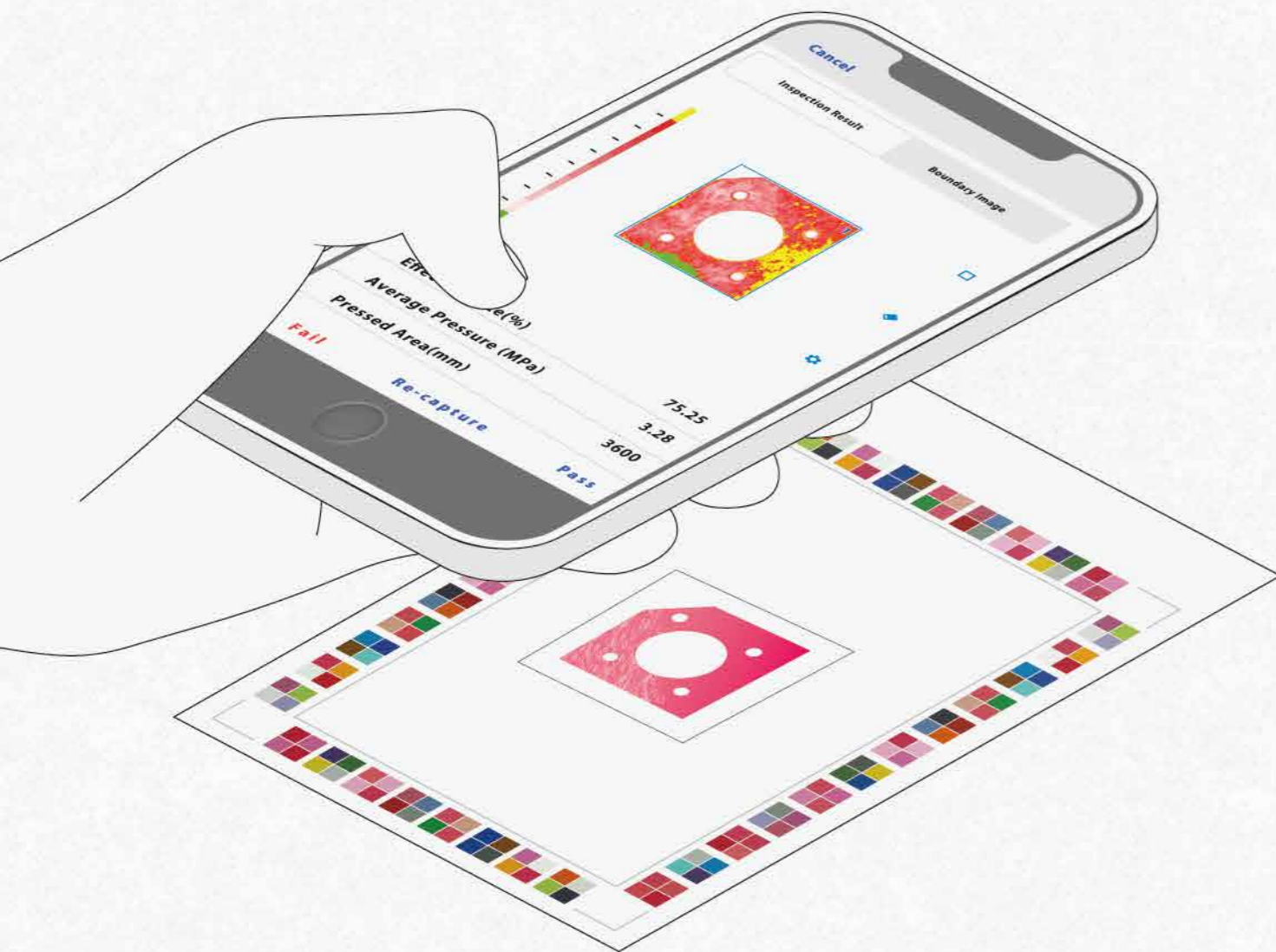
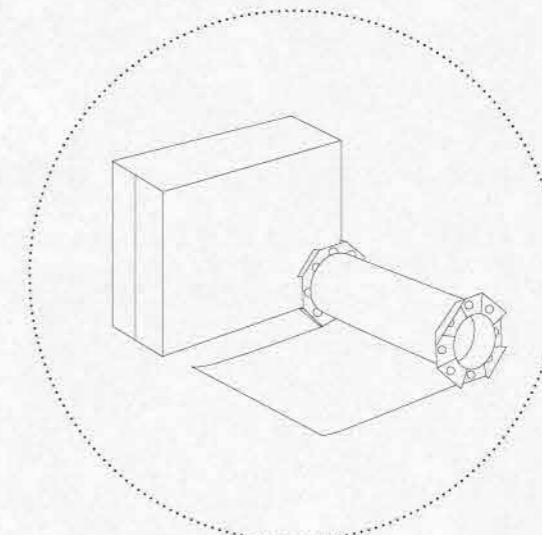
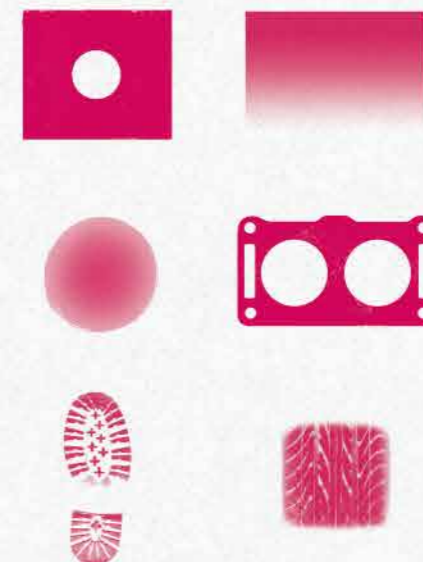


