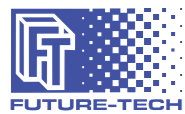


Sample Preparation Machines

# GENERAL CATALOG

FTC-B255FS / FTM-EVO / FTP-1AH



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当社は、認定標準として、ISO 17025 (ISO/IEC 17025) を用い、認定基準として、ISO/IEC 17011 に従って運営されているJCSSの下で認定されています。  
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 当社は、国際MPA対応JCSS認定事業者です。  
 JCSSのロゴは、当社の認定業者です。



# FTC-B255FS

Flushed water system prevent the drain from clogging with polished waste.

This saves your time to clean up the machine.

- Silent operation is realized by the tough machine body.
- Simple design with handleability.
- Many kinds of sample fixing jig can be used on the stage.



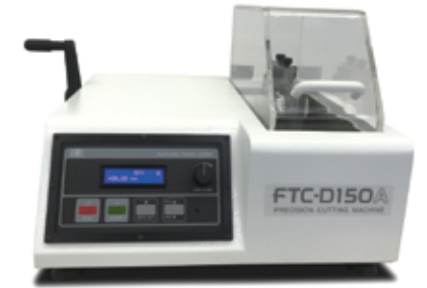
FTC-B255FS

MODEL		FTC-B255FS
ITEM		SPECIFICATIONS
Design / Structure		Benchtop Type (Base: Aluminum Casting / Cover: Steel Sheeting with Hard Acrylic Window)
Polishing Wheel	Motor	Front Door Interlock during Cutting (The main shaft motor does not operate when the door is open.)
	Doors	Up-and-Down Open Door with Hard Acrylic Windows
Max Available Sample Size	Front	Small Slide Door for inserting long specimen
	Left Hand Side	
Cutting Wheel	Cylindrical	In case $\phi$ 230mm Cutting Wheel: Max $\phi$ 60mm In case $\phi$ 255mm Cutting Wheel: Max $\phi$ 70mm
	Dimensions	Outer Dia.: $\phi$ 230/255mm x Inner Dia.: $\phi$ 31.75mm x T1.2mm
Movable Sample Stage	Flange	Outer Dia.: $\phi$ 60mm
	Rotary Speed	3420rpm-60Hz / 2850rpm-50Hz
	Main Motor	3HP / 2.2KW / AC3P Induction Motor
Sample Fixing Jig	Structure	Fixed Type
	Dimensions	W225 x 220mm with 4 T-slots (X direction: 6 slots each with 10mm width) for fixing various vice and jig
Sample Fixing Vise		Various kinds of Vise and Fixing Jigs attachable on Stage (OPTION)
Special Sample Fixing Jig		
Cooling Section	Structure	Separate Type / Double Tank Type (with Steel Mesh Filter)
	Cut Powder Separator	Magnet Separator (OPTION)
	Coolant Tank Capacity	25L
	Circulation Pump	1/4HP
	Coolant Capacity	30L/min
Water Nozzle		for Cutting Sample: 2pcs / for Cleaning Chamber: 1pc
Inner Illumination		LED Light: 1pc
Machine Dimensions		W650 x D700 x H405mm
Machine Weight		120kg
Coolant Tank	Cooling Device Dimensions	W410 x D340 x H565mm (OPTION)
	Cooling Device Weight	18kg (OPTION)
Power Supply		3P-AC200 ~ 240V / 50Hz, 60Hz (OPTION: 3P-AC380V)
Standard Accessories		Cutting Wheel: $\phi$ 255mm x 2pcs Wrench: 2pcs / Coolant: 1L x 1btl

# FTC-D150A

The machine automatically cuts a sensitive sample precisely.

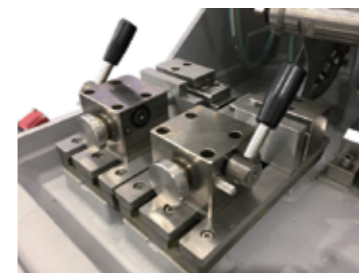
- The crystal cutting of the properties of matter study.
- The electron microscope sample cutting of the metal structure analyzing.
- For electronic materials, ceramics, various metal sample cutting etc...
- It is possible to control the revolution load of the cutter by load lever.



