

FBB Grinding Wheels



Nippon Tokushu Kento Co., Ltd.



日本特殊研砥株式会社
Nippon Tokushu Kento Co., Ltd.

新配方

經實驗結合劑改由N5H14C,組織更加鬆,節省鏡面拋光的時間
面粗度RY(μm)又更佳



FBB超精密研磨砂輪

欣研鑽石有限公司
www.cediamond.com.tw

FBB超精密研磨砂輪

產品規格標示

PRODUCT SPECIFICATION



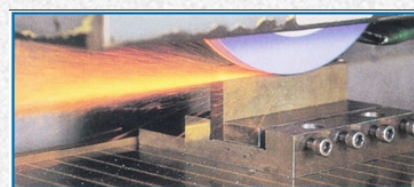
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磨料	粒度		質地			處理度	尺寸
			(硬度)	(密度)	(磨粒率)		
GC	120	220	軟	高	小	A B C	OD T ID mmxmmxmm 外徑厚度內徑
	320	400					
	600	800					
	1000	1500					
	2000	2500	硬	低	大		
	3000	4000					



適用研磨方式

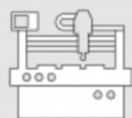
SUITABLE FOR GRINDING



FBB超精密研磨砂輪



斜進外圓



自動化



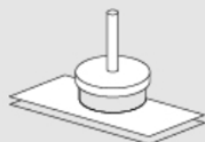
機械手臂



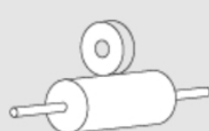
其他方法



橫軸平面



立軸平面



橫軸外圓



無心



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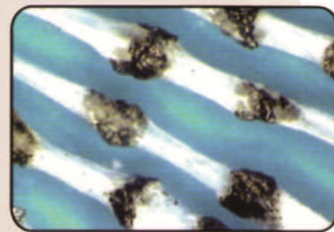
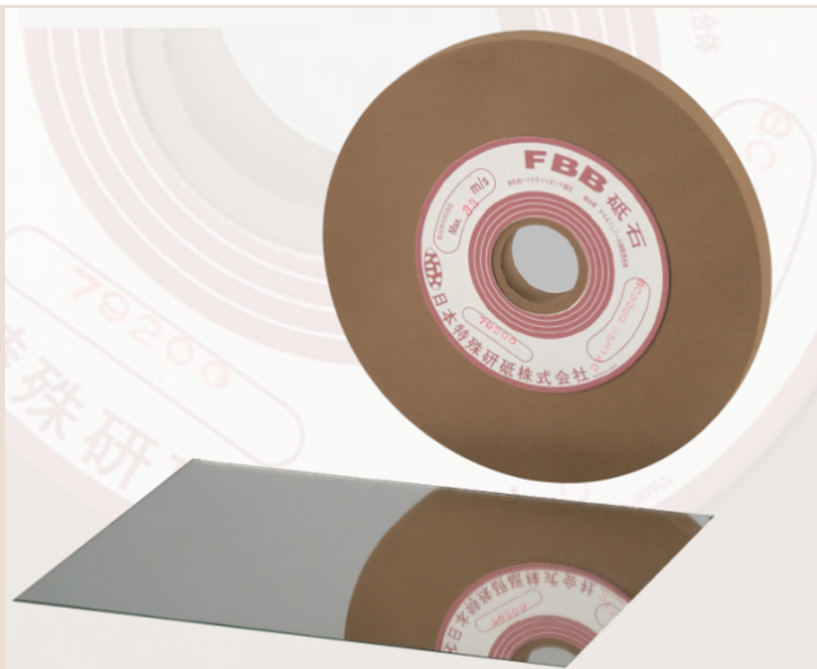
台北總公司：新北市新莊區瓊林路59之75號一樓