# PRESCALE

## Visualization and Quantification of Pressure



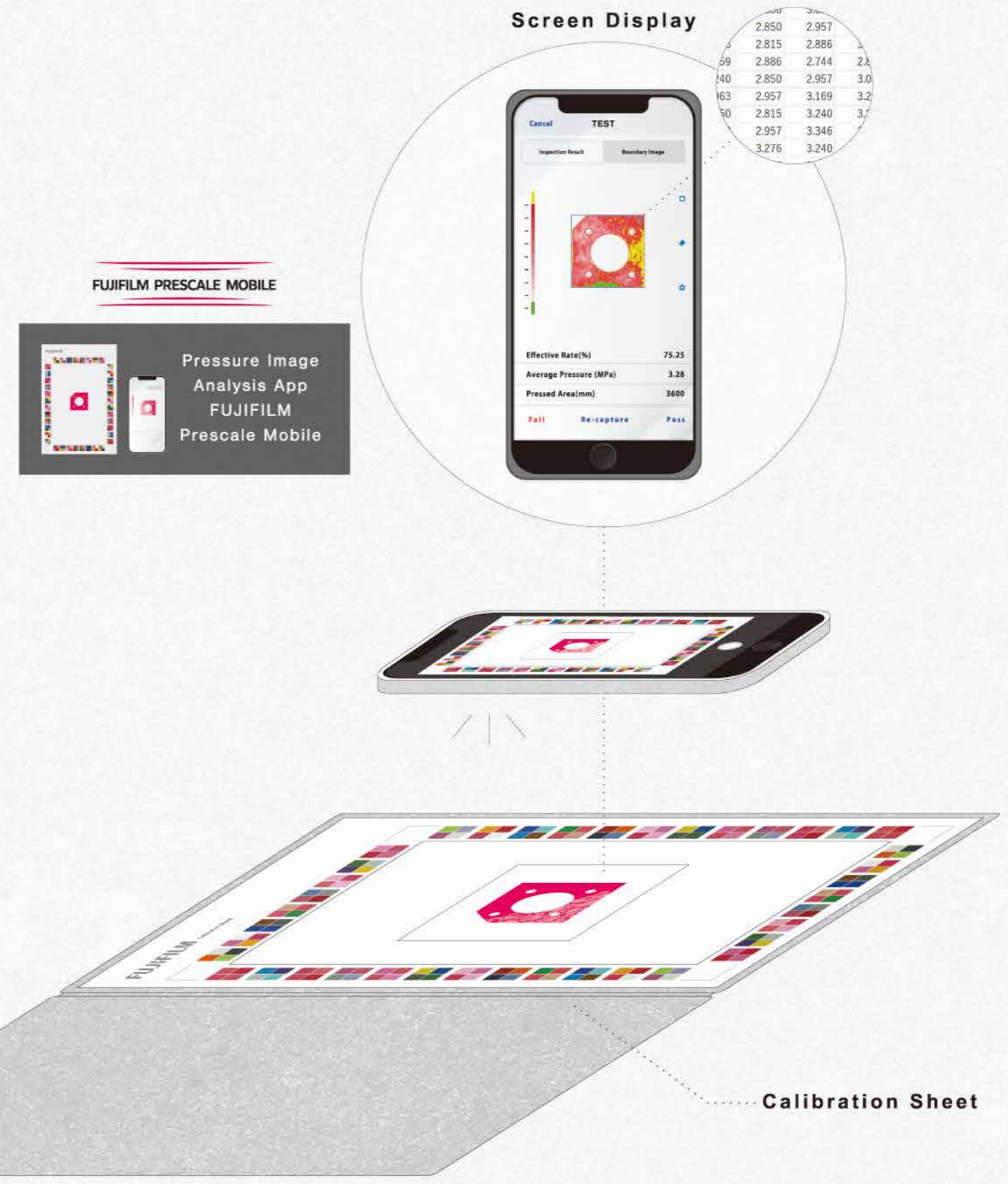
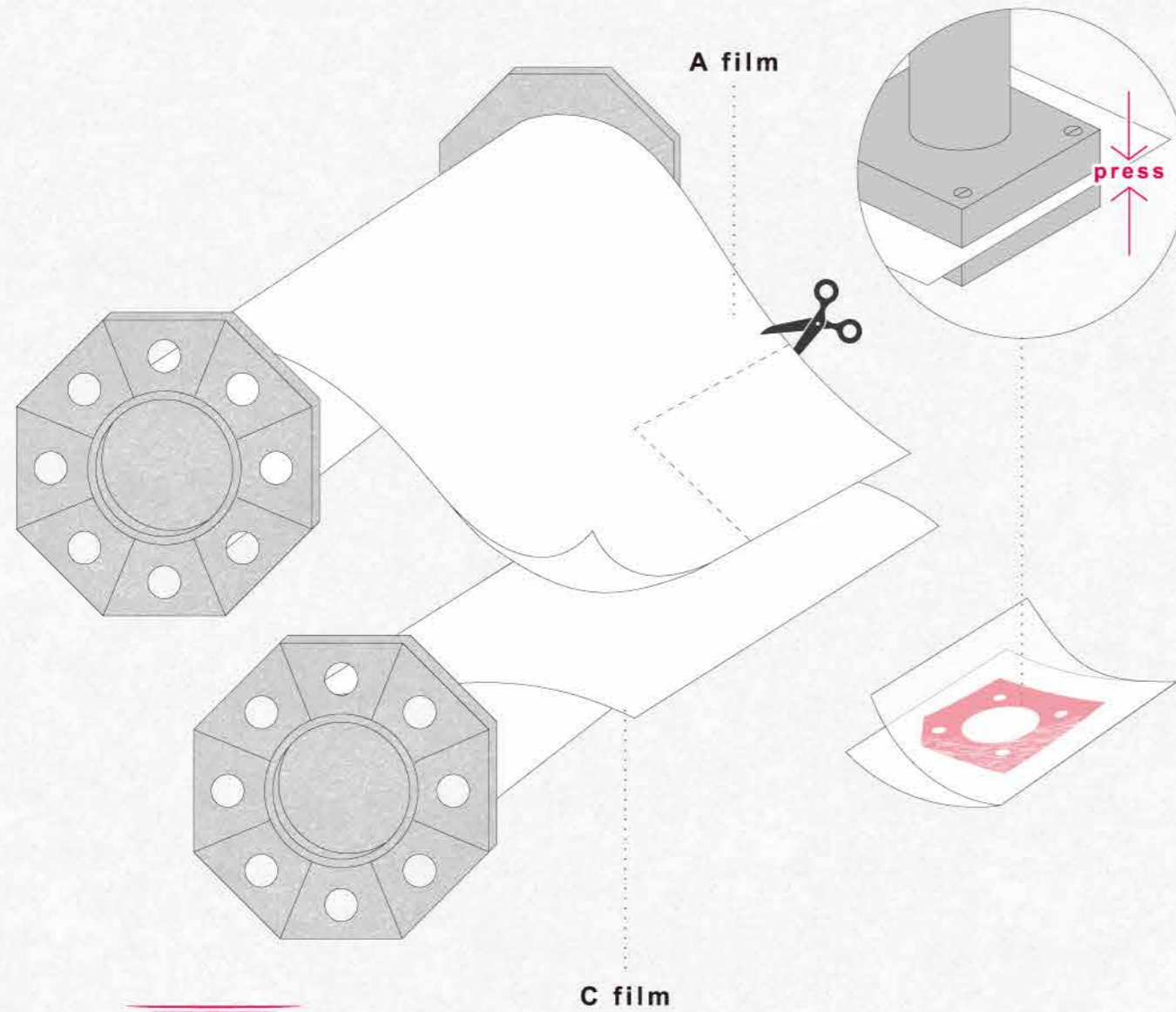
Prescale



# Solutions to quantify pressure

Pressure measurement film 'Prescale' allows you to easily confirm pressure and pressure distribution.

Furthermore, 'FUJIFILM Prescale Mobile' allows anyone to easily quantify Prescale results and perform advanced analysis and data utilization.



