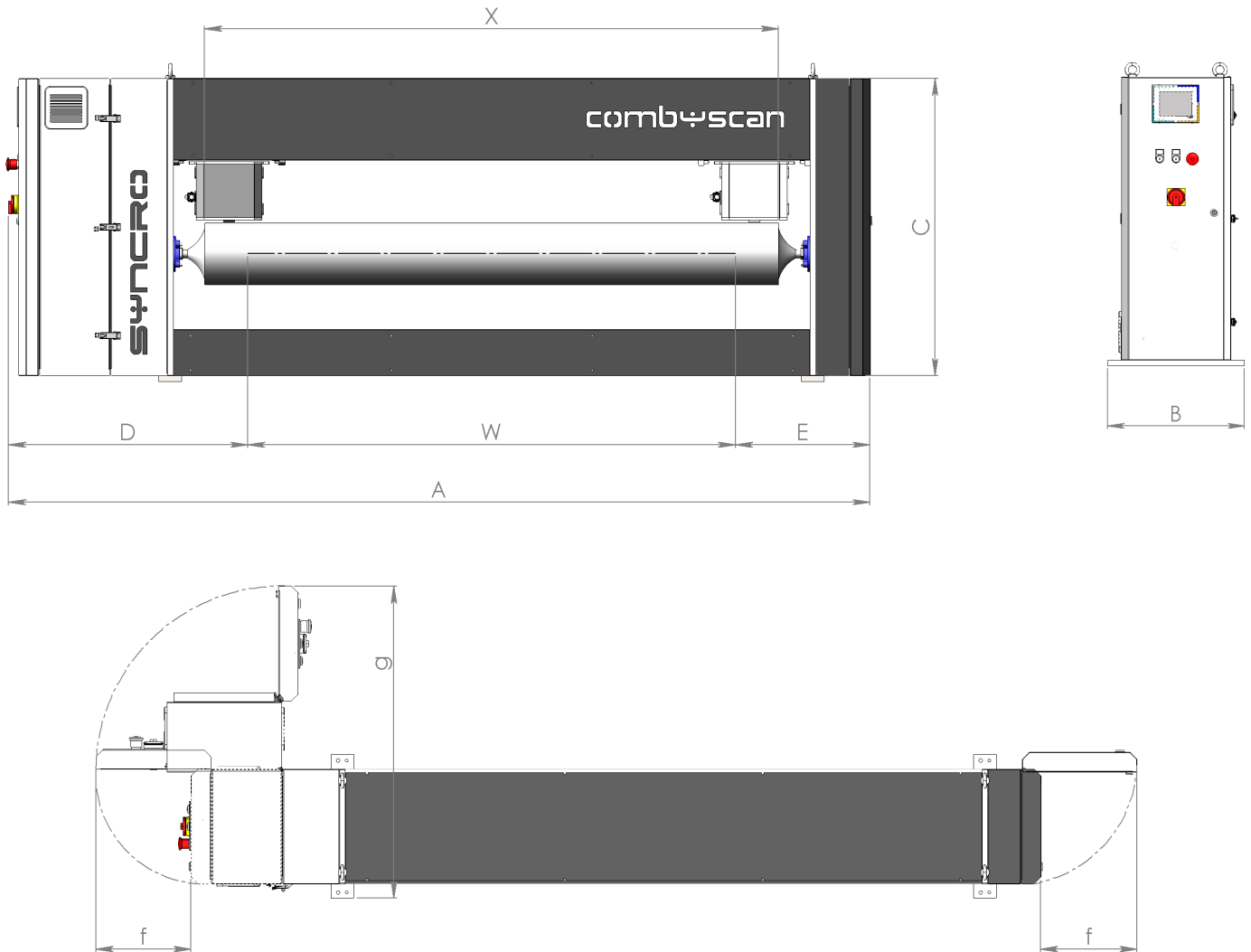
#### FAST PROFILE CALCULATION - BLOWNLINES

On a Blown Film Line COMBYSCAN shows the first profile after just 3 scans.

#### AUTO PROFILE CONTROL

As an option, COMBYSCAN can be connected to SYNTROLGAUGE to automatically control the thermal bolts used on flat dies or automatic air rings on blown film lines to regulate the film/sheet profile.

TECHNICAL DATA



| Model | W<br>max Film<br>width | X (mm) | A (mm) | B (mm) | C (mm) | D (mm) | E (mm) | f (mm) | g (mm) | Power<br>kW | Weight<br>Kg |
|-------|------------------------|--------|--------|--------|--------|--------|--------|--------|--------|-------------|--------------|
| 900   | 900                    | 1200   | 2200   | 500    | 1060   | 820    | 480    | 335    | 1100   | 1.38        | 420          |
| 1100  | 1100                   | 1400   | 2400   |        |        |        |        |        |        |             | 450          |
| 1300  | 1300                   | 1500   | 2600   |        |        |        |        |        |        |             | 480          |
| 1500  | 1500                   | 1800   | 2800   |        |        |        |        |        |        |             | 520          |
| 1700  | 1700                   | 2000   | 3000   |        |        |        |        |        |        |             | 600          |
| 1900  | 1900                   | 2200   | 3200   |        |        |        |        |        |        |             | 650          |
| 2100  | 2100                   | 2400   | 3400   |        |        |        |        |        |        |             | 670          |
| 2300  | 2300                   | 2600   | 3600   |        |        |        |        |        |        |             | 680          |
| 2500  | 2500                   | 2800   | 3800   |        |        |        |        |        |        |             | 700          |
| 2700  | 2700                   | 3000   | 4000   |        |        |        |        |        |        |             | 720          |

\*In case of collapsed tubular the measure thickness is the sum of the two film layers' thickness.