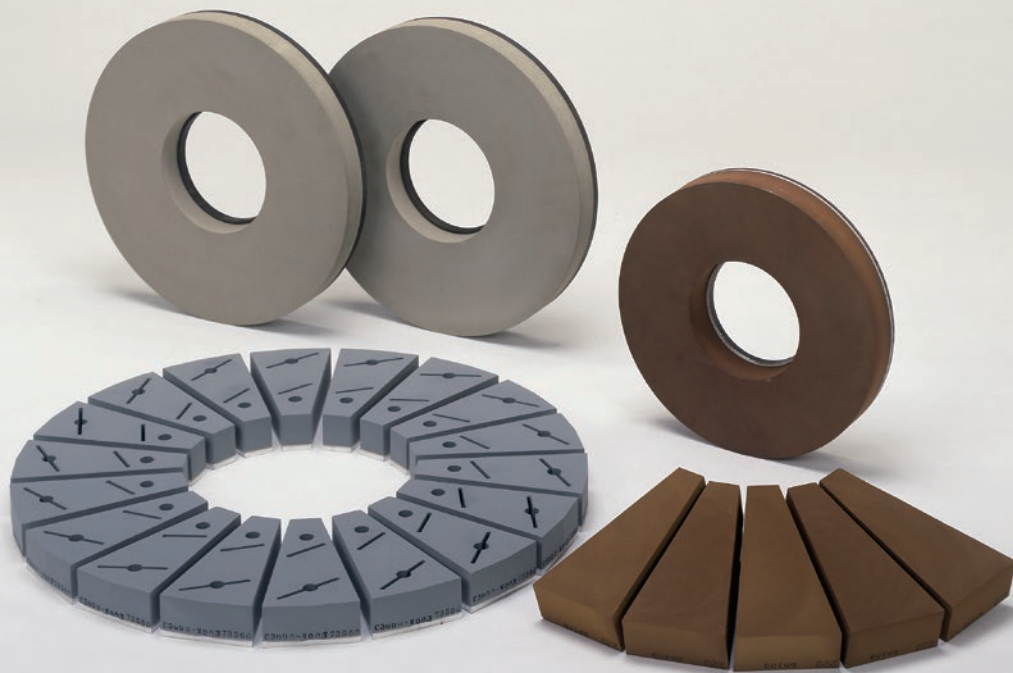


# JWP FBB

# Grinding Stones for Lapping Process



Our Grinding Stones for Lapping are used for precision instrument grinding. Owing to its slight elasticity effect, it is suitable for finishing of difficult-to-grind materials such as aluminium, copper, nickel alloy and stainless steel.



(JWP,FBB)  
aluminium substrates and spacer rings for computer (HDD)

## Features

**JWP Grinding Stones,**  
made from Polyvinyl Alcohol and much characterized by its sponge type structure.  
And designed for using with water or water soluble coolant.

**FBB Grinding Stones and Wheels,**  
made from Polyvinyl Alcohol and thermosetting resins.  
And designed for using with water or water soluble coolant.

## Major Applications

**JWP Grinding Stones,**  
aluminium substrates and spacer rings for computer HDD,  
watch dials, aluminium pressure plates for camera.

**FBB Grinding Stones and Wheels,**  
stainless steel spacer rings for computer HDD  
engine parts of automobile made from clad steel  
(aluminium, copper and steel)  
electronic parts made from various alloy  
(aluminium, nickel, cobalt, copper etc.)



(JWP) polygon mirror



(FBB) various material parts



Nippon Tokushu Kento Co., Ltd.

# JWP Grinding Stones, FBB Grinding Stones for Lapping Process

## Hardness Comparison table

	JWP	FBB(soft type)	FBB(hard type)
Hardness	soft ←	medium	→ hard
Young's Modulus	50~600 MPa	300~1500 MPa	1000~3000 MPa

## Standard specifications & Dimension table

### JWP Grinding Stones

Abrasive	Grit#	Grade	Young's Modulus
C	400 1500	S	50~80 MPa
	600 2000		
	800 3000	M	
	1200 4000		
GC	6000	H	170~600 MPa

Dimension
Segment type : Available in various size for lapping machine.

### FBB Grinding Stones (soft type)

Abrasive	Grit#	Grade							
		Hardness	Density	Grain %	Cure Temperature				
GC (WA)	220 800	N3	soft	S	low	10	low	A	low
	320 1000		↑	M	↑	12	↑	B	↑
	400 2000	N5	↓	H	↓	14	↓	C	↓
	600 3000		hard	high	high	high	high		

Dimension
Segment type : Available in various size for lapping machine.
Wheel type : Maximum Outer Diameter 510mm, Maximum Thickness 50mm

Example of Abrasive grain and Grade  
 1) FBB-N GC220 N5H14C  
 2) FBB-N GC800 N5H12A

### FBB Grinding Stones (hard type)

Abrasive	Grit#	Grade				
		Kind of Bond	Amount of Bond	Amount of Filler	Density	Cure Temp.
WA	120	LBA (Brittle type)	low	low	low	low
	220		4	4	4	H
	320		5	5	5	A
	400		6	6	6	B
GC	600	LHB (Hard type)	7	7	7	C
	800		8	8	8	high
	1000		high	high	high	high
	2000		high	high	high	high

Dimension
Segment type : Available in various size for lapping machine.
Wheel type : Maximum Outer Diameter 510mm, Maximum Thickness 50mm

Example of Abrasive grain and Grade  
 1) FBB-C WA320 LBA438H  
 2) FBB-C WA600 LHB546C  
 ※Please ask the availability of combination.

## ⚠ Cautions for operation

1. Do not use beyond the maximum peripheral speed (m/s) indicated on each stone/wheel or inspection card.
2. Check all stones/wheels before installing, and do not use the stone/wheel that has cracking, fractures or chipping.
3. Coolant: designed for wet grinding, water-soluble type is recommended.
4. Do not leave the wheels in any place where it will be subjected to direct sunlight or high-temperature and humidity.
5. Addition to the above cautions, always handle, store, and use stones and wheels in a careful manner according to A.N.S.I. Safety Code B7.1.



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