



THP-100 Series 熱硬化型穴埋めインキ

Thermal Curable Permanent Hole-Plugging Materials

特徴 Features

THP-100 DX7 & DX9

- 高 Tg/低 CTE High Tg/Low CTE
- 高信頼性: $-65^{\circ}\text{C} \Leftrightarrow 150^{\circ}\text{C}$ 、1000Cycleクラックなし
No crack after $-65 \Leftrightarrow 150^{\circ}\text{C} \times 1000$ cycles
- 低硬化収縮 Extra-low shrinkage after curing

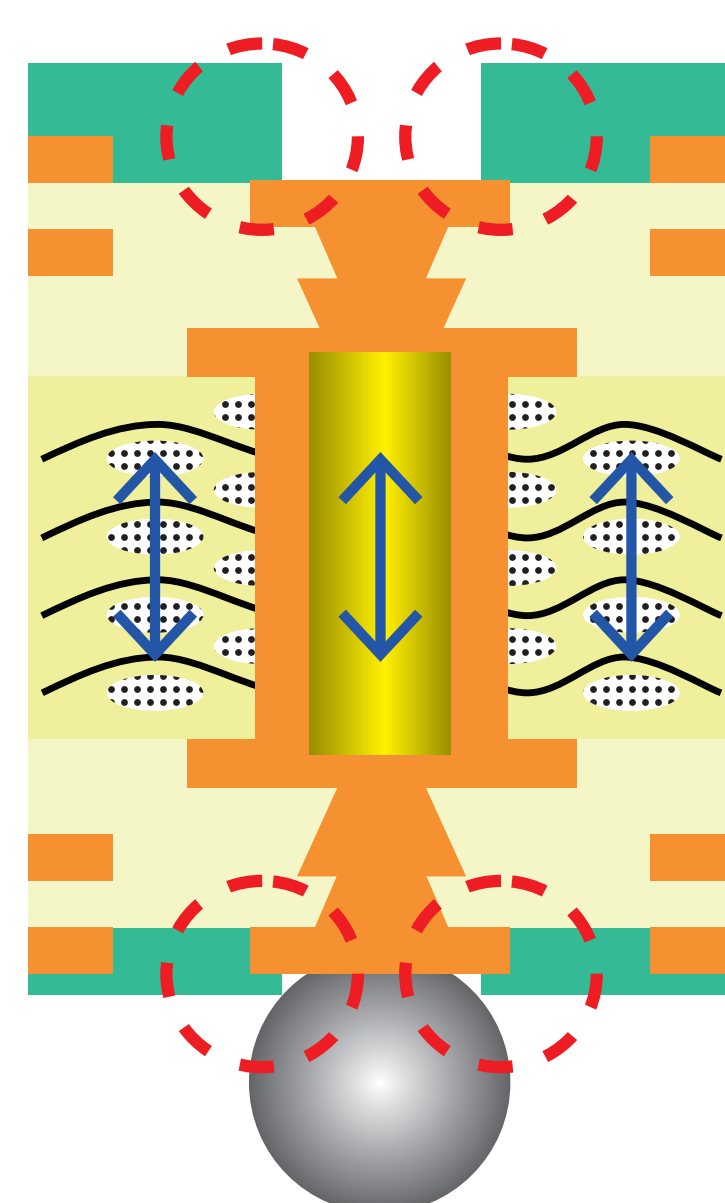
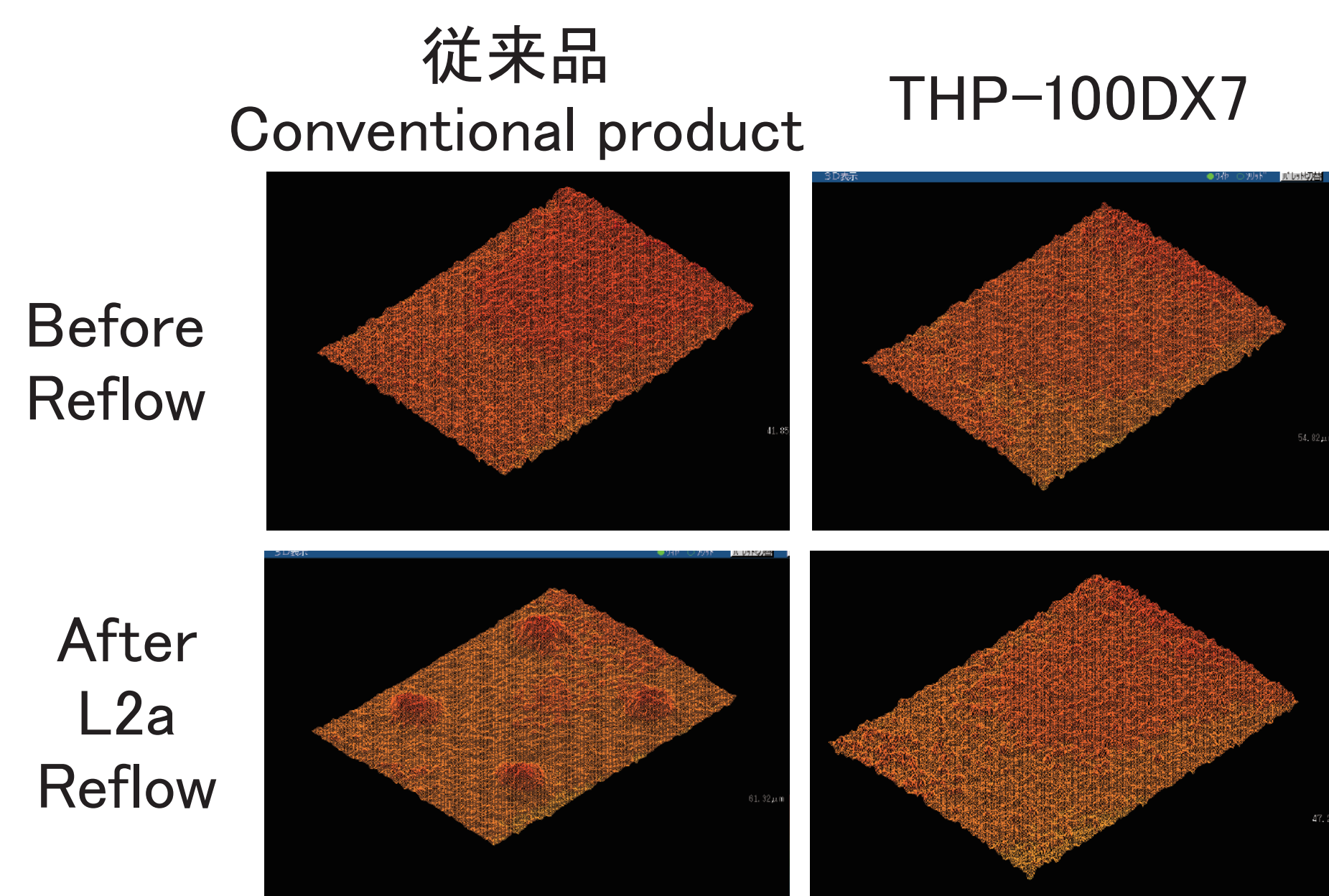
THP-100 Z Series

