New composite drill

Optimized drill design

新規開発ドリル加工事例

φ0.4 Small-hole drilling performance

Work material : **R-1566** (halogen-free PCB material)
t1.6(6 layers 18/35/18 μ mCu) **3 panels / stack**

Entry sheet : Aluminum t0.15

N:100,000 min^{-1} F:2.0 m/min f:20 μ m/rev

Set life:3,000 hits x 6 = Total 18,000hits

Work material : Panasonic Electric Works Co., Ltd.

UNION TOOL CO.

New composite drill

φ0.4

application: FBGA / BGA / HDI etc…

φ0.4mm 加工事例

用途 半導体パッケージ、ビルドアップ用内層コア材 等

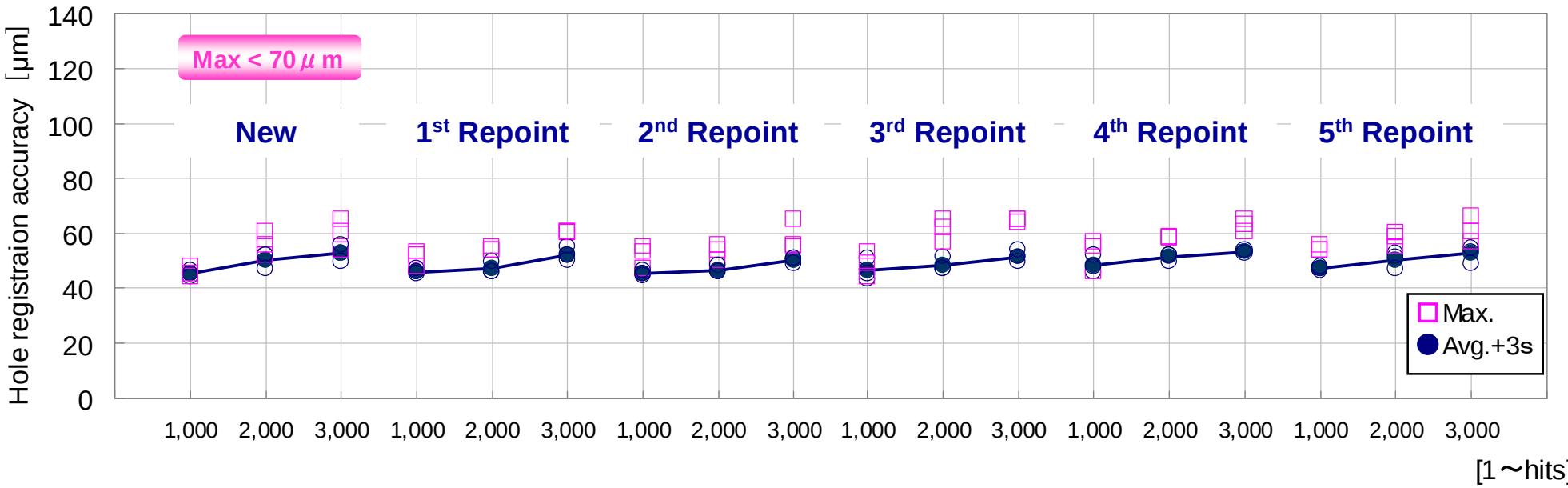
Drilling condition［ 加工条件 ］

Work material : FR-4 R1566 t1.6（ 6 layers 18/35/18 μm Copper ）3 panels / stack
Entry sheet : Aluminum t0.15 Back-up board : SPB-CM
N : 100,000 min^{-1} F : 2.0 m/min f : 20 μm/rev
Set life:3,000 hits x 6 = Total 18,000hits

