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better results.

SPC-295 – Industrial-grade Colorimeter  
Datasheet

SPC-295

# Industrial-grade Colorimeter



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## Equipment for production lines and industrial machineries

The SPC-295 industrial colorimeter is designed for automatic color control of up to 100% of production, suitable for retrofitting existing production lines or as an advanced sensor for machine builders.

Features and benefits:

- Automatic and continuous color control,
- Highly repeatable stability and trend control,
- Full production monitoring,
- Batch classification of production,
- Easy machine integration via the integrated Modbus TCP communication protocol.

SPC-295

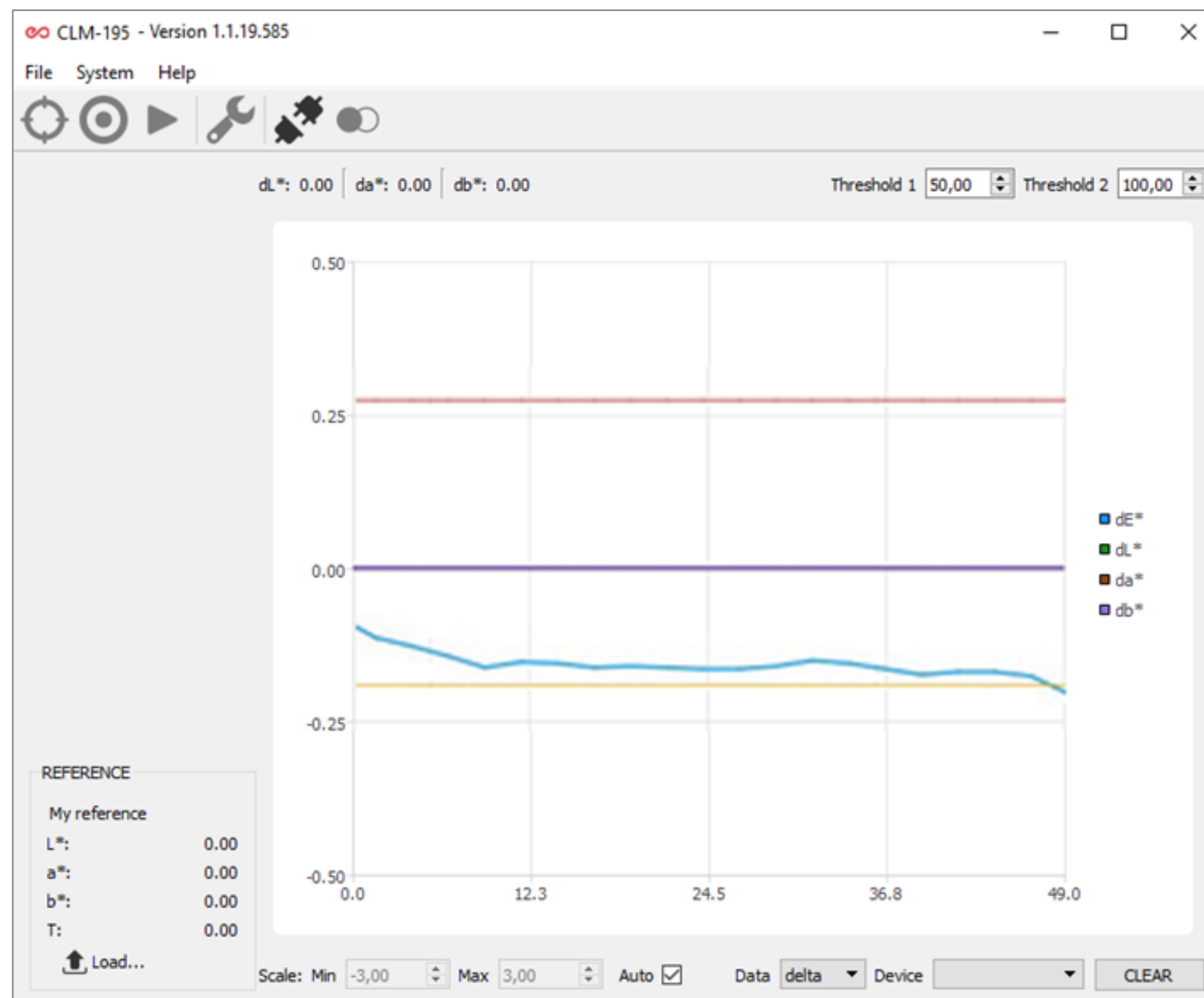
# Industrial-grade Colorimeter



# Technical specifications

Color sensor	Based on the spectral values of the standard CIE 1931 color-matching functions (DIN ISO 13655, DIN 5033)
Light source	6 white LEDs
Target type	Reflective (matte or glossy)
Working distance	Non-contact measurement, optimal distance at 12mm
Measurement geometry	(45°c:0°) according to CIE15:2004, ASTM E1164
Repeatability	0.03 $\Delta E^*_{ab}$ typ (30 measurements at 5s on white reference)
Illuminant	D65
Observer	CIE-1931 2°
Measurement area	∅ 10mm
Dimensions	70mm (L) x 79mm (H) x 55mm (W)
Power	+24VDC @ 1A
Weight	710 g

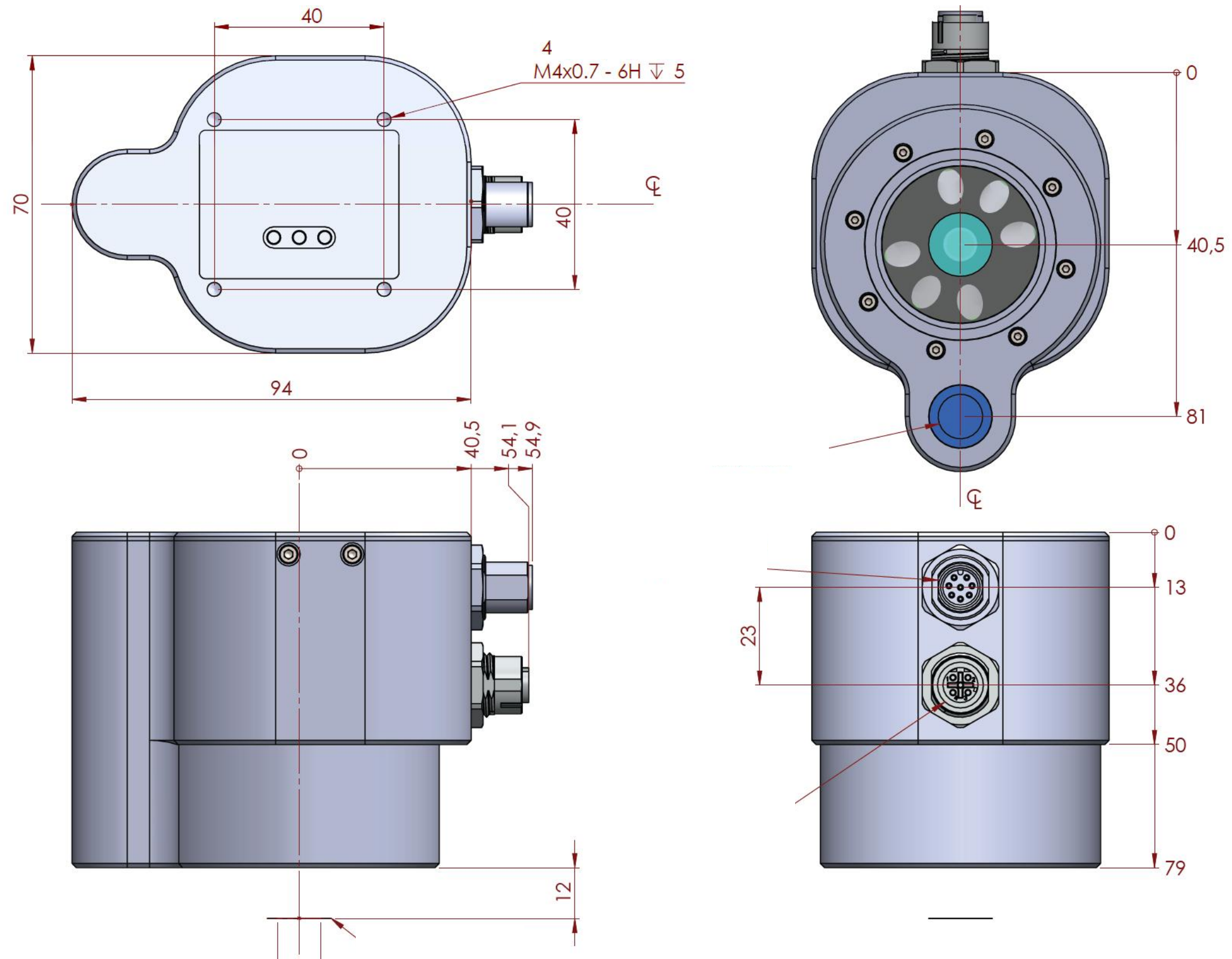
# «CLM195 Interface» application software