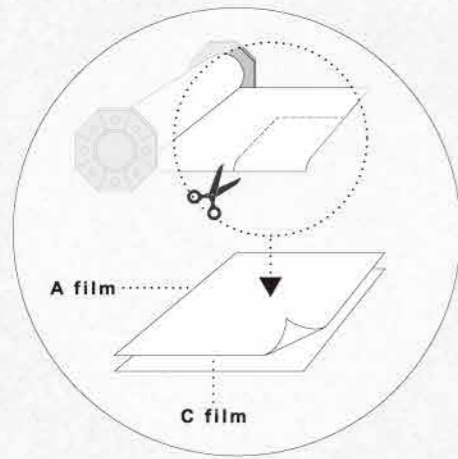
# PRESCALE

Pressure Measurement Film

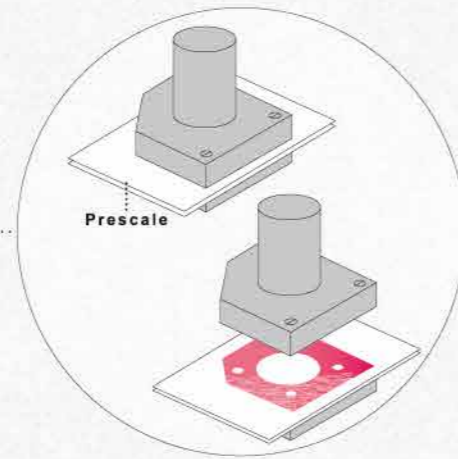


## GUIDE

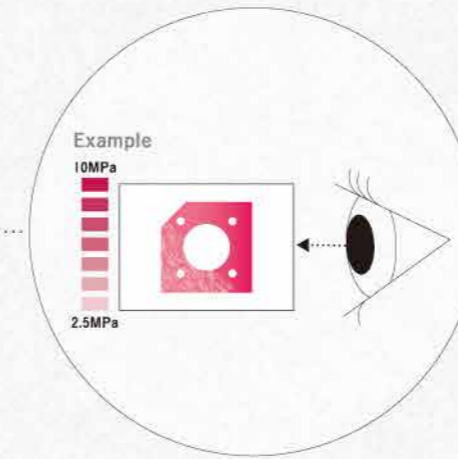
Just cut Prescale and insert to the place you want to inspect.  
Prescale visualizes pressure with its color density.



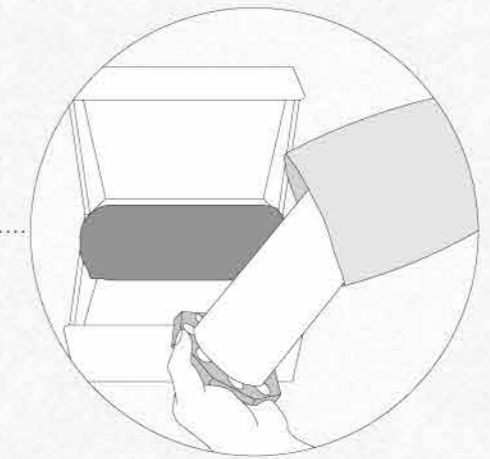
Cut Prescale into any size or shape of your choice.



Apply pressure and a color appears to where pressure is applied.



Visually confirm using Prescale Color Chart.  
\* Check from the glossy surface

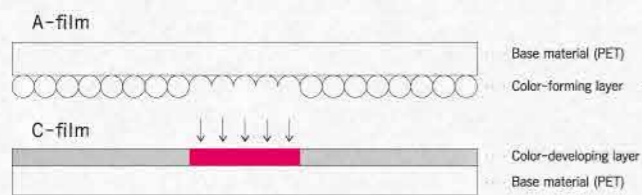


Store Prescale in light-resistant bag and keep it in the box in a cool, dark place to protect from light and impact.

## STRUCTURE

### Two-sheet type (5LW-MW)

A film which a color-forming layer and a color-developing layer are coated to separate base material. Place the material-coated side (non-glossy side) face each other.



### Mono-sheet type (MS-HHS)

A film which a color-forming layer and a color-developing layer are coated to a base material.



- ① The microcapsules are broken by applying pressure.
- ② The color-forming material in the microcapsules transfers to the color-developing material.
- ③ The color appears as a result of a chemical reaction.

## LINE-UP

Prescale Type	Measurable pressure range [MPa] 1MPa≒10.2kgf/cm <sup>2</sup>	Roll	Sheet
		Size W(mm)×L(m)	Size W(mm)×L(mm)
Ultra Extreme Low Pressure (5LW)	0.006 - 0.05	320×2	—
Extreme Low Pressure (4LW)	0.05 - 0.2	320×3	—
Ultra Super Low Pressure (LLLW)	0.2 - 0.6	270×5	270×200 (5 sheets)
Super Low Pressure (LLW)	0.6 - 2.5	270×6	270×200 (5 sheets)
Low Pressure (LW)	2.5 - 10	270×10	270×200 (5 sheets)
Medium Pressure (MW)	10 - 50	270×10	—
Medium Pressure (MS)	50 - 130	270×10	270×200 (5 sheets)
High Pressure (HHS)	130 - 300	270×10	270×200 (5 sheets)
Super High Pressure (HHS)	—	270×10	270×200 (5 sheets)
For High Temperature (LLW)*	—	270×6	—

\* Visit our official website for more details.