- 保存安定性良好: 有効期限180日(10°C 以下保管)
Very long shelf life and quality stability for 180days
(Stored below 10°C)
- 短時間硬化: $150^{\circ}\text{C}/15$ 分 Quicker curing time
- 小径TH基板 への印刷性良好
Excellent plugging ability to small diameter holes

特性 Properties

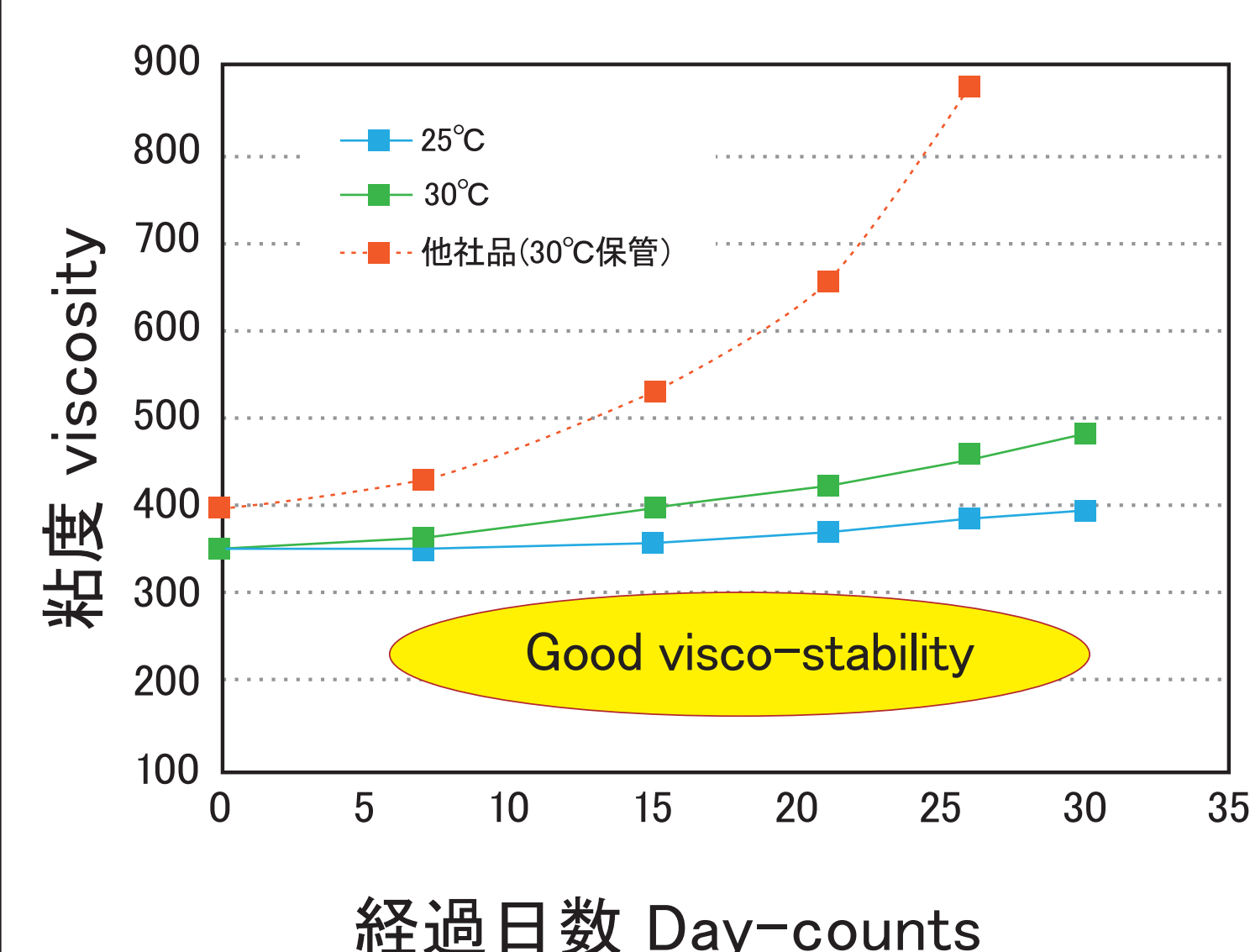
	THP-100 DX7 Mass-produced	THP-100 DX9 Under development	THP-100 Z2 Mass-produced	THP-100 Z3 New product	Test Condition
粘度 (dPa·s)	450±50	500±75	350±50	350±50	コーンプレート型粘度計 Cone plate type viscometer
ガラス転移温度 ($^{\circ}\text{C}$) Tg	165-175	175-185	150-160	160-170	TMA (Pulling mode) X-Y方向 X-Y direction
線膨張係数 (ppm) CTE ($\alpha 1/\alpha 2$)	20-25/55-65	15-20/50-60	40-45/110-120	30-35/85-95	
弾性率 (Gpa) Elastic modulus	5.0-6.0	8.0-9.0	4.0-4.5	5.0-6.0	引っ張り法 Pull-mode (室温 At room temperature)
破断点強度 (MPa) Tensile strength	60-70	60-70	45-55	45-55	
伸び率(%) Elongation	2.0-2.5	1.5-2.0	1.5-2.0	1.5-2.0	
吸水率(%) Water absorption	<1.0	<1.0	<1.0	<1.0	D-24/23, 塗膜厚み100umt Resin thickness : 100um
ピール強度 (N/cm) Peel strength	>5.0	>5.0	>6.0	>6.0	引っ張り方向 90° Pull-mode for vertical direction at 90°

THP-100 DX7

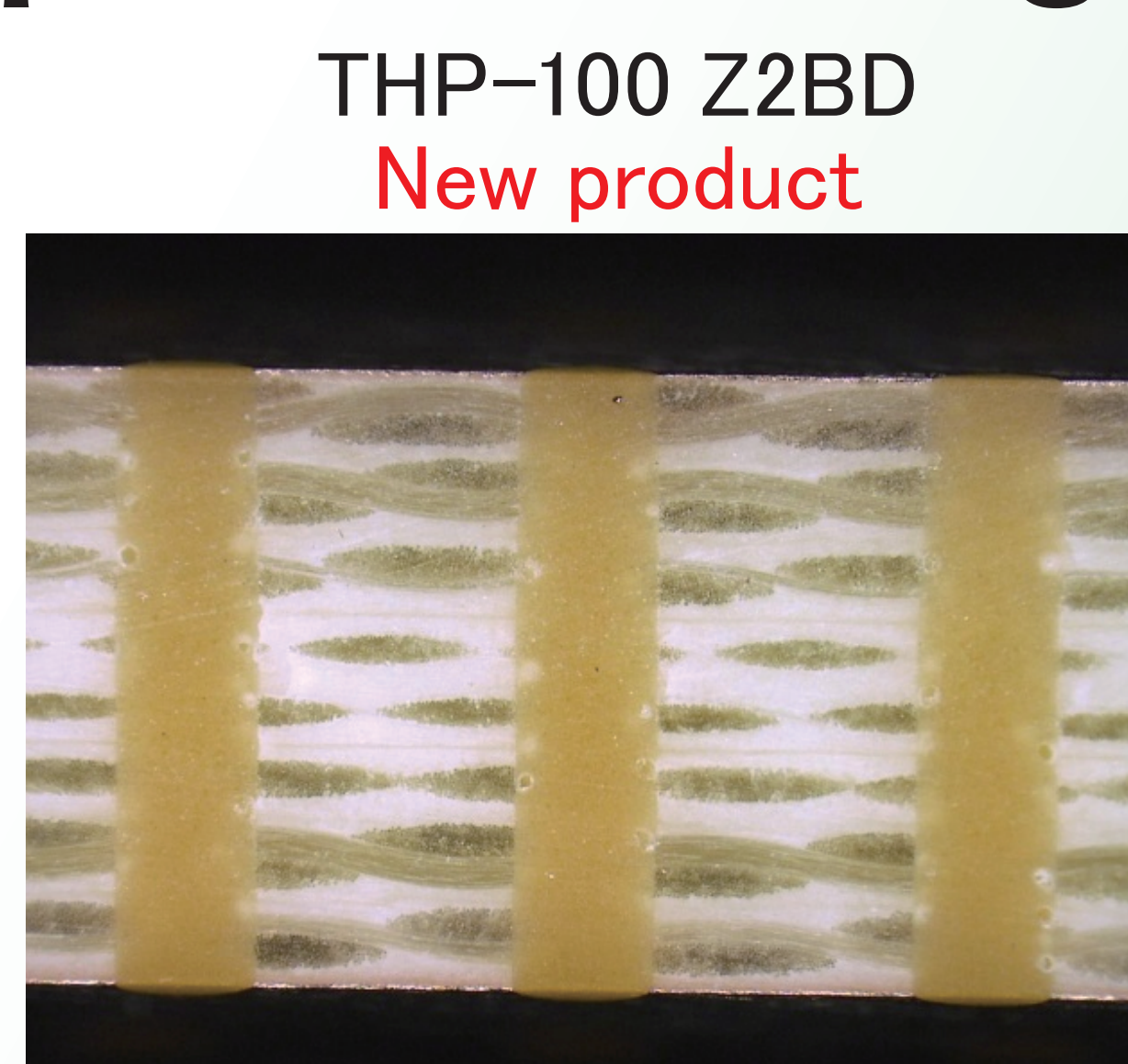
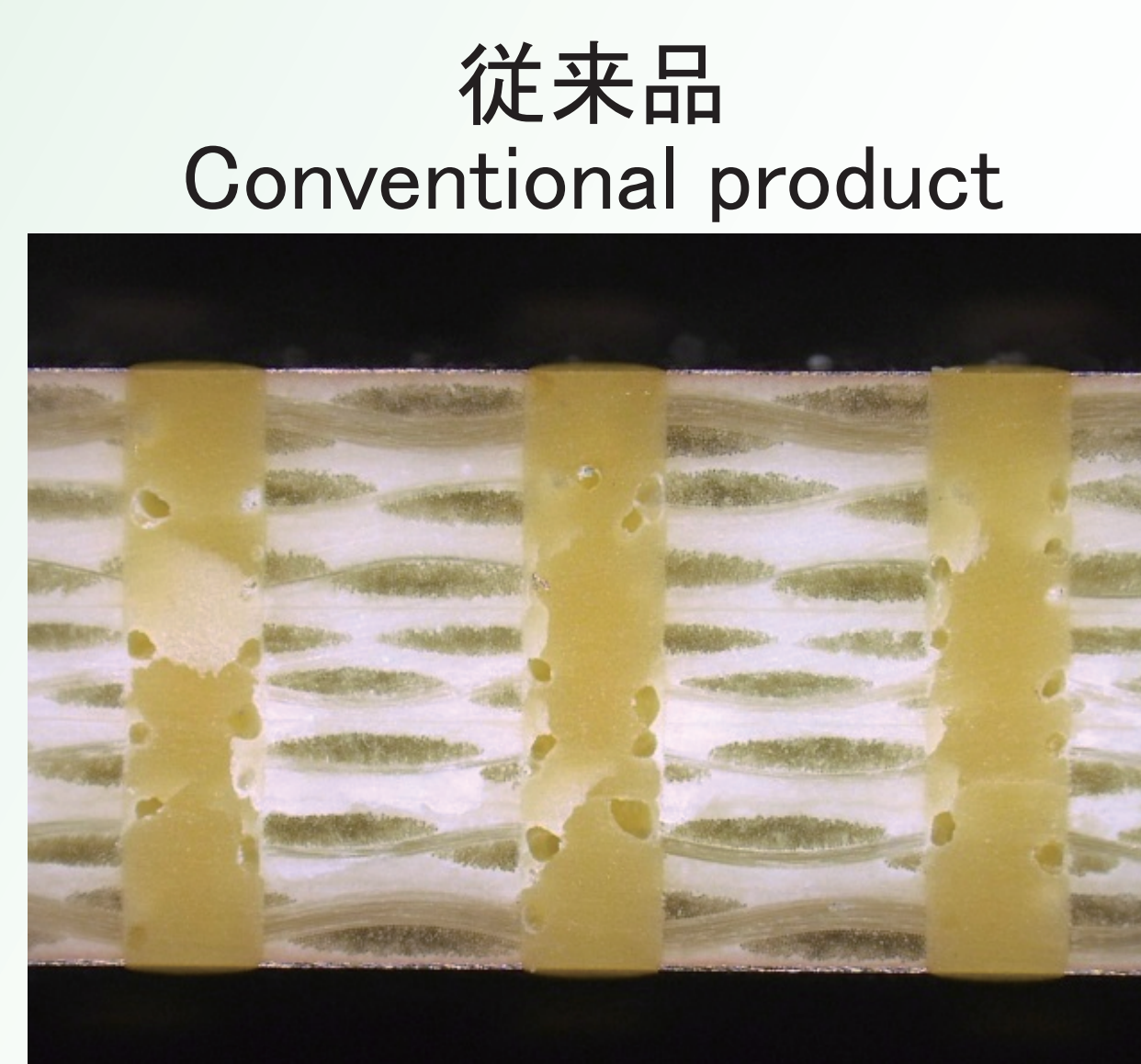


- ◇ Core
T=0.4mm PTH=0.25mm
- ◇ Treatment
L2a (C-120/60/60)+
Reflow($270^{\circ}\text{C}/5$ cycles)
※基板表面実温度

THP-100 Z Series



■低温硬化タイプ Low-temperature curing type



アウトガスによる
ボイドの発生を低減

高アスペクト比基板



(T=3.5mm/PTH=0.20mm)



TAIYO INK MFG. CO., LTD.