

# Concrete survey instrument SCI System



*Get the result  
on site!*

The SCI System uses near infrared spectroscopy to measure the chloride ion concentration in concrete structures under attack by a salt environment. On-site measurements are made quickly and easily \*

\*Using the current method such as JCI and JIS, measurement is generally made by regulated laboratories using a chemistry based analysis system; results are typically obtained several weeks following sample collection.

## [ Features ]

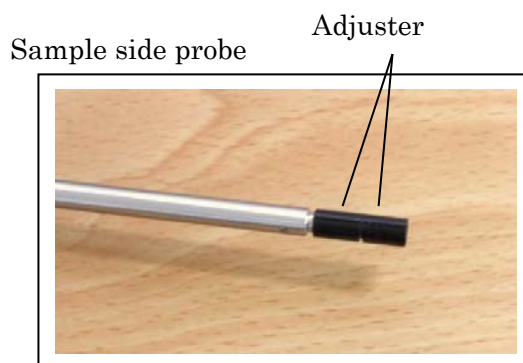
- Result are obtained in real-time in-situ.
  - Analysis is made using the sample spectrum.
  - Instrument control and data processing are made using a laptop PC.
  - Measurement can be done without access to an AC power outlet by using a dedicated portable power supply.
- The SCI system uses a high throughput, high resolution **spectroscope**, which delivers excellent data quality and reliable test results.

## [ Use ]

- Measurement of the chloride ion concentration in concrete structures under attack from salt environments.

[ Fiber probe for Near infrared (standard accessories)]

Two matched fiber probes with optimized branching ratio for near infrared are used. An adjuster controls the distance of the sample measurement probe from the surface being measured and protects the fiber end from damage.



Main specifications	SCI System	※Product specification are subject to change without notice (2009.4)
Measurement wavelength range	1350~2500nm	
Resolution	7nm	
Wavelength precision	1nm	
Real time measurement range	380nm	
Spectrograph	Czerny-Turner type	
Spectrograph F value	F/3.2	
Detector	InGaAs Linear image sensor (2 step thermoelectric cooling type)	
Light Source	High power density halogen lamp (Color temperature 3000K)	
PC for control and data processing	Laptop PC OS: WindowsXP® (USB terminal 2 use)	
Fiber unit	Probe side: Outside diameter 6.3mm/ fiber diameter 3mm Fiber length: 2m Aperture: 0.2 Protective wrapping: Stainless steel flexible tube	
Instrument dimensions and weight	Approx. 450(H)×160(W)×360(D) (Excluding projections), Approx. 14kg	
Power source and power consumption	AC100V 50/60Hz, 200W (including Laptop PC, max)	

<p>Distributor</p>	<p>Manufacturer</p> <p><b>Photoscience Incorporated</b></p> <p>1-D Kimura-bldg 492-1 Katakura Hachioji, Tokyo 192-0914, Japan Tel: +81-42-649-1447 Fax: +81-42-649-1455 URL <a href="http://photoscience.co.jp">http://photoscience.co.jp</a></p>
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