



DIFFUSE HIGHLIGHTS

- Designed for rough, non-reflective surfaces
- Near universal measurement of solids and surfaces
- Easy to focus for quick measurements
- Insensitive to small hand movements
- No sample preparation
- Material identification, composite analysis, geological or soil science, art conservation
- Non-contact sampling



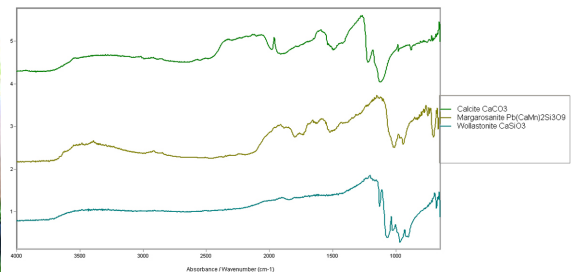
DIFFUSE APPLICATIONS

- Quality Control, Quality Assurance ID
- Coating Thickness
- Surface Contamination
- Analysis of Large Surfaces
- Composites
- Soil, Rocks and Minerals
- Plastics
- Fabrics
- Corrosion on metal surfaces
- Art Conservation

Diffuse Reflectance Sample Interface

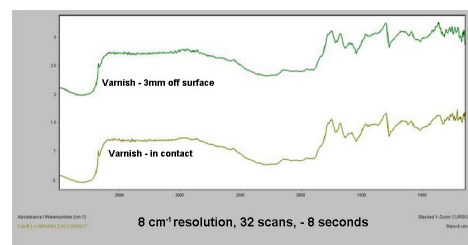
The diffuse reflectance sampling capability allows the Exoscan to tackle an increased number of important applications. Testing has determined good results on a wide variety of samples including artwork, soils, rocks and minerals, composites, rough plastics, fabrics and corrosion on metal surfaces. In general, if the sample reflects little light, the diffuse reflectance interface will be the sampling method of choice. In many cases, the diffuse reflectance provides the easiest to use sample interface for the hand-held Exoscan.

Geology



Above: In a laboratory setting, geology samples may be crushed and mixed with a non absorbing matrix, such as potassium bromide to eliminate the negative bands. In order to accomplish field measurements, the sample must be measured without preparation; therefore, the reflectance spectra is measured directly. Library matching can be accomplished with the same accuracy as laboratory data.

Art Conservation



Above: Diffuse reflectance spectra of varnish coating on painting. Because of the large depth of focus, the Exoscan diffuse reflectance interface provides good quality spectra without physically contacting the sample