# SYNCRO®
SYNCRO GROUP

# EASYEYES

## Zero Waste, total control

**EASYEYES** the Optical Inspection System designed exclusively for quality control on plastic film surfaces, provides a standardized configuration.

It is ideal for both Blown and Cast film production lines with speeds up to 300 mt/min and defect resolutions of no less than 250 microns.

PLANET APPROVED

### PROCESSES & MATERIALS

EasyEyes analyses materials produced through blown and cast film extrusion processes. These materials showcase a spectrum of optical properties, ranging from transparency to translucency. In this configuration, the sole lighting setup utilized is the backlight.
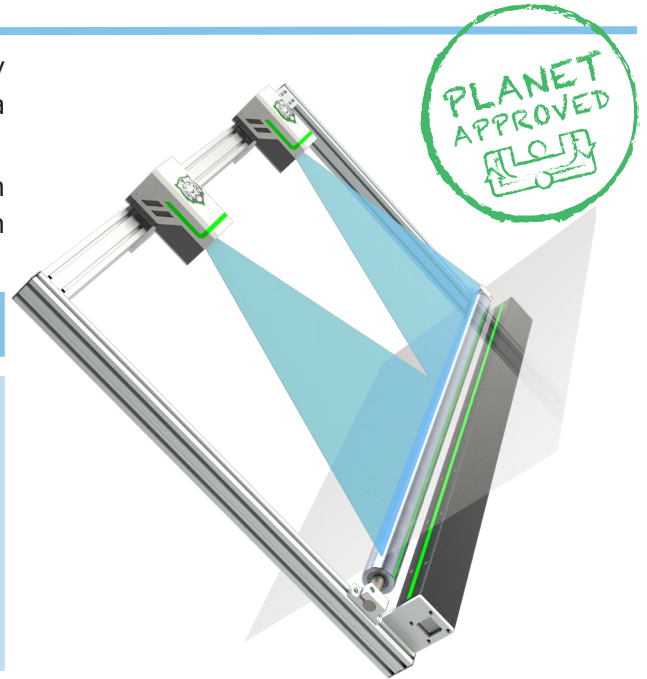
### PRINCIPLES OF OPERATION

#### FEATURES

EasYEyes offers two standard configurations tailored to the layflat range, spanning from 2000mm to 3000mm.

With high-resolution cameras and powerful processors, EasyEyes can detect defects as small as 250 µm while scanning films traveling at speeds of up to 300 m/min.

For EasyEyes applications, a single backlight illuminator is sufficient to detect all common film defects.

#### HMI & REPORT

EasyEyes features an intuitive HMI for real-time visualization of the inspection process, including advanced 2D mapping for defect analysis.

It automatically catalogs defects and provides statistical analysis, enabling detailed inspection reports aligned with industry standards for enhanced productivity and waste reduction.

#### FRAME SETUP

The complete system, comprising cameras, optics, and illuminators, is mounted on a frame spanning the production line. For blown film lines, two distinct configurations are available, typically positioned just before the winders:

The standard Twin Configuration enables a single image processor to conduct inspections on two reels simultaneously within a unified frame.

The newest and innovative Mezzanine Configuration, fully integrates the camera optical path embedded in the mezzanine floor, uses an intermediate bar equipped with a specialized reflecting mirror solving the problem of the very short path from blow film separation to the winders.
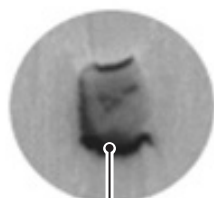
#### INDUSTRY 4.0 & IoT

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.

## PROCESSES

FILM
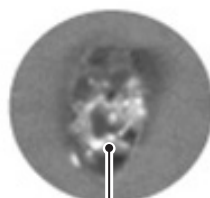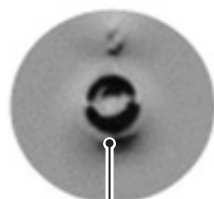
CAST

SHEET EXTRUSION

## DETECTABLE DEFECTS

Burn material

Hole

Inclusion

Insect

Fish Eye

Paraffine
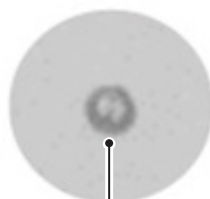
Bubble
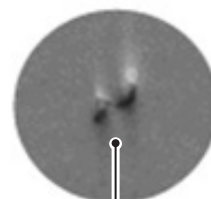
Gel

| BLOWN FILM | WEB WIDTH | |
| --- | --- | --- |
| | 2000 mm | 3000 mm |
| Quantity of 4k Cameras needed | 4 | 6 |
| Quantity of Backlight Illuminators | 2 | 2 |
| Max Line speed | 300 m/min | 200 m/min |
| Max Resolution Reached | 250 µm | 250 µm |

| CAST FILM | WEB WIDTH | |
| --- | --- | --- |
| | 2000 mm | 3000 mm |
| Quantity of 4k Cameras needed | 2 | 3 |
| Quantity of Backlight Illuminators | 1 | 1 |
| Max Line speed | 300 m/min | 200 m/min |
| Max Resolution Reached | 250 µm | 250 µm |