TEL: 02-8991-5349 FAX: 02-8991-7349

台中分公司：台中市東區十甲東路527號

TEL: 04-2213-7102 FAX: 04-2213-3529

E-mail: ce_diamondtop@yahoo.com.tw

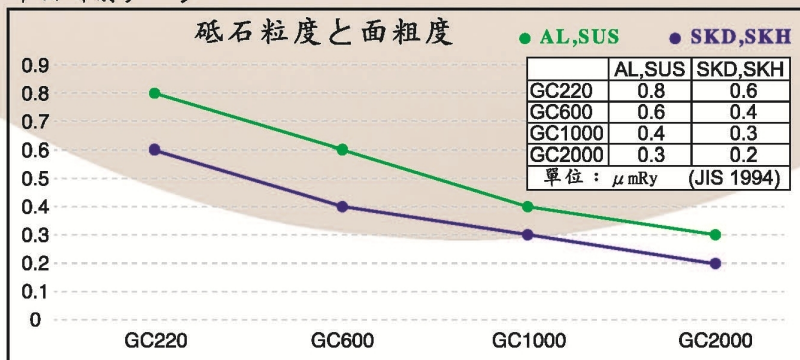


PVA人造纖維

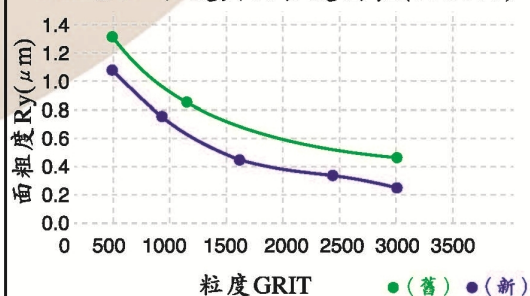


FBB砥石の研削データ

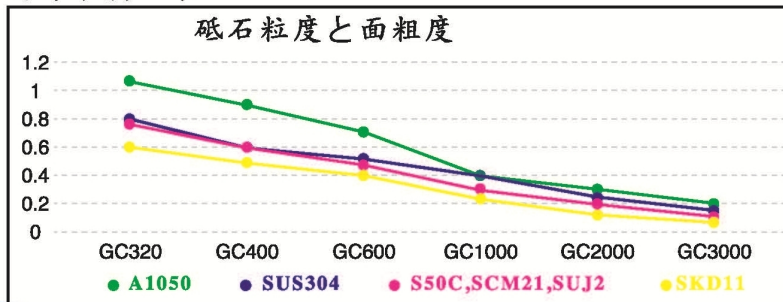
平面研削データ



FBB砥石 粒度與面粗度圖表(SUS430)



丹筒研削データ



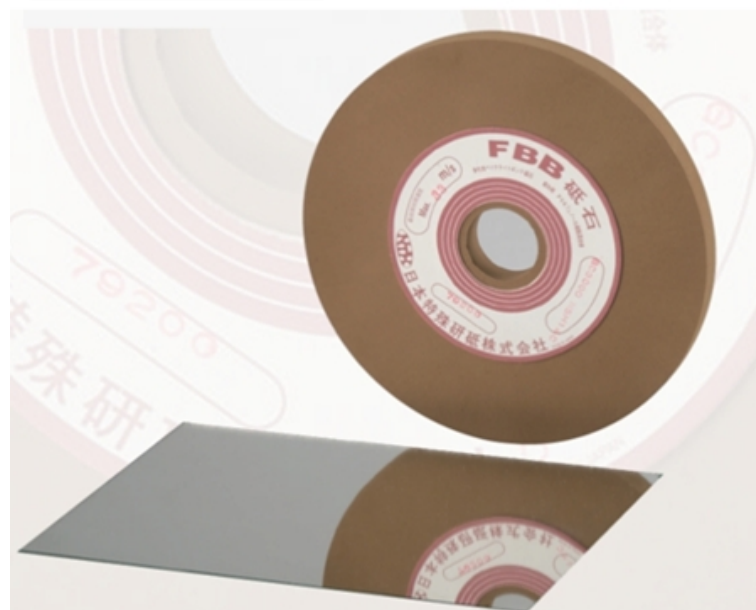
	A1015	SUS304	S50C,SCM21,SUJ2	SKD11
GC320	1.05	0.8	0.75	0.6
GC400	0.9	0.6	0.6	0.5
GC600	0.7	0.52	0.5	0.4
GC1000	0.4	0.4	0.3	0.25
GC2000	0.3	0.25	0.2	0.15
GC3000	0.2	0.18	0.12	0.08

