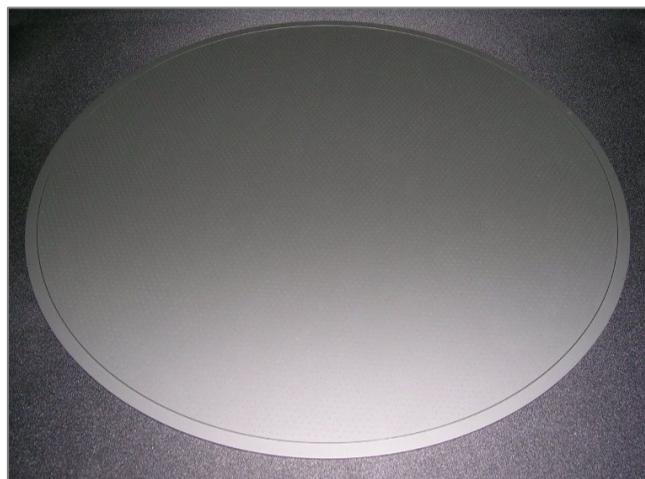


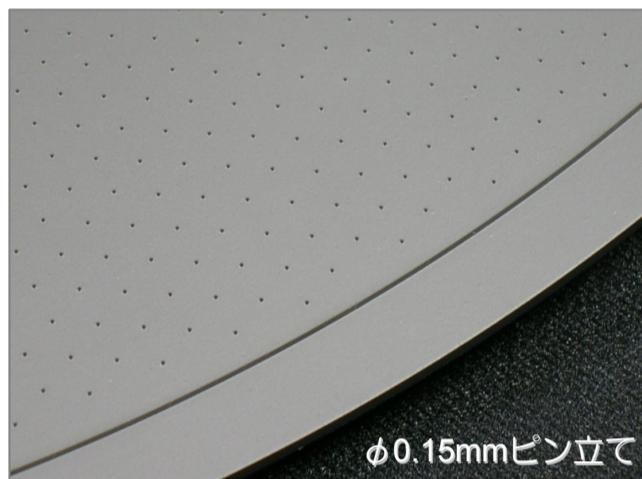
超精密微細パターン加工／高密度SiCパーツ “Ultra-Precision Machining and Micromachining of SiC”

微細ピン(凸)を形成したSiC基板の超平坦化仕上げ加工。

Fine pins are formed on the surface of SiC substrate, which is mechanically planarized with ultra-high accuracy.



Size: $\phi 310 \times t1.5 \text{ mm}$ ($\phi 12.2 \times t0.06''$)
Material: Sintered SiC (Silicon Carbide)



Pin Pattern: Pitch 2.5- $\phi 0.15 \times h0.1 \text{ mm}$
(Pitch 0.1- $\phi 0.006 \times h0.04''$)

■ 製品特長

Product Features

- ピン径 $\phi 0.1 \text{ mm}$ から製作可能

Pin sizes available from 0.004" in diameter.

- ピンの面積占有比率 1% 以下

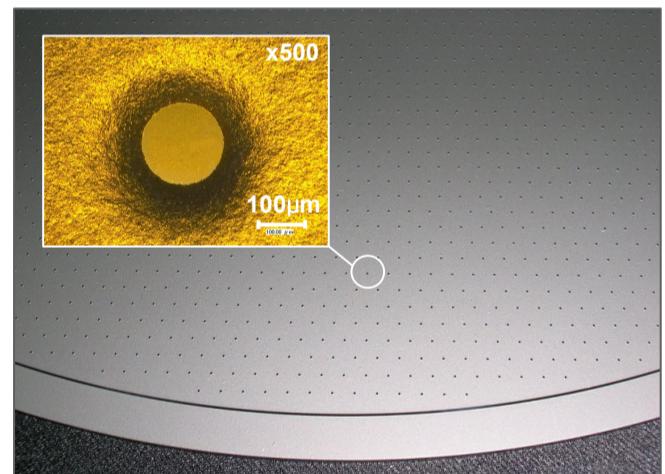
Occupancy ratio of pins is less than 1% of the surface.

- 全面平面度 $0.3 \mu\text{m}$ 以下 (300mm面内)

Total surface flatness less than $12\mu''$ (12" in-plane).

- 消耗面の再生加工可能

Recycle service available for consumed surface.



■ 平面度測定結果

Flatness Measurements

→ Example of Application to Vacuum Pin Chuck (12")

測定器：レーザー干渉計 / FUJINON G310

Measuring Instrument : LASER INTERFEROMETER

測定方法：Siウェーハ(300mm)を吸着し、ウェーハ全面についてPV測定

Measurement Means : Flatness is measured on the total surface of Si wafer (12") which is adsorbed on vacuum pin chuck.

全面平面度： PV=0.181 μm

Total Surface Flatness : PV=7.13 μ"