FTC-D150A

MODEL		FTC-D150A
ITEM		SPECIFICATIONS
Design / Structure		Benchtop Type (Steel Sheeting with Hard Acrylic cover)
Cutting Wheel	Dimensions	Outer Dia.: Max $\phi$ 150mm Inner Dia.: 12.7mm x T1.0mm 2.0mm
	Flange	Outer Dia.: Max $\phi$ 60mm
	Motor power	100W Induction Motor
	Flange	Outer Dia.: $\phi$ 55mm
	Rotary Speed	0~3000rpm 50/60Hz
Max Available Sample Size		Cylindrical: Max $\phi$ 30mm
Movable sample holder		X-direction: $\pm$ 15mm from center position
Sample Fixing Jig		Various kinds of Vice and Fixing Jig attachable (OPTION)
Cooling Section		Coolant Tank Capacity: 3L
Front Panel	Start SW	Rotary wheel operation start
	Stop SW	Rotary wheel operation stop
	Zero set SW	Zero reset of the micrometer
	mm/mils SW	Change Unit of mm or mils
Speed rpm DIAL		Wheel speed setting
Display indication		Wheel rotary speed (rpm) Movement distance (mm/mils) 1/100 unit Warning indication (safe cover switch / cutting end limit switch / motor alarm)
Power Supply		AC100V~240V 50Hz/60Hz
Standard Accessories		Cutting Wheel: $\phi$ 150mm x 2 pcs

## OPTIONAL ACCESSORIES



Sample Fixing Vise for FTC-B255FS



Coolant Tank for FTC-B255FS



Floor stand for FT-B255FS

# FTM-EVO

Slide mould cap system is adopted. Sample can be installed and removed easily and safely.

- CPU Control Full-Automatic Hydraulic System
- Space-saving desk type, lightweight compact body.
- The running time is greatly shortened by quick heating and quick cooling.
- Fully-automatic one cycle (pressurizing, heating and cooling) operation.
- PreciMount series has the Adjustable Cooling Function which helps to make perfect condition of moulding sample with Thermoplastic resin (Lucite) and Thermosetting resin (Bakelite).



FTM-SL

FTM-EVO

MODEL	FTM-SL	FTM-EVO
ITEM	SPECIFICATIONS	
Design / Structure	Bench Top Type / Solid Aluminum Frame+Hard-Coated FRP Cover	
Machine Top Mould Cap	Back & Forth Slide & Flip Motion Type Mould Fasten Cap: Convenient Interchangeable Mould Cap and Easy Cleaning.	
Bore and Mould Size of Cylinder	Standard: $\phi$ 50mm Base Cylinder + Additional Cylinder OPTION: $\phi$ 25, 30, 32, 40mm, 1 1/2"(38.1mm)	
Pressure Method	Adjustable Setting between 1200 ~ 4500psi (82 ~ 310bar) by 10psi. Set value is kept by automatic control while a sample is being made.	Adjustable Setting between 0 ~ 14500psi (0 ~ 1000bar) by 10psi. Set value is kept by automatic control while a sample is being made.
Heating Time	0 ~ 99min. (set by 1min.)	0 ~ 59min. (set by 30sec.)
Heating Temperature Setting (Selectable C and F)	50 ~ 200°C (set by 1°C) / 122 ~ 392 °F (set by 5°F)	0 ~ 200°C (set by 1°C) / 32 ~ 392 °F (set by 1°F)
Heater Capacity	1800W	
Cooling Time	Cool-down Time according to Preset Cylinder Temperature (0 ~ 200°C / 32 ~ 392°F).	
Cooling System	External Water Supply	Min. Pressure of Water Supply: 2L / min. Through 2 Hoses connected to Taps on Rear of Machine
	Separate Type Coolant Tank	Rust-Prevention Type Coolant Tank with Radiator: Tank Capacity: 30L / Pressure of Water Supply: 4L / min. (OPTION)
Sample Number in One Time Operation	$\phi$ 25, 30, 32, 38.1, 40mm: Max 1pcs	$\phi$ 25, 30, 32, 38.1, 40mm: Max 2pcs
Control Panel	LED Pressure Setting, Pressurizing Time, Heating Temperature and Cooling Temperature	Color LCD Touch Panel Operation and Display
Machine Dimensions	W410 x D600 x H500mm	W475 x D620 x H635mm
Weight of Machine / Cooling Device	Machine: 94kg / Cooling Device: 30kg(OPTION)	Machine: 83kg / Cooling Device: 30kg(OPTION)
Power Supply	1P AC100 or AC200 ~ 240V / 50, 60Hz: Changeable	
Standard Accessories	Mould Removing Oil: 1btl / Phenol Resin: 1btl (500g) / Spoon: 1pc / Funnel: 1pc / Tweezer: 1pc / Coolant Supply Hose: 2m x 2pcs / Accessory Box: 1pc	

# FTP-1AH

Flushed water system prevent the drain from clogging with polished waste.

