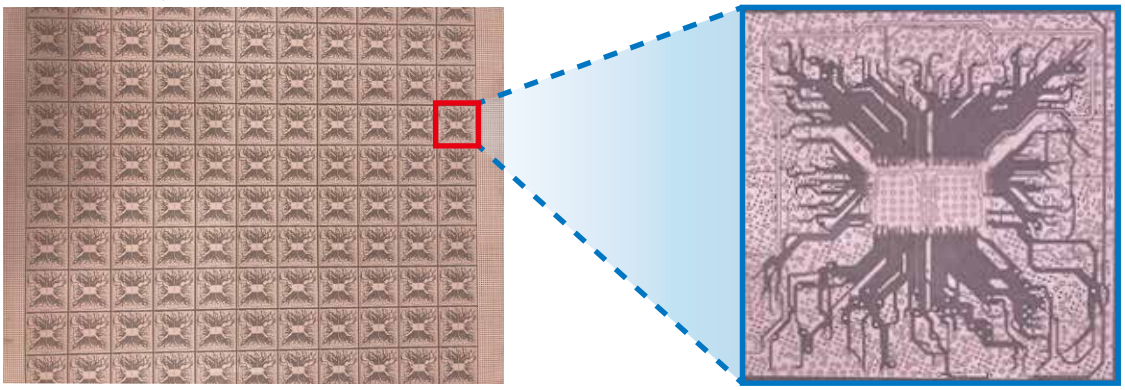
高圧ラミネートによるボイド低減試験例
Void reduction test example using high-pressure lamination

ビルドアップフィルムを用いて、ボイド数確認試験を行いました実例をご紹介致します。
We will introduce an example of an accelerated void test under low-temperature lamination conditions using a build-up film.

Test Condition: Temperature 130°C / Vacuum time 40 sec / Press time 40 sec
Pressure; Standard pressure and High pressure
Test panel: See below photo / Material: BU film

Test panel 510 x 515 mm



Result:

圧力を上げることで、Cure後のボイド数が**0**まで減少したことを確認出来ました。
By increasing the pressure, it was confirmed that the number of voids after curing was reduced to **zero**.

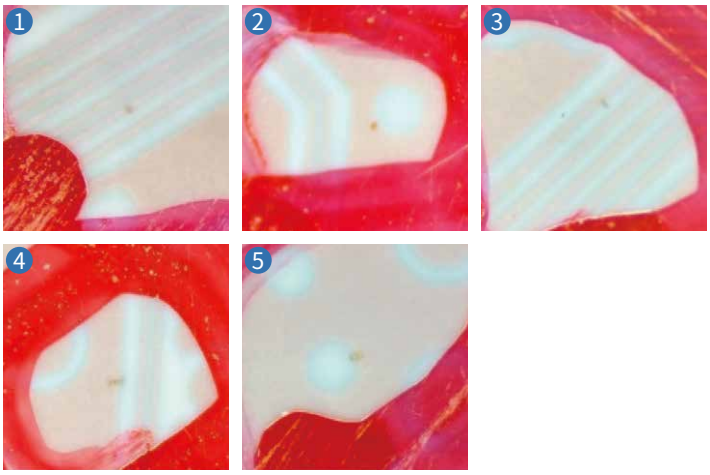
The number of voids

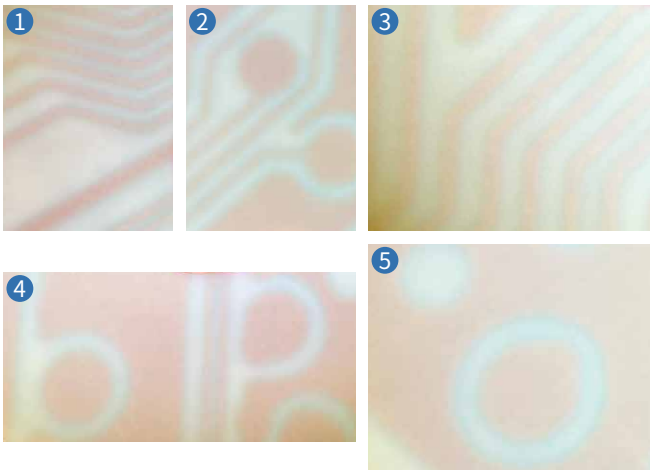
Standard pressure
16 kgf/cm² ⇒ **12** Voids

0	0	0	0	0	1	0	0	0	0	0
1	0	0	0	0	0	0	1	0	0	0
0	0	0	0	0	0	0	0	1	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	1	0	0
1	0	0	0	0	0	0	0	0	0	0
0	1	0	0	0	0	0	0	0	0	0
0	0	0	1	0	0	0	2	0	1	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	1	0	0	0	0

High pressure
30 kgf/cm² ⇒ **0** Voids

0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0





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