単位: μ mRy (JIS 1994)



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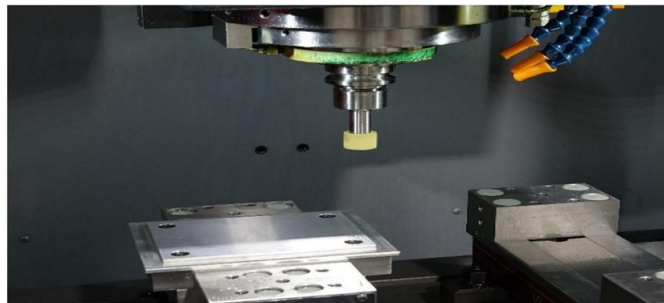
FBB Grinding Wheel

Polishing for multiple materials

Performance

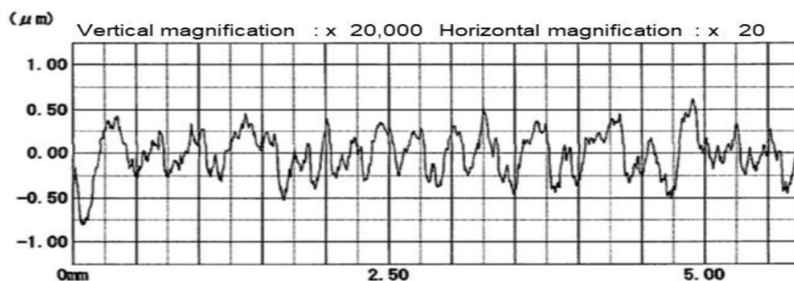
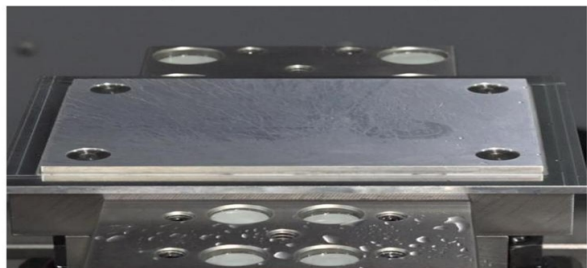
Grinding center

- ◇ Specification
FBB wheel GC2000
- ◇ Workpiece
EN AW6061, HV100
(A6061)
- ◇ Vc 16m/s
- ◇ Contact time 150sec



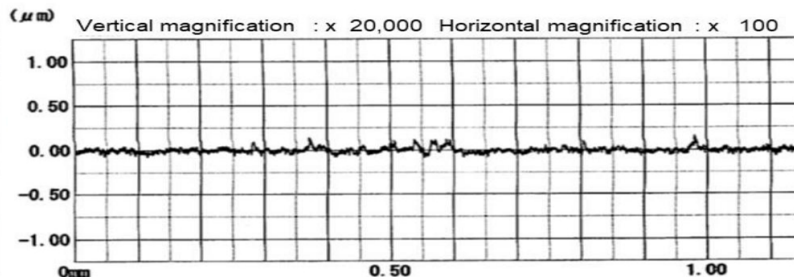
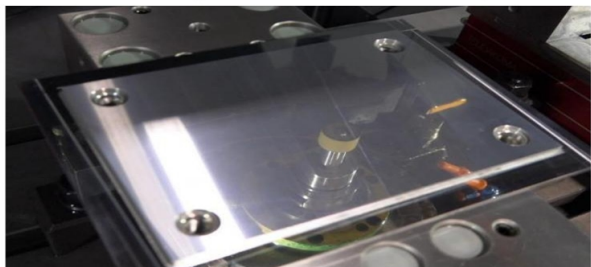
Before grinding