This saves your time to clean up the machine.

- Sample holder can be quickly and easily washed by simply sliding the head to the washing tub.
- Individual pressure or Central pressure can be selected.
- Large LCD touch panel is easy to see and it has various user friendly functions.



FTP-1AH

MODEL	FTP-1AH		
ITEM	SPECIFICATIONS		
Polishing Wheel	Size (Specified at P/O)	$\phi$ 300mm (12") / $\phi$ 250mm (10") / $\phi$ 200mm (8") (Aluminum Wheel with Hard Plating)	
	Rotary Motor	Motor / 400W	
	Rotary Speed	0 ~ 600rpm (Variable)	
Wheel Cooling Device	Water-Cooled System by Manual Type Nozzle (Pouring water activate only during wheel rotating.)		
Water Supply	External Water Supply / INLET: Bore of Hose: $\phi$ 15mm		
Cleaning & Drainage	Automatic Sludge Cleaning and Drainage through Sample Holder Washing Cabin during Automatic Operation (Water Current Direction: CW)		
Automatic Polishing System (Auto-Head)	Rotary Motor	Motor / 200W	
	Rotary Speed	0 ~ 180rpm (Variable)	
	Rotary Direction	CCW / CW	
	Combination of Rotation Wheel + Rotary Head	SELECTABLE	
	Sample Downthrust Method	by Pneumatic Pressure: Central Air Cylinder x 1pc / Individual Air Cylinder x 6pcs	
	Pressure Range (on Center of Sample Holder)	Central: 52 ~ 400Nf / 11.8 ~ 90.71lbf / 5.31 ~ 40.82kgf	
	Pressure Range (on Individual Sample)	Individual: 5 ~ 100Nf / 1.13 ~ 22.6lbf / 0.51 ~ 10.2kgf $\phi$ 40mm or less: Max 6pcs	
	Air Source	0.6 ~ 1.0Mpa $\phi$ 6mm	
	Sample Holder (OPTION)	Mounted Sample Number at once	
		Central Pressure:	$\phi$ 25、30、32mm Max 9pcs $\phi$ 40mm Max 4pcs
Central Pressure:		$\phi$ 50mm Max 3pcs	
Individual Pressure:		$\phi$ 40mm or less Max 6pcs $\phi$ 50mm Max 3pcs	
Program Setting	Setting & Display for Operation Wheel Rotary Speed / Wheel Rotary Direction / Auto-Head Rotary Speed / Auto-Head Rotary Direction / Polishing Timer / Sample Fixing Force / Auto-Head Up-Down / Wheel Coolant Water ON-OFF		
Sample Holder Washing Cabin	Built-in Type Special Cabin Equipped Water / Air Spray Nozzle inside For washing sample holder after each polishing cycle completed [STANDARD]		
Machine Dimensions	W750 x D675 x H670mm		
Power Supply (Specified at P/O)	1P / AC200 ~ 240V / 50, 60Hz: Fixed		

# FTP-1MX / FTP-2MX

The removable water filler faucet realizes easy cleaning

- Sophisticated simple design. (All models)
- Excellent operability, quietness and durability! (All models)
- The quantity of water adjustment is not necessary every time by the control of the electromagnetic valve.