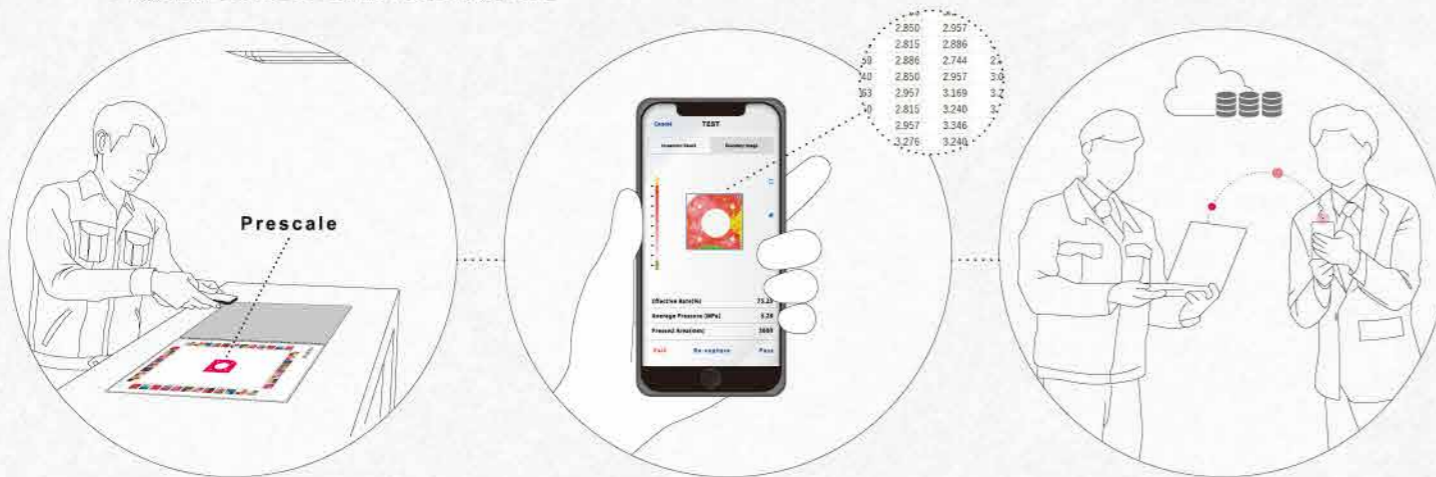
# FUJIFILM Prescale Mobile

Pressure Image Analysis App

## GUIDE

Digitize inspection data by capturing Prescale.  
We also support advanced data utilization by using 'FUJIFILM Pressure Analysis Cloud'\*.

\* Registration is required for FUJIFILM Pressure Analysis Cloud



Capture colored Prescale with FUJIFILM Prescale Mobile app.

\* Capture from the non glassy surface

Quantify pressure in various items: Average pressure, pressed area, etc.

Analyze data in detail, and share data to others.

## IMAGE PROCESSING TECHNOLOGY

### Calibration Sheet

Automatically calibrates according to your inspection environment using color patches while capturing Prescale.



### Coloring Correction

The color patches correct the color of Prescale depending on the lighting color and illuminance.



### Tilt Correction

The black frame works as a correction to adjust Prescale in the correct shape, avoiding "tilt" which occurs when capturing Prescale.

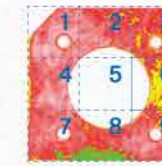


## USEFUL FUNCTIONS

### Example 1. Analysis with Various Inspection Columns

Displays the analysis result with various columns by inspection area selected arbitrarily. It is also possible to divide the square-shaped inspection area into 9 equal parts to support inspection by smaller area easily.

Average Pressure - 3.28MPa  
Pressed area - 3600mm<sup>2</sup>  
Uniformity - 65%

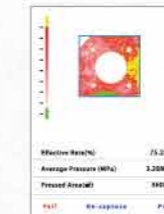


Average Pressure - 4MPa  
Pressed area - 380mm<sup>2</sup>  
Uniformity - 55%

### Example 2. Auto Judgement

Automatically judges the inspection based on the preset threshold value or range.