Ra 0.20 μ m Rz 1.19 μ m



After grinding

Ra 0.021 μ m Rz 0.183 μ m



FBB Grinding Wheel

Polishing for multiple materials

Performance

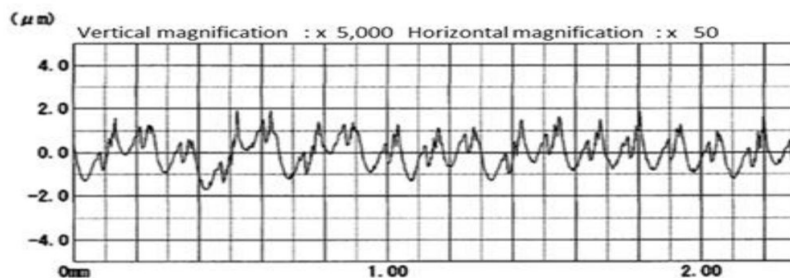
Surface grinder

- ◇ Specification
FBB wheel GC6000
- ◇ Workpiece
EN AW5052, HV70
(A5052)
- ◇ Vc 20m/s
- ◇ Contact time 10min



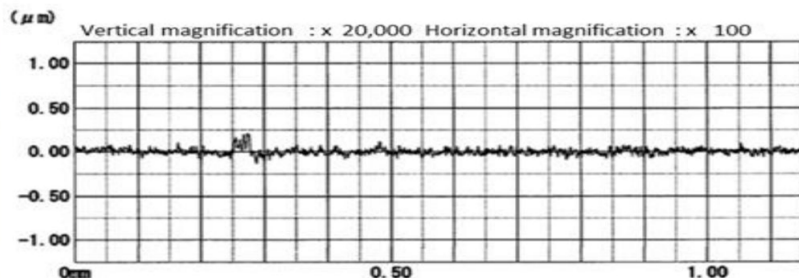
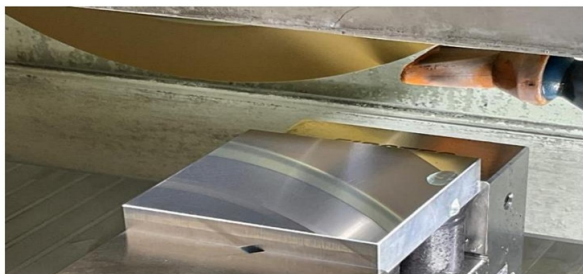
Before grinding

Ra 0.576μm Rz 3.092μm



After grinding

Ra 0.025μm Rz 0.217μm



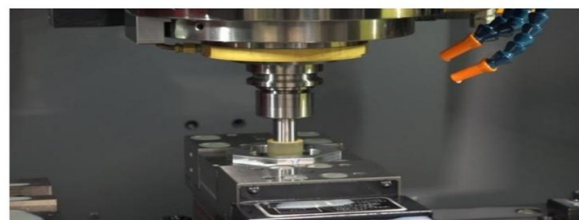
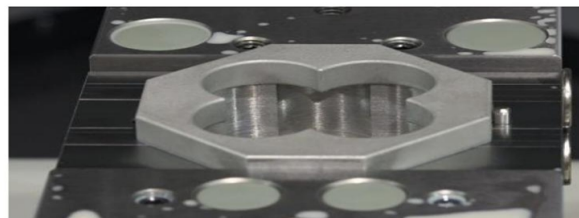
FBB Grinding Wheel