FTP-1MX



FTP-2MX

MODEL	FTP-1MX	FTP-2MX
ITEM	SPECIFICATIONS	
Design / Structure	Bench Top Type / Solid Aluminum Frame+Hard-Coated FRP Cover	
Polishing Wheel	Number	Single Double
	Size	φ 200 / 250 mm
	Rotary Motor	DC 300W / Newtonm
	Rotary Speed	0 ~ 600rpm
	Rotary Direction	CW / CCW
Machine Control Panel	Disk rotation : Start/Stop Rotatory direction: CW/CCW Rotary speed: Dial adjustment	
Wheel Cooling Device	Water-Cooling System (Auto : Wheel Start ON/ Wheel Stop OFF)	
Water Supply	External Water Supply / INLET: φ 16.7mm (Bore of Hose: φ 15mm)	
Drainage	Through Drain Hole in Bowl / OUTLET: φ 32.5mm (Bore of Hose: φ 25mm)	
Machine Dimensions	W480 X D640 X H185 (280)mm	W800 X D640 X H205 (300)mm
Machine Weight	42kg	60kg
Power Supply	1P / AC100 ~ 120V or AC200 ~ 240V / 50, 60Hz	

## OPTIONAL ACCESSORIES



Sample holder of the individual force for FTP-1AH



Sample holder of the central force for FTP-1AH



Flat table for Sample holder of central force

# CONSUMABLES

For FTC - series

## CUTTING WHEEL

- φ 305mm
- φ 255mm
- φ 230mm



CODE	ITEM	Q'TY
C - 0 0 1	WA120NA9C (Soft) Dia.305mmx T1.5mm x Shaft Dia.31.75mm	50pcs / box
C - 0 0 2	WA120NA9C (Soft) Dia.255mm x T1.2mm x Shaft Dia.31.75mm	50pcs / box
C - 0 0 3	WA120NA9C (Soft) Dia.230mm x T1.2mm x Shaft Dia.31.75mm	50pcs / box
C - 0 1 0	WA100N (Med.-Soft) Dia.305mm x T1.5mm x Shaft Dia.31.75mm	50pcs / box
C - 0 1 1	WA100N (Med.-Soft) Dia.255mm x T1.2mm x Shaft Dia.31.75mm	50pcs / box
C - 0 1 2	7A80N (Hard) Dia.305mm x T1.5mm x Shaft Dia.31.75mm	50pcs / box
C - 0 1 3	7A80N (Hard) Dia.255mm x T1.2mm x Shaft Dia.31.75mm	50pcs / box
C - 0 1 4	GC80K101 (Ext.-Soft) Dia.305mm x T1.5mm x Shaft Dia.31.75mm	50pcs / box
C - 0 1 5	GC80K101 (Ext.-Soft) Dia.255mm x T1.2mm x Shaft Dia.31.75mm	50pcs / box
C - 0 1 6	GC120NA9C (Soft) Dia.305mm x T1.5mm x Shaft Dia.31.75mm	50pcs / box
C - 0 1 7	GC120NA9C (Soft) Dia.255mm x T1.2mm x Shaft Dia.31.75mm	50pcs / box
C - 0 1 8	GC100N (Med.-Hard) Dia.305mm x T1.5mm x Shaft Dia.31.75mm	50pcs / box
C - 0 1 9	GC100N (Med.-Hard) Dia.255mm x T1.2mm x Shaft Dia.31.75mm	50pcs / box
C - 0 2 0	GC120R9C (Hard) Dia.305mm x T1.5mm x Shaft Dia.31.75mm	50pcs / box
C - 0 2 1	GC120R9C (Hard) Dia.255mm x T1.2mm x Shaft Dia.31.75mm	50pcs / box

※ Work material C-001~C-013 · Steel, Alloyed steel, Stainless steel, Hardening steel etc.  
C-014~C-021 · High-speed steel, Casting, Non-ferrous metal, Resin, Glass etc.

# CONSUMABLES

For FTP - series

## WATER BASE DIAMOND SLURRIES, MONOCRYSTALLINE



Diamond Liquid

CODE	ITEM	Q'TY
01.02.0.25	Water base diamond slurry, monocrystalline 0.25 $\mu$	250ml / bottle
01.02.0.5	Water base diamond slurry, monocrystalline 0.5 $\mu$	250ml / bottle
01.02.1.00	Water base diamond slurry, monocrystalline 1 $\mu$	250ml / bottle
01.02.3.00	Water base diamond slurry, monocrystalline 3 $\mu$	250ml / bottle
01.02.6.00	Water base diamond slurry, monocrystalline 6 $\mu$	250ml / bottle
01.02.9.00	Water base diamond slurry, monocrystalline 9 $\mu$	250ml / bottle