When "Average Pressure of 3MPa or more" is registered as a threshold:



**PASS**  
Average Pressure  
3.28MPa



**FAIL**  
Average Pressure  
2.1MPa

### Example 3. Data Storage and Export

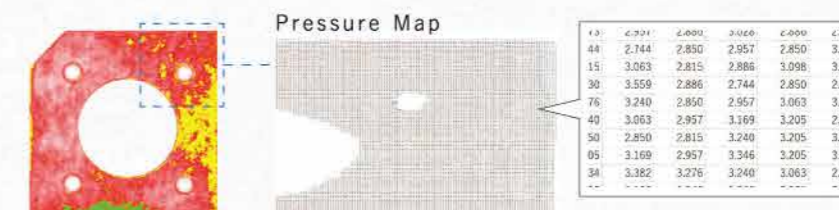
Data is stored in the mobile device used or can be exported to your PC. We also support data accumulation and more advanced data utilization by linking to the cloud system.



### Example 4. Pressure Map export

Export pressure value by each cell of minimum 0.18mm\* square.

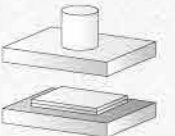
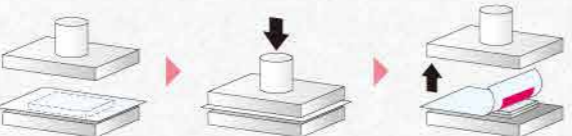

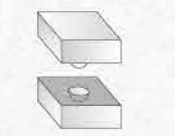
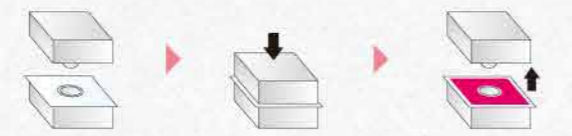

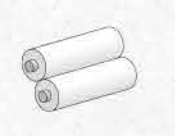
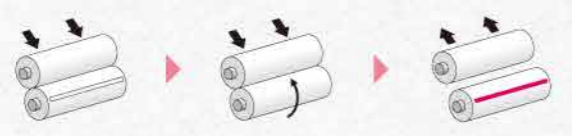

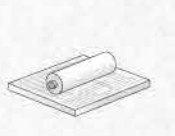


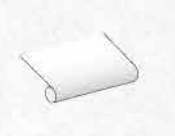
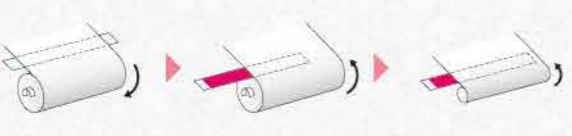

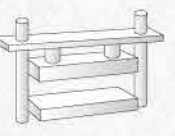
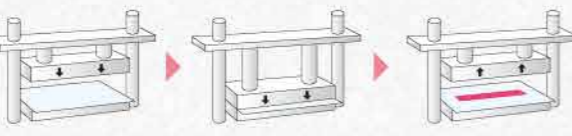

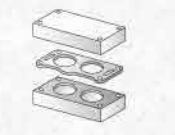
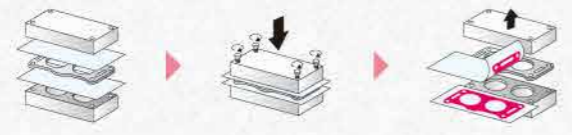


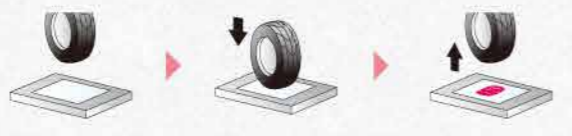


\* When used 'Calibration Sheet A5'



# APPLICATION EXAMPLES

## PROCESS

## PRESCALE

	<b>Compression pressure</b>		
	<b>Molding pressure</b>		
	<b>Nip pressure</b>		
	<b>Roll pressure</b>		
	<b>Winding pressure</b>		
	<b>Seal pressure</b>		
	<b>Tightening pressure</b>		
	<b>Support pressure</b>		
<b>Others</b>			

# INFORMATION

## PRESCALE

\* Please check the updated information from our official website.

### Specification

Recommended temperature	20°C~35°C*1 *2
Recommended humidity	35%RH~80%RH*3 *4
Precision	±10% or less (measured by a densitometer at 23°C, 65% RH)

\*1 5LW, 4LW, HHS: 15~30°C \*2 Prescale for High Temperature: 180~220°C  
\*3 5LW, 4LW: 20%RH~75%RH \*4 HHS: 35%RH~70%RH

## FUJIFILM PRESCALE MOBILE

\* Please check the updated information from our official website.

### Specification

Usable Prescale	5LW, 4LW, LLLW, LLW, LW, MW, Prescale for High Temperature (LLW)
Recommended environment	Light source: White LED/ Fluorescent lamp, Illumination: 500-900Lux, Color temperature: 5, 000-6,500K
Supported device	Please check the updated information from our official website

### Line-up

There are three types: "Package," which includes items necessary or recommended for using Fujifilm Prescale Mobile; "License only," which allows you to purchase only the license; and "Optional Items" for items other than the license.

