

# NANOERA WHEELS



## Characteristics of Nanoera

High Dispersion Mixing of Sub-micron particles  
Contributing fewer chipping and scratching

Structure of breaking off loading during grinding  
Prevent low efficiency by continued grinding efficiency

particle arrangement able to no-dressing grinding  
leading to self-dressing of grinding wheel

## Evoloved Super Fine Grinding

Loading and grazing using a conventional wheel resulted in decreased during the process. Therefore in order to improve efficiency dressing for rove grinding is required, however during this process a lot of grinding wear occurs.

Therefore Nanoera wheel was developed to solve this problem.

The structure of Nanoera wheels were designed considering our original mixing technology to minimize cohesion of abrasive grains in sub-micron grade, in addition to the effect of particle arrangement after curing to prevent loading.

At the same time as loading occurs suitable self-dressing mechanism enables the optimal surface condition for each grinding condition and work material.

Therefore unwanted wheel wear by dressing is reduced and also prolonged grinding time with loading is avoided, so the grinding cost performance is much improved.

## Mesh size

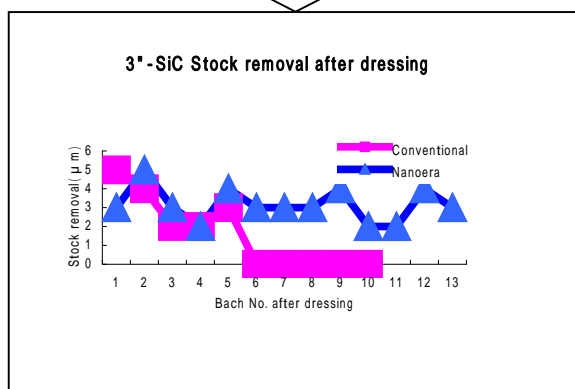
Bond	Mesh size
Original fine ceramics bond NF08 (super finish)	#4000 ~ #50000

## Application

Grinding wheel SD #30,000  
Machine infeed rotary grinding machine  
Grinding rate 1  $\mu$ m/min Ra 1nm TTV 1  $\mu$ m machine emovale 5  $\mu$ m

No dressing grinding by coming to sharp grain of grinding surface by self-dressing again

Over load Loading Self-dressing  
repeated cycle holds back decreased productivity



\*Grinding mechanism is continually grinding by the set stock removal