Polishing for multiple materials

Performance

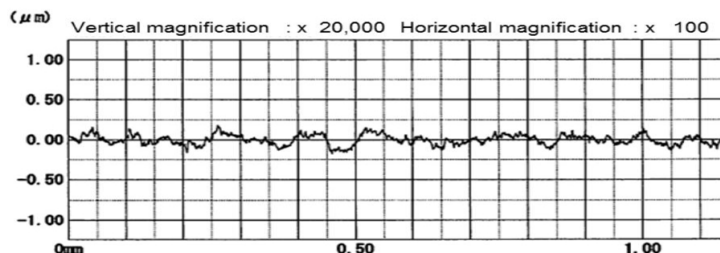
Grinding center

- ◇ Process
Cutting → **Grinding**
- ◇ Specification
FBB wheel GC2000
- ◇ Workpiece
AISi10Mg, HV80
- ◇ Vc Inside 15m/s
Top 5m/s
- ◇ Contact time 240sec



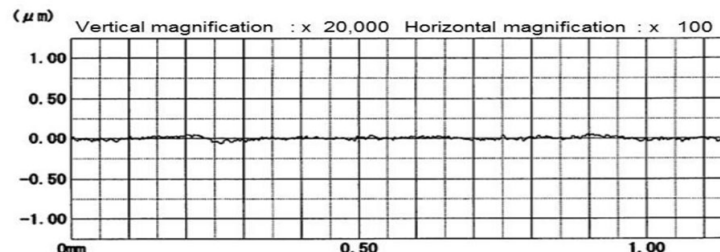
After grinding (Inside surface)

Ra 0.055μm Rz 0.32μm



After grinding (Top surface)

Ra 0.015μm Rz 0.09μm



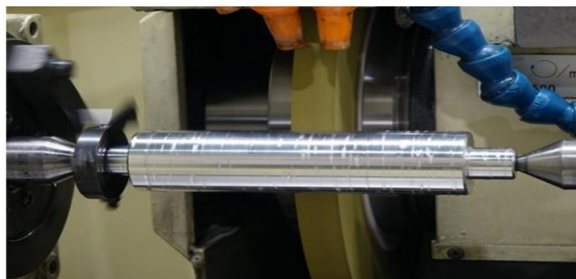
FBB Grinding Wheel

Polishing for multiple materials

Performance

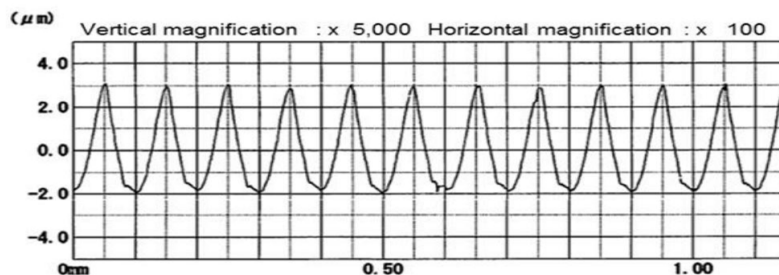
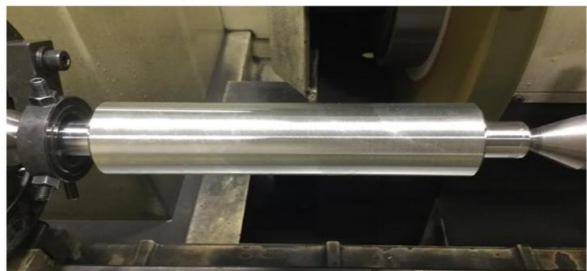
Cylindrical grinding machine

- ◇ Specification
FBB wheel GC2000
- ◇ Workpiece
EN AW7075, HV160 (A7075)
- ◇ Vc 27m/s
- ◇ Contact time 300sec



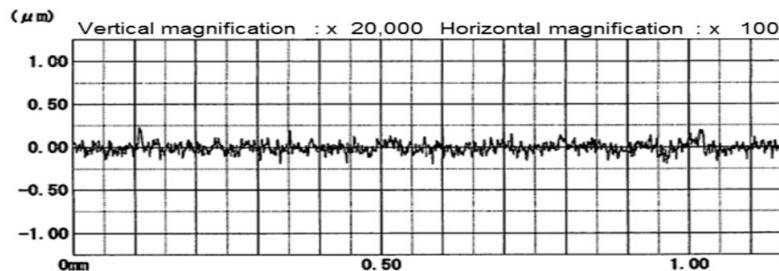
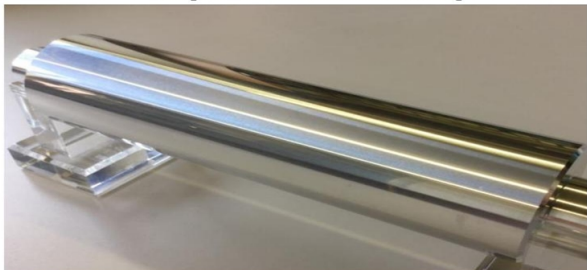
Before grinding