\* Mobile devices are not included.

Product	
<b>Package</b> (Includes license, calibration sheet, folder, etc.)	FUJIFILM Prescale Mobile Perpetual
	FUJIFILM Prescale Mobile 1-year
<b>License only</b>	FUJIFILM Prescale Mobile Perpetual
	FUJIFILM Prescale Mobile 1-year
<b>Optional Item</b>	Calibration Sheet A4*
	Calibration Sheet A3 (Synthetic paper)*
	Calibration Sheet A4 (Synthetic paper)*
	Calibration Sheet A5 (Synthetic paper)*
	Folder A4 (Cardboard)
	Folder A4 (PP)

\* The capturing area of FUJIFILM Prescale Mobile.

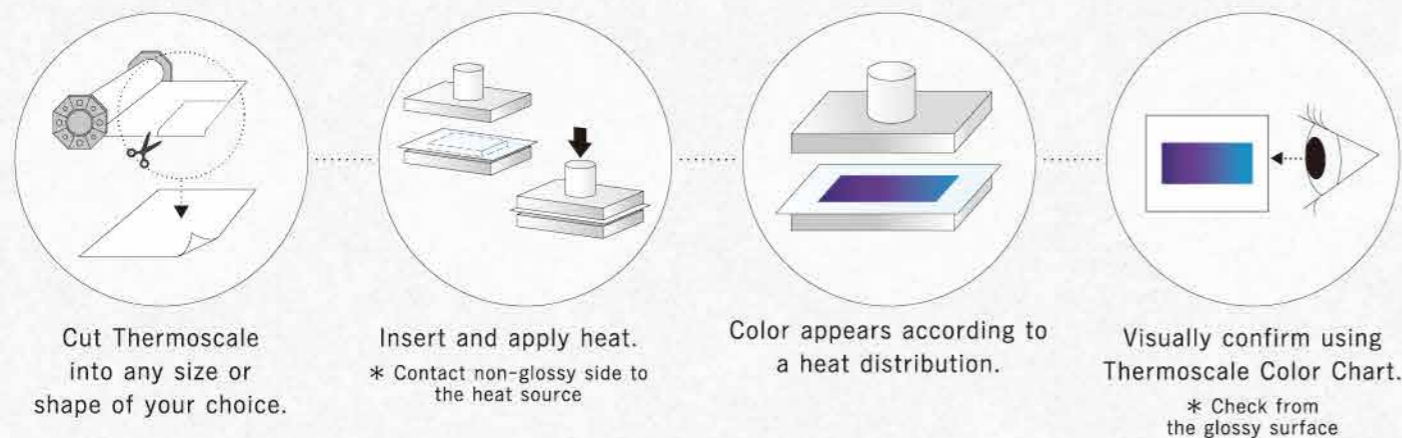
# THERMOSCALE

Heat Distribution Measurement Film



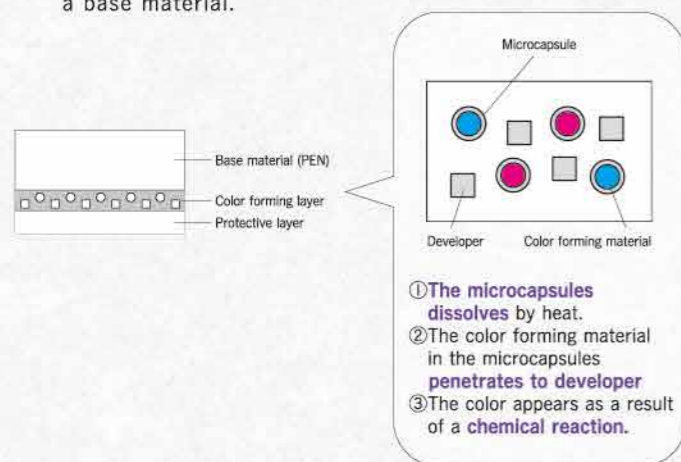
## GUIDE

Measure heat distribution by surface.  
Thermoscale visualizes heat distribution by its color density.



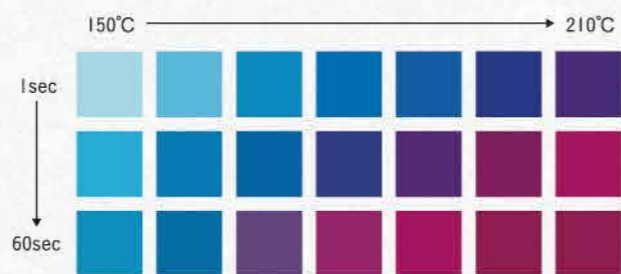
## STRUCTURE

A thermosensitive layer and a protective layer are coated to a base material.



