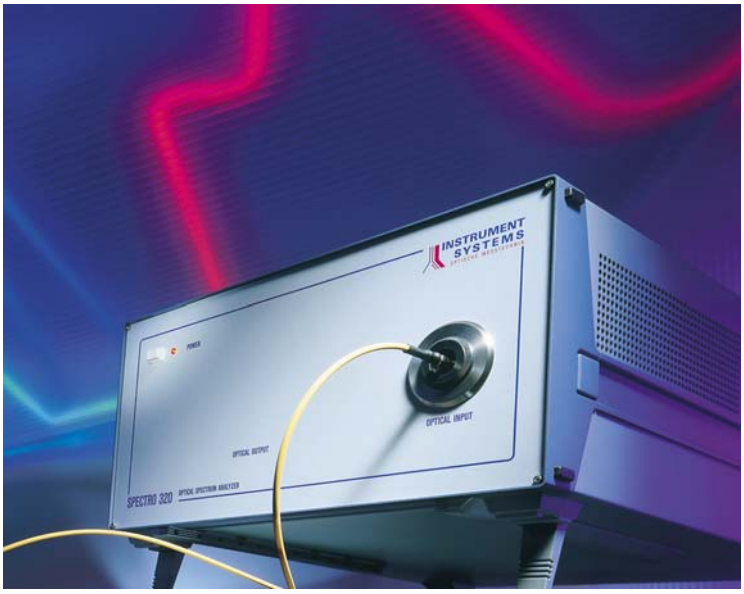
WE BRING QUALITY TO LIGHT.



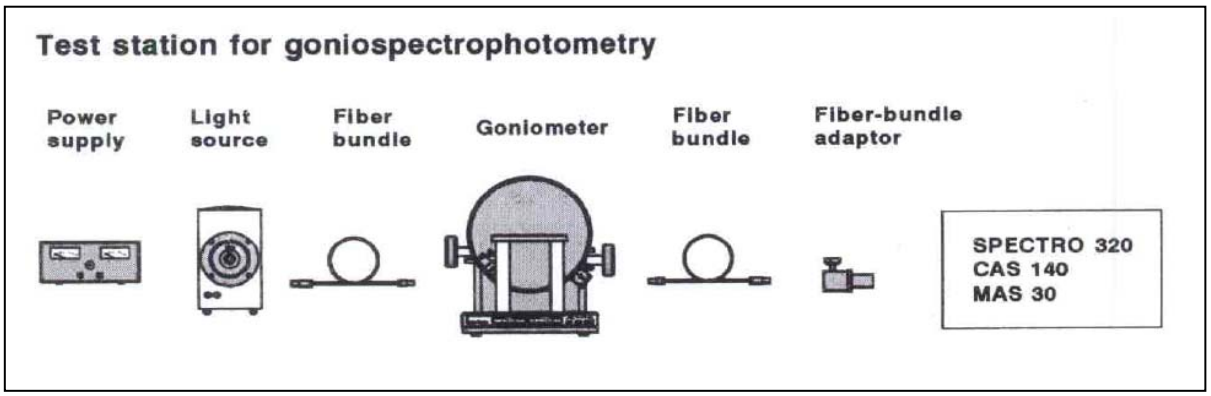
The right angle: Goniospectrophotometry with the GON 360

- Variable adjustment of angular range from 0° to 360° with 0.01° resolution
- Transmission and reflection measurements without changing the setup
- Manual / motorized versions
- Different light sources
- All INSTRUMENT SYSTEMS spectrometers can be connected by optical fibers
- Software integration for automatic test routines
- Diffuse reflection properties of metallic and pearl-effect paints
- Angular-dependent transmission and reflection from coatings and samples
- Color analysis with CIELAB evaluation at different angles
- Determination of anisotropic reflection at surfaces
- Angle scans for goniospectro-photometry.

Goniospectrophotometry

Many materials demonstrate significant angular-dependent behavior for reflection or transmission. This property can be desirable as in the case of metallic or pearl-effect paints. However, it can also occur as a side effect with a considerable influence on the optical properties of a sample, e.g. coatings for interference filters.

INSTRUMENT SYSTEMS now supplies a complete goniospectrophotometer. The test station is based on a goniometer with a range of light sources and a choice of spectrometers. The system is controlled by a software package that permits the motorized goniometer version to perform a full angle analysis and carry out color analysis on your samples.



Specifications for GON 360:

Optical data:

Spectral range	:	190 - 2300 nm
Measuring-spot size	:	10 mm or 1 mm
Beam divergence	:	4°
Polarizer	:	Extinction ratio < 10^{-5}
Test optics (optional)	:	Integrating sphere

Angle of illumination:

Absolute accuracy	:	± 0.3°
Reproducibility	:	± 0.05°
Adjustment range	:	360°

Test angle:

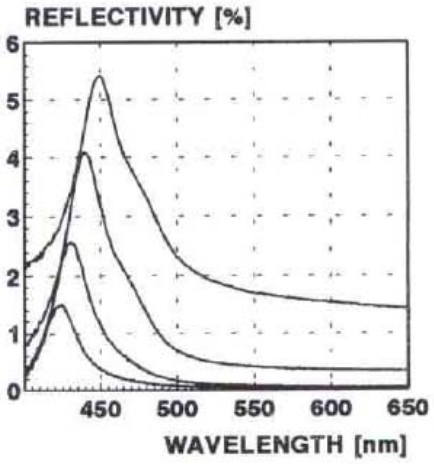
Absolute accuracy	:	± 0.3°
Reproducibility	:	± 0.05°
Adjustment range	:	-7° - +187°

General information:

Sample size	:	max. 297 x 210 mm²
Size (H, W, D)	:	350 x 310 x 580 mm³
Weight	:	18 kg (motorized version)

Measurement accuracy for ΔE:

SPECTRO 320 (with Si detector)	:	± 0.1
(only suitable for specular reflection / transmission due to the sensitivity of the Si detector)		
SPECTRO 320 (with PMT 3)	:	± 0.2
CAS 140	:	± 0.3
MAS 30	:	± 0.3



Reflection spectra from a metallic paint at different test angles for a fixed angle of illumination.

INSTRUMENT SYSTEMS GMBH
Neumarkter Str. 83, D - 81673 Munich, Germany
TEL:+49/89/454943- 0
FAX:+49/89/454943-11