- Interface: Modbus TCP over LAN;
- Control: 1 to 3 colorimeters with a single HMI;
- Acquisition types: manual (HMI button), automatic (cyclic from PC clock), hardware (via digital trigger signal (GPIN));
- Values calculated for each acquisition: CIE\*Lab, instrument-target distance, T (internal temperature);
- Values plotted in real time: CIE\*Lab, d, T,  $\Delta E$ ,  $\Delta L$ ,  $\Delta a$ ,  $\Delta b$ ;
- Log file type: .csv data file for subsequent analysis;
- Data analysis: threshold crossing verification with status changes of 2 digital outputs (GPOUT1 and GPOUT2).

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# Mechanical drawings



# Type of materials

## Solids



Panels, furniture industry  
 Leather, tanning industry  
 Fabrics, food and agriculture  
 Plastic films

## Liquids



Food Liquids  
 Paints  
 Detergents

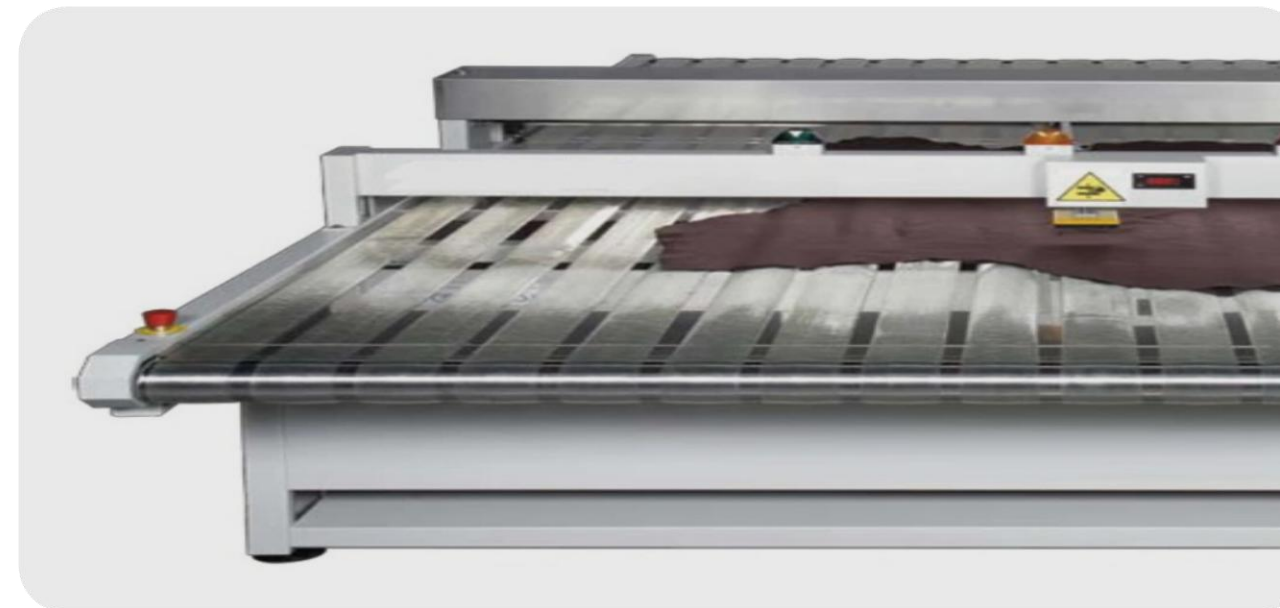
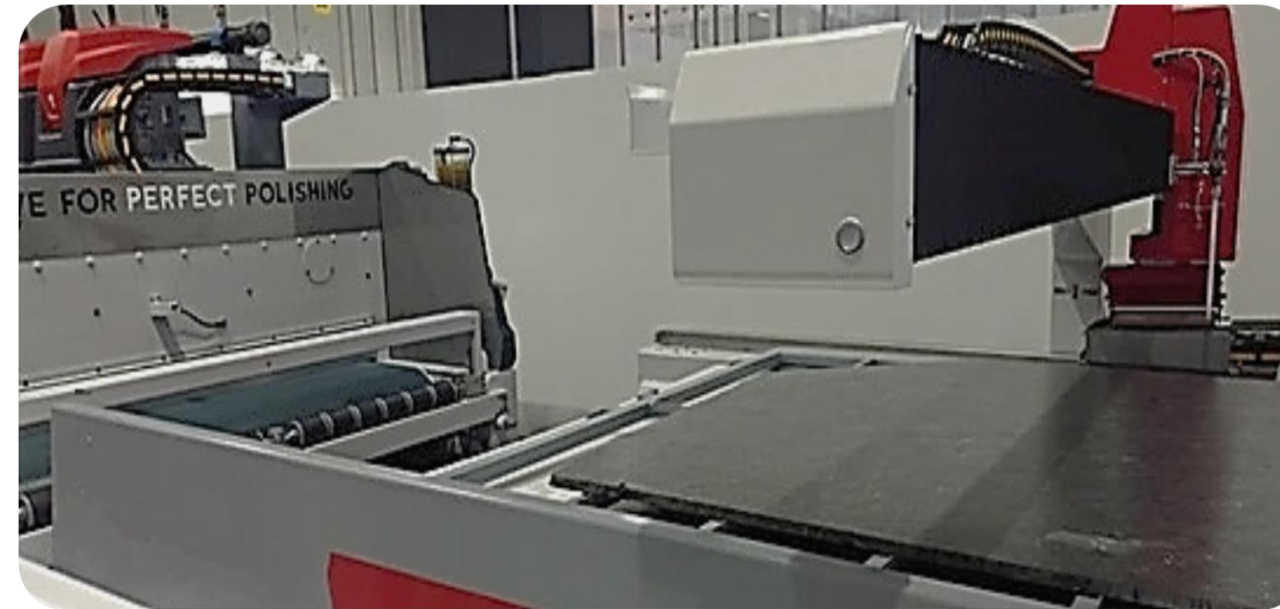
## Powders