## LUBRICANTS

CODE	ITEM	Q'TY
01.21.L0250W	Water base lubricant / White	250ml / bottle
01.21.L0250R	Water base lubricant / Red	250ml / bottle
01.21.L0250B	Alcohol base lubricant / Blue	250ml / bottle



## HIGH PURITY ALUMINA (99.9%)

Polishing Powder  
Polishing Liquid

CODE	ITEM	Q'TY
01.08.0.05	High purity alumina powder 0.05 $\mu$ / Dilute with water	1kg / bottle
01.08.0.30	High purity alumina powder 0.3 $\mu$ / Dilute with water	1kg / bottle
01.08.1.00	High purity alumina powder 1 $\mu$ / Dilute with water	1kg / bottle
01.28.0.05	High purity alumina slurry (Water base) 0.05 $\mu$	1Lt / bottle
01.28.0.30	High purity alumina slurry (Water base) 0.3 $\mu$	1Lt / bottle
01.28.1.00	High purity alumina slurry (Water base) 1 $\mu$	1Lt / bottle
01.18.0.00	High concentration alumina gel 0.05 $\mu$	0.5kg / bottle
01.18.1.30	High concentration alumina gel 0.3 $\mu$	0.5kg / bottle
01.18.1.00	High concentration alumina gel 1 $\mu$	0.5kg / bottle

## COLLOIDAL SILICA SUSPENSION

CODE	ITEM	Q'TY
01.09.0.05	Colloidal Silica suspension PH 9.8 0.05 $\mu$	1Lt / bottle
01.09.5.05	Colloidal Silica suspension PH 9.8 0.05 $\mu$	5Lt / bottle

## POLISHING CLOTHS

Polishing Cloth  
 $\phi$  200  
 $\phi$  250  
 $\phi$  300



CODE	ITEM	Q'TY
01.04.250FLAT	FLAT - Woven acetate For pre-polishing of ferrous materials, very high stock removal, excellent flatness. Recommended with 9 $\mu$ m to 3 $\mu$ m diamond slurry and diamond pastes.	5pc / box
01.04.250FAST	FAST - Satin Woven acetate For pre-polishing of all materials, high stock removal, excellent flatness. Recommended with 6 $\mu$ m to 3 $\mu$ m diamond slurry.	5pc / box
01.04.250KYO	KYO - Woven acetate For Pre-polishing and Intermediate polishing of ferrous materials. Recommended with 9 $\mu$ m to 3 $\mu$ m diamond slurry.	5pc / box
01.04.250MIX	MIX - Non woven polyurethan For single step polishing. Also suitable for intermediate and final polishing of composites, silicon wafers and crystals. Use with 6 $\mu$ m to 1 $\mu$ m diamond slurry and diamond pastes.	5pc / box
01.04.250SNAP	SNAP- Short nap soft flocked synthetic. For Final polishing of ferrous materials. Recommended with diamond slurries >3 $\mu$ m.	5pc / box
01.04.250OPTO	OPTO-Flocked synthetic fibers For Final polishing of ferrous and non ferrous materials. Recommended with Aluminum oxide >1 $\mu$ m, Diamond slurries > 1 $\mu$ m, Colloidal Silica.	5pc / box
01.04.250STEP	STEP-Woven wool taffeta Universal cloth for all materials , Single step polishing. Recommended with Diamond slurries 6-1 $\mu$ m.	5pc / box
01.04.250RED	RED-Woven wool felt For Final polishing of ferrous materials Recommended with Diamond slurries >3 $\mu$ m	5pc / box
01.04.250KEMO	KEMO - Neoprene form For final polishing of non ferrous materials. Recommended with colloidal silica, fine alumina, oxide slurry and 1 $\mu$ m to 0.5 $\mu$ m diamond slurry.	5pc / box

# CONSUMABLES

For FTM - series

## HOT MOUNTING COMPOUNDS

Phenolic Resin  
Epoxy Resin  
Acrylic Resin  
Diallyl Phthalate Resin

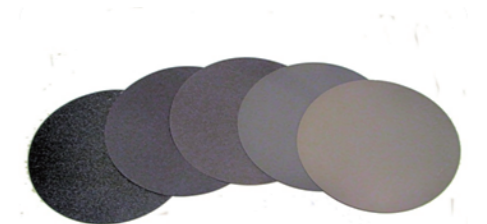


CODