

Scattered Light Photoelastic Stress Meter SLP-2000

This machine is available to measure stress distribution of chemically tempered glass which is strengthened by ion-exchange from Li⁺ to Na⁺ Using scattered light photoelasticity.

In case of that the glass is strengthened by mixed liquid KNO₃ and NaNO₃, K⁺ layer should be measured by FSM-6000LE and Na⁺ layer should be measured by SLP-2000. These data can be combined by special software.

*The combination requires optional
FsmV dongle.



<Standard Deviation>

| Model | Wavelength | CT_CV | DOL_Zero |
|----------|------------|---------|----------|
| SLP-1000 | 640nm | 5.65MPa | 2.16um |
| SLP-2000 | 520nm | 1.51MPa | 1.42um |
| SLP-2000 | 405nm | 1.00MPa | 1.27um |

- Actual data measuring the same glass 20 times
- Required Refractive index and Photoelastic constant at the wavelength for measurement

Specification

| | |
|------------------------|---|
| Measurement range | : CS 0-2000MPa, DOL 10—600μm |
| Measurement resolution | : Stress 5MPa, Depth 5μm |
| Measurement precision | : 50μm or deeper from surface stress±10MPa Depth±10μm (For standard glass) |
| Light source | : LD 520±10nm 30mw Class 3B or 405±10nm 30mw Class 3B |
| Application | : Chemically tempered glass, DIOX glass Thermally tempered glass. |
| Sample shape | : Flat-1000R 10×10mm or more |
| Prism | : nD=1.518 @ 518nm / 1.530 @ 405nm |
| PC | : Preinstalled OS, special software |
| OS | : Windows 10 professional edition |
| Size (main body) | : W 320 × D280 × H220mm |
| Weight (main body) | : 11kg |

- The combination requires optional FsmV dongle.
- In case of using 405nm LD continuously for a long time, the optical parts in the machine are damaged. Therefore, the parts replacement is necessary in a short cycle.



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