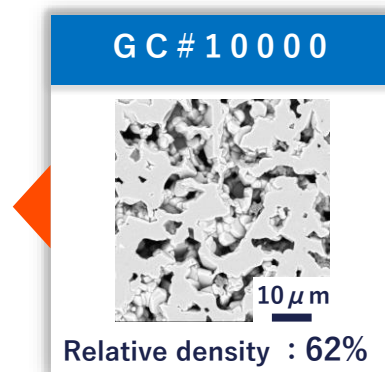
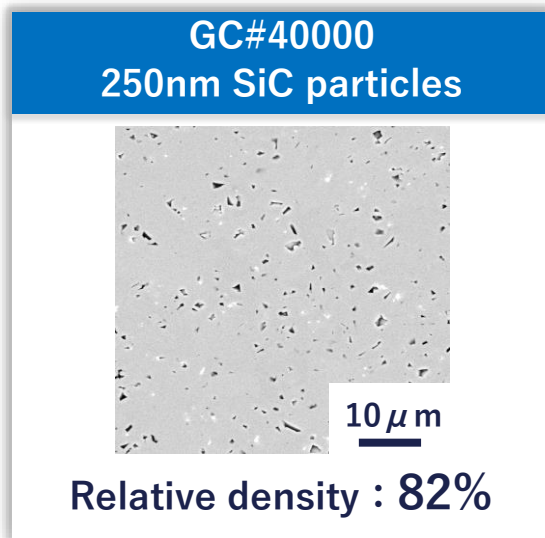


# GC#40000 250nm SiC particles

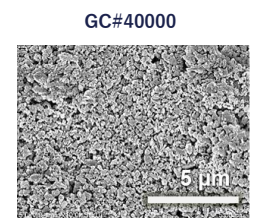
Contributes to high density of sintered SiC materials



## Features of GC#40000

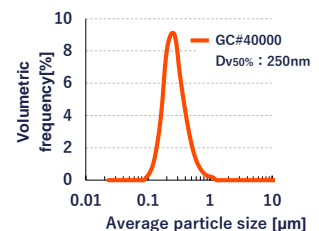
### ✓ Ultrafine 250 nm in Average

GC#40000 is a  $\alpha$ -type SiC ultrafine particles with 250 nm. Ultrafine particles increase the activation energy during sintering, resulting in increased sinterability.



### ✓ Narrow particle size distribution

FUJIMI's unique manufacturing process achieves a narrow particle size distribution.

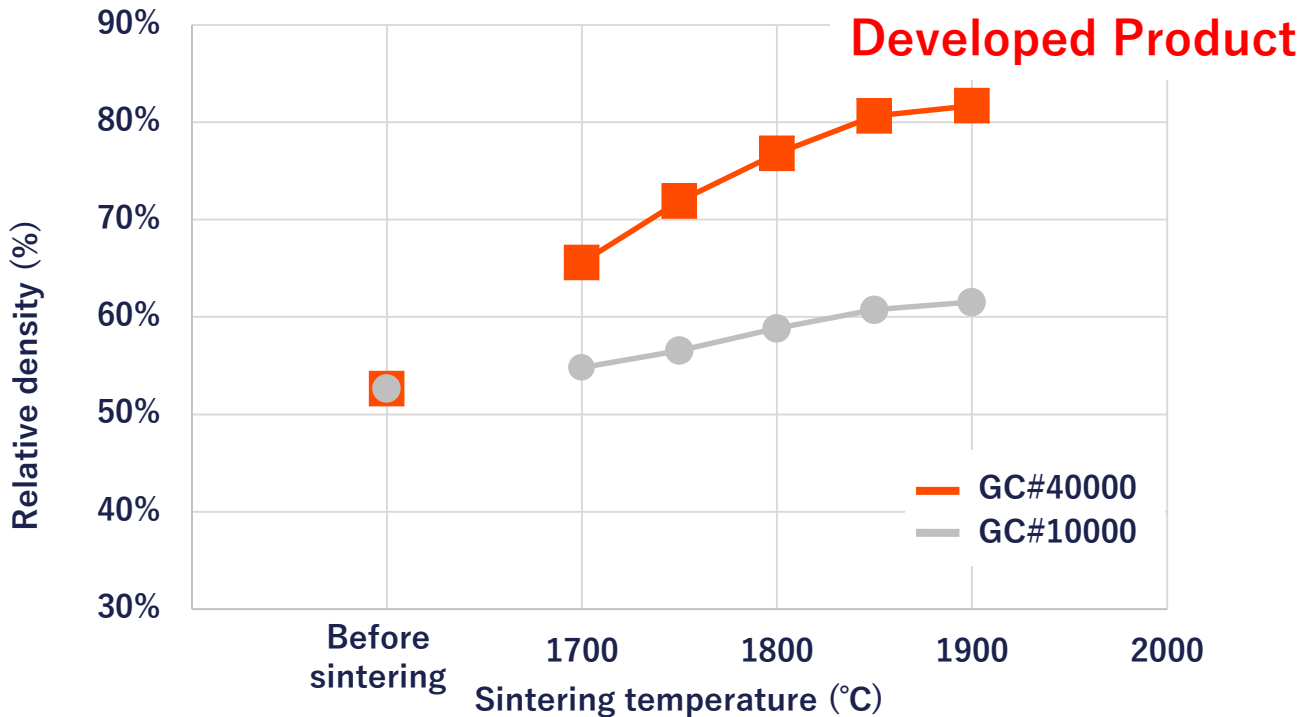


## Application examples of GC#40000

- ✓ Industrial machinery parts  
(mechanical seals, structural members, heat-resistant jigs, heaters... etc.)
- ✓ Semiconductor manufacturing equipment parts (process tubes... etc.)

# Increased sinterability performance with GC#40000

## Comparison of relative density with different SiC materials size



## Cross-sectional images of sintered bulk

	1700°C	1800°C	1900°C
<b>① GC#40000</b> (Dv <sub>50</sub> : 250nm)		 Relative density : 77%	 Relative density : 82%
<b>② GC#10000</b> (Dv <sub>50</sub> : 620nm)		 Relative density : 59%	 Relative density : 62%

**10 μm**

GC40000 can increase density at the same temperature