Ra 1.452 μ m Rz 5.00 μ m



After grinding

Ra 0.042 μ m Rz 0.37 μ m



FBB Grinding Wheel

Polishing for multiple materials

Performance

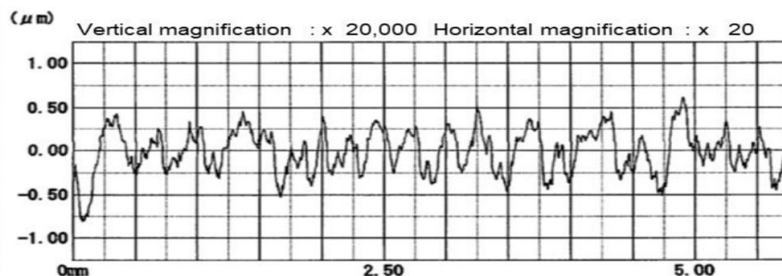
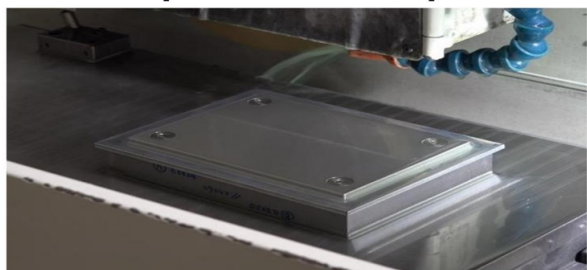
Surface grinder

- ◇ Specification
FBB wheel GC6000
- ◇ Workpiece
EN AW6061, HV100
(A6061)
- ◇ Vc 20m/s
- ◇ Contact time 10min



