

# Applications Information MCS 500

## Colour Measurement

### Process Monitoring on Vacuum Coating Plants



〒164-0011

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## Process description

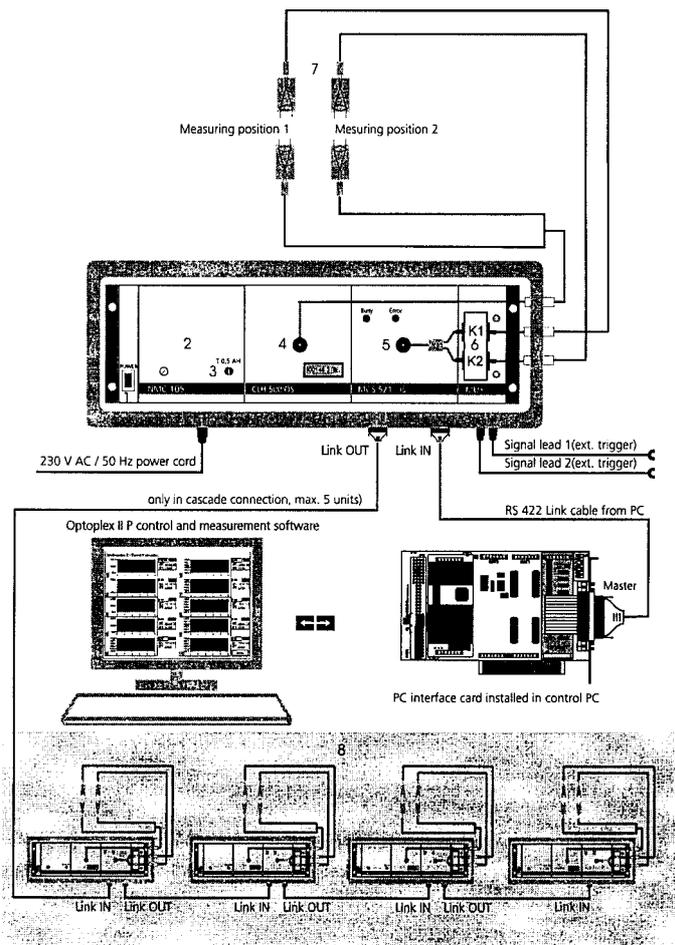
OPTOPLEX is a new measurement and analysis system for the use in vacuum coating plants. It allows non-contact and destruction-free measurement of spectral transmission and colour data both in and outside vacuum plants. Measurement and analytical results are suitable as proof of quality and serve for process optimisation. OPTOPLEX II P is customised for

transmission measurements in vacuum. Measurements are taken on architectural glass, but also on car window panes, displays, acrylic glass or plastic films. The system provides measurement of single and multi-layer coatings.

## System description

The system serves for quality control in glass coating processes inside vacuum chambers. It collects the data of a transmission measurement carried out by the system itself in the running production process

and displays the results graphically and numerically on the screen of the control computer.

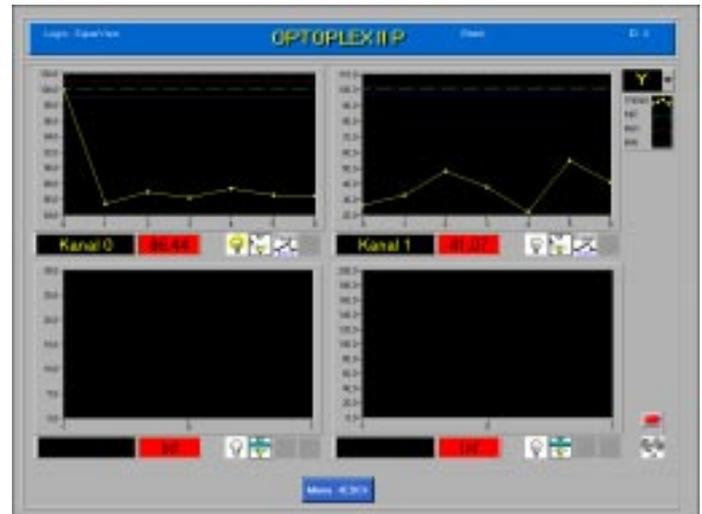


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|--|--|
| 1 ON/OFF Switch                                  | 5 Spectrometer cassette                        |
| 2 Power supply unit                              | 6 Multiplexer                                  |
| 3 Fuse carrier                                   | 7 Measurement optics                           |
| 4 CLH lamp cassette<br>(with elapsed-hour meter) | 8 Connection scheme for further units (max. 5) |

## Software

The software allows display of spectra or of the trends of one or several measuring stations.

The system determines the transmission for different standard illuminants (A, C or D 65) and viewing angles ( $2^\circ$  or  $10^\circ$ ).



The program can handle up to 10 measuring stations. The measured spectral curves are converted into the corresponding CIELAB data considering the selectable standard illuminants and viewing angles.

## Specification

Measuring range

380 ... 900 nm

Resolution acc. to Rayleigh

10 nm

Spectrometer

Diode array spectrometer

Source

Halogen lamp

Colour data

Y, L\*, a\*, b\* (CIELAB)

Standard illuminants

A, C, D 65

Presentation

Spectral curves, different presentation modes for trend analysis

Subject to technical alteration

263259-7563.161



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