

# Nanomate Premium

For SiC finish process



**Nanomate Premium**

Suitable for wafer grinding of semiconductor power device

Combining diamond grit and vitrified bond with suitable ratio to obtain best grit clearance for efficient grinding. Continuous grinding of monocrystal SiC is now available.

Especially, superabrasive wheel can process with same feed rate as the one for silicon wafer grinding to obtain extremely smooth surface.

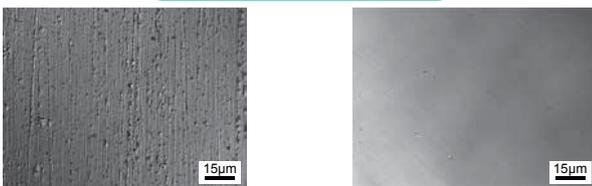
### □ Grit size and work surface (SiC wafer)

- SD3000 (feed 40 $\mu$ m/min)
- SD8000 (feed 20 $\mu$ m/min)

#### Surface roughness



#### Surface of workpiece



#### Damage of surface



For SiC and Sapphire rough process



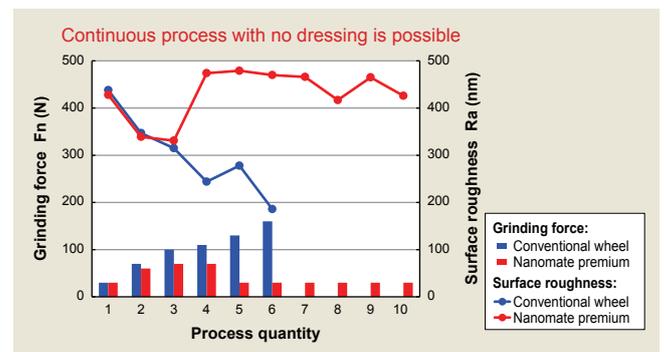
**Nanomate Premium**

Suitable for rough and semi-finish grinding of semiconductor power device

Newly developed vitrified bond for rough process has high grit retention and pore which realize high efficient continuous process.

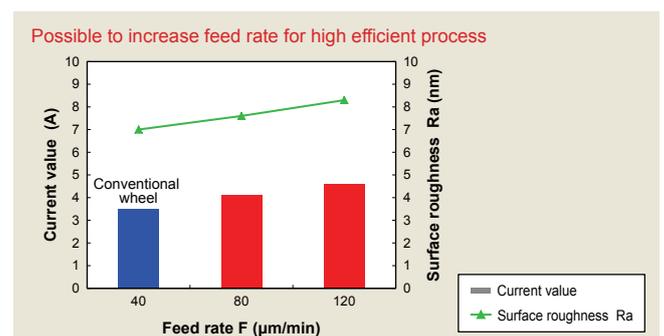
Suitable for hard-to-cut material such as sapphire and SiC and can feed 2 to 3 times compared to conventional wheel.

### □ Grinding result of 4 inch sapphire wafer



Normal force and surface roughness (Spec : SD400)

### □ High efficient grinding results of 3 inch SiC wafer



Current value and surface roughness (Spec : SD2000)