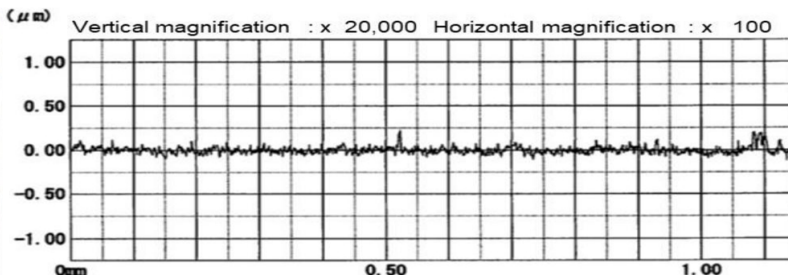
Before grinding

Ra 0.20 μ m Rz 1.19 μ m



After grinding

Ra 0.029 μ m Rz 0.241 μ m



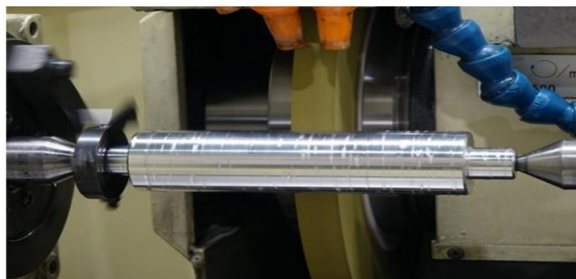
FBB Grinding Wheel

Polishing for multiple materials

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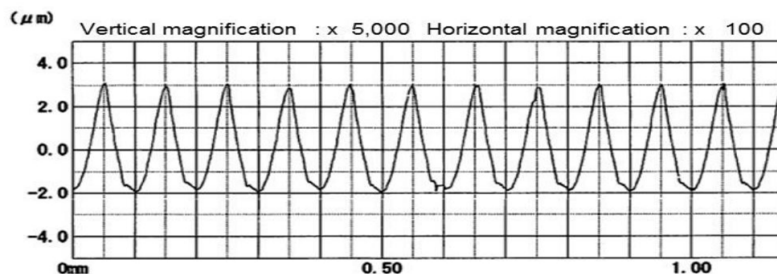
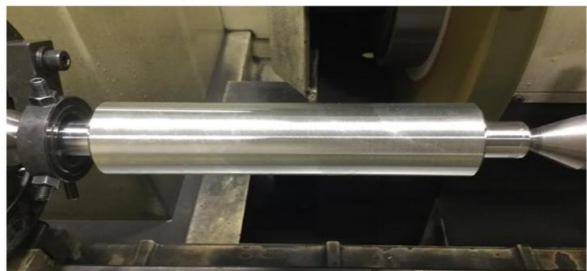
Cylindrical grinding machine

- ◇ Specification
FBB wheel GC2000
- ◇ Workpiece
EN AW6061, HV100
(A6061)
- ◇ Vc 27m/s
- ◇ Contact time 300sec



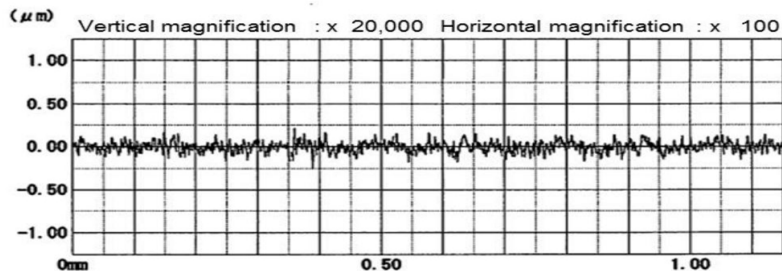
Before grinding

Ra 1.452μm Rz 5.00μm



After grinding

Ra 0.045μm Rz 0.37μm



FBB Grinding Wheels,

made from PolyVinyl Alcohol and thermosetting resins. Its elasticity effect enables to produce good surface roughness. It is suitable for precision instrument grinding.

Major Applications:

various rods, pins, bearings and blades



parts for lapping



rods & pins



bearings



steel cutting rules

Wheel specifications & Dimension table

Abrasive	Grit#		Grade						Curing
			Hardness		Density		Grain %		
GC	220	1000	N3	soft	S	low	10	low	A
	320	1500							
	400	2000	N5		M		12		B
	600	3000							
	800		N6	hard	H	high	14	high	C

		Unit:mm						
D	T	19	25	32	38	50	75	100
180								
205								
255								
305								
355								
405								

For other dimensions, please contact us.

⚠ Cautions for operation

- Do not use beyond the maximum peripheral speed (m/s) indicated on each wheel or inspection card.
- Check all wheels before tightening, and do not use the wheel that has cracking, fractures or chipping.
- Recommended flange tightening method and pressure:
 - When mounting flange on the FBB Grinding Wheel, tighten flange bolts with a standard hexagon wrench.
 - *Excessive tightening weaken the wheel rotational strength.
 - *Do not hammer the hexagon wrench to tighten nor connect a pipe to hexagon wrench.
 - When tightening down the flange bolts with a torque wrench, tightening torque is calculated as below:

$$MQ \text{ (tightening torque)} = \frac{0.49 \times d \times Af}{n}$$

MQ: proper tightening torque (N·m)
d: bolt diameter (cm)
Af: flange contact area (cm²)
n: number of bolts
- Coolant: designed for wet grinding, water-soluble type is recommended.
- Do not leave the wheels in any place where it will be subjected to direct sunlight or high-temperature and humidity.
- Addition to the above cautions, always handle, store, and use wheels in a careful manner according to A.N.S.I. Safety Code B7.1.



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AGENT



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