

Ultraviolet Light Amount Distribution Measurement Film

UVSCALE Application Examples

No.6

Field
UV molding

Measured objects

- Components for electronic products
- Materials for liquid crystal panels
- LED components
- Films for solar batteries

Purpose

To check the UV light amount and UV light distribution when molding UV curable resins using nanoimprint technology

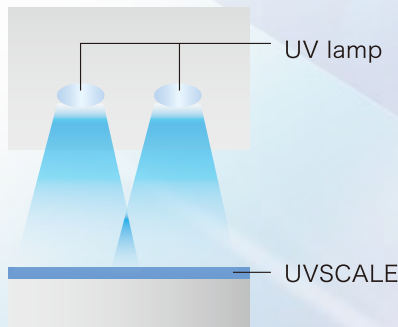
Outline of use

Cut the UVSCALE to the mold size or other relevant appropriate size, place on the base material or work surface, and irradiate with UV light under normal conditions. Remove the UVSCALE and observe its coloring.

UV light irradiation coverage and lamp degradation can easily be checked.

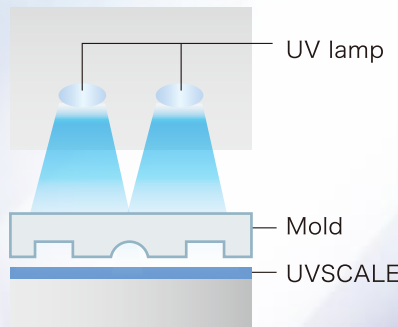
[Use example 1]

Measuring the light distribution produced by the UV lamp across the surface of the molding

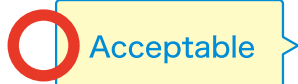


[Use example 2]

Checking the amount of UV light that the resin receives on passage of the mold



Finished product



Acceptable



UV light is applied evenly across the whole surface of the molding. The correct amount of light has been applied.



Defective



An uneven light distribution across the surface is observed. In the area where the light amount is large, irradiation is outside the correct range.

Benefits of UVSCALE

- Since the light distribution across the whole surface of moldings can be visualized, the positioning and suitability of lamps can be designed and judged efficiently.
- Allows measurement of the amount of light that the resin receives on passage of the mold, so that the actual light amount and light distribution can be determined.
- As anyone can easily perform measurement, the measurement method can easily be standardized and process control improved.

UVSCALE

Search

http://www.fujifilm.com/products/industrial_products/uvscale/

* Please note that the specifications and performance stated in this catalog may change without prior notice as a result of improvements. The diagrams used are schematic, and differ from those for actual measurements.