Halogen free material
Promising hole quality!
ハロゲンフリー基板における
安定した品質の確保を実現

Performance of optimized drill design［ 新規開発ドリルの性能 ］

■ Hole registration accuracy［ 穴位置精度 ］



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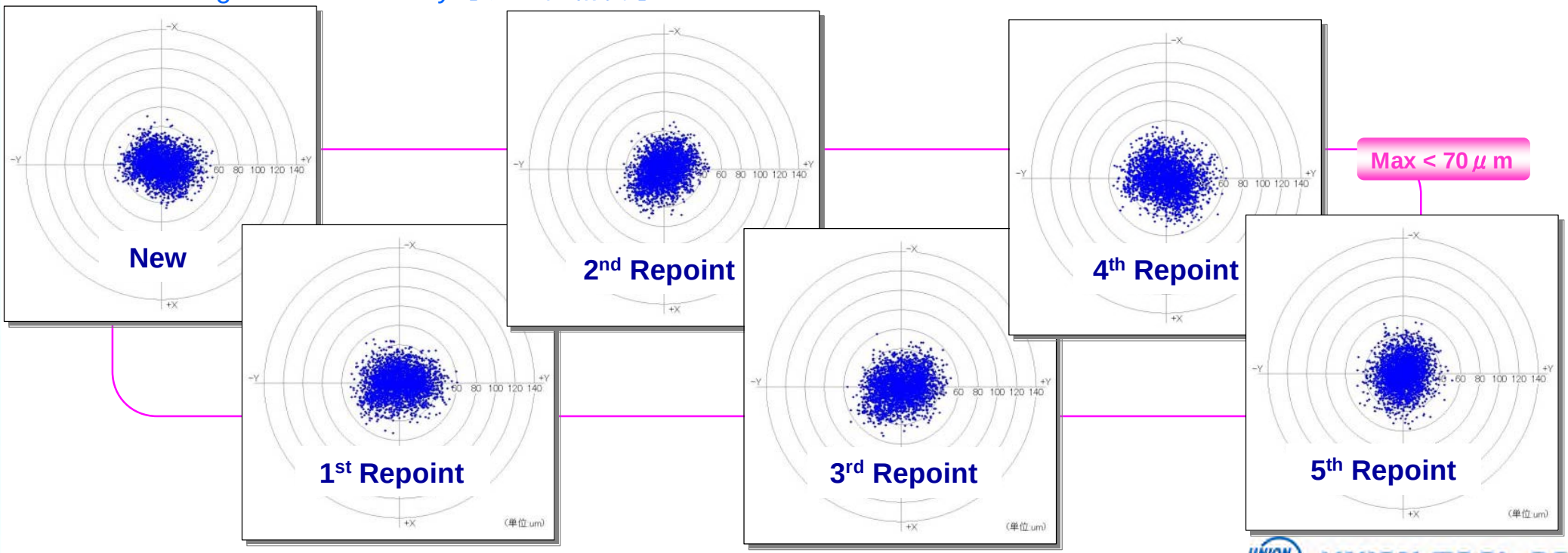

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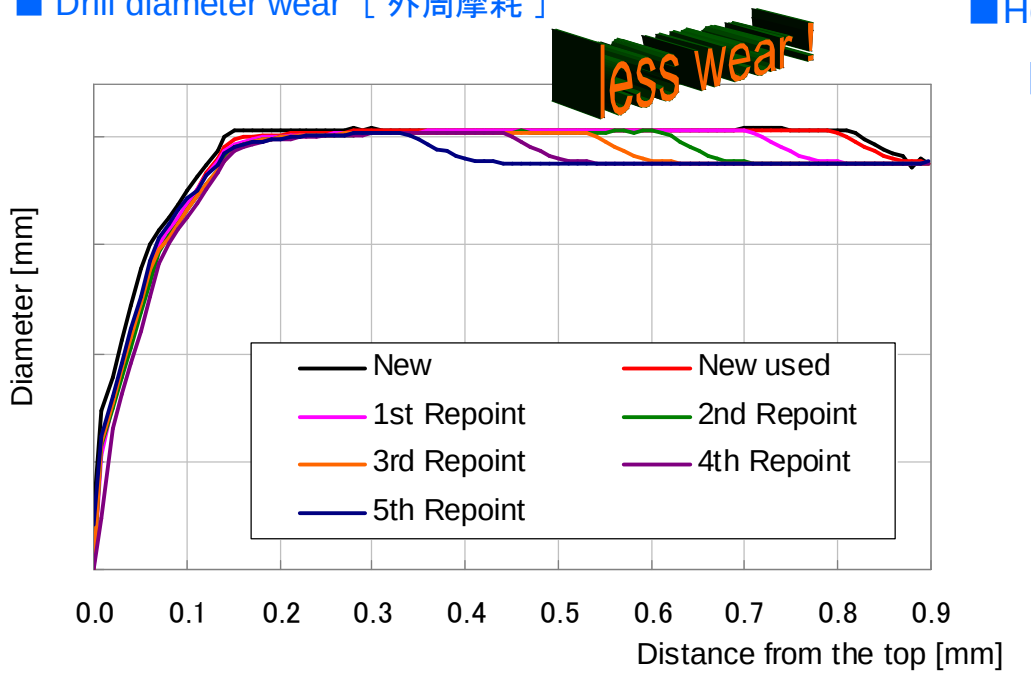
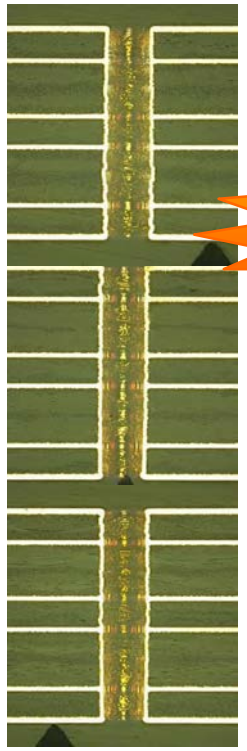
■ Drill diameter wear［ 外周摩耗 ］



■Hole wall roughness

［ 内壁粗さ ］



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