## COLOR SAMPLE

The color changes according to the temperature of the heat source and the contact time.



## LINE-UP

Thermoscale Type	Temperature range	Roll Size W(mm) × L(m)	Sheet Size W(mm) × L(mm)
Thermoscale 200C	150°C~210°C	270×5	270×200 (5 sheets)

\* The color is also influenced by factors such as the type of material, thermal characteristics, contact pressure and air flow.

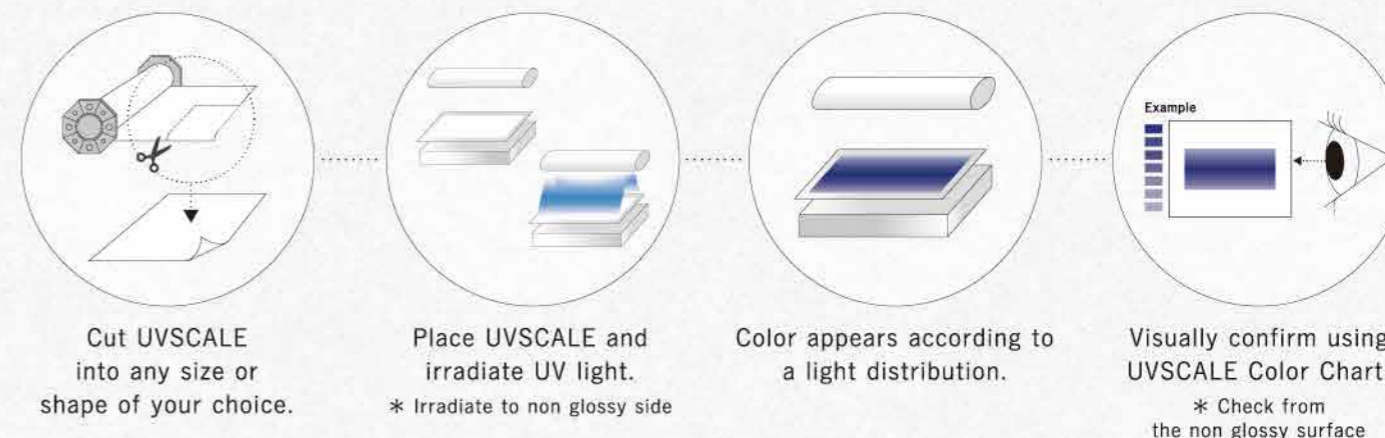
# UVSCALE

Ultraviolet Light Amount Distribution Measurement Film



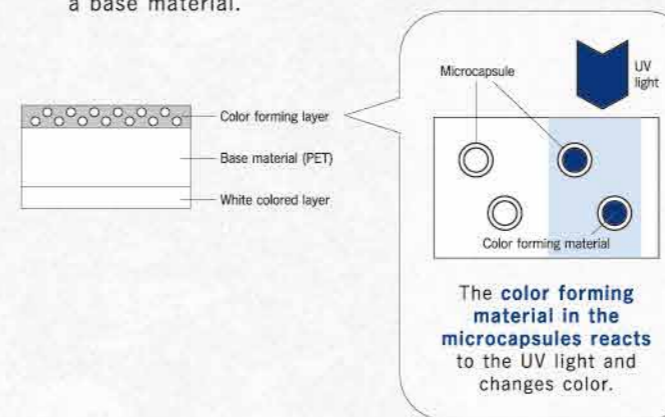
## GUIDE

UVSCALE visualizes exposed UV light distribution by its color density.



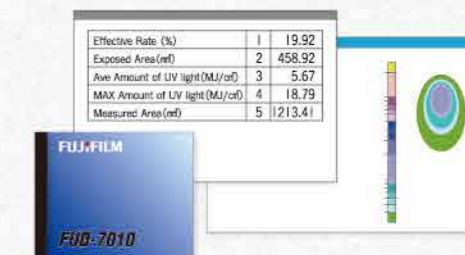
## STRUCTURE

A UV sensitive layer and a white colored layer are coated to a base material.



## SYSTEM

A software that can digitize and analyze UV light distribution by scanning UVSCALE.



## LINE-UP

UVSCALE Type	Light Level *	Film to use	Roll Size W(mm) × L(m)	Sheet Size W(mm) × L(mm)
UVSCALE LM	Low	UVSCALE LM	270×5	270×200 (5 sheets)
	Medium	UVSCALE LM + Light Reducing Film		
UVSCALE H	High	UVSCALE H + Light Reducing Film		

\* Please check the updated information from our official website.