Coffee beans  
 Flours  
 Plastic granules  
 Spices

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# Examples of installation



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# Examples of installation



# Levels of proposal

## «Base» proposal

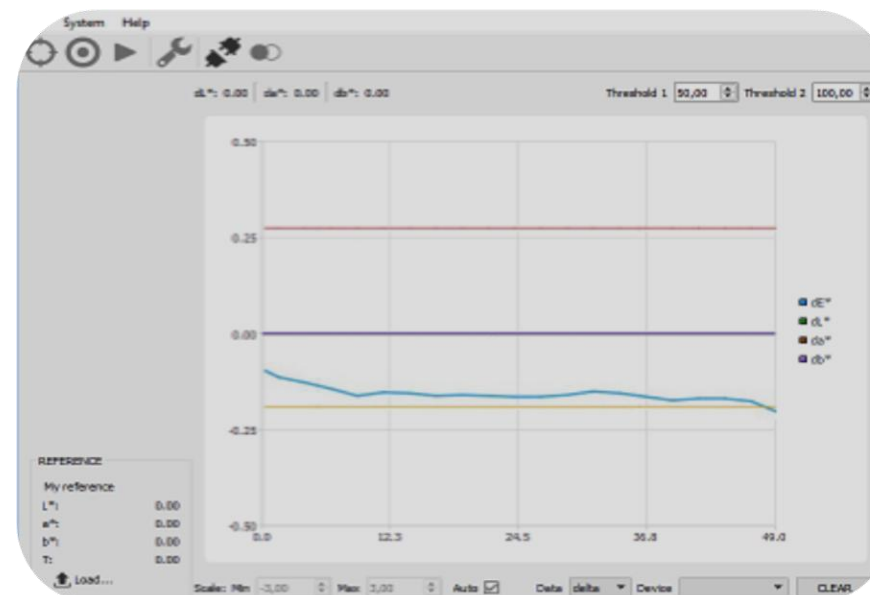
- Industrial-grade Colorimeter
- Electrical cables
- Calibration certificate.



## «Medium» proposal

Includes everything in the Base proposal, plus:

- Software license for the «CLM195 Interface» application software
- Industrial PC



## «Turn-key» proposal

Includes everything in the Medium proposal, plus:

- Physical installation on the line
- Start-up of the in-line measurement system.



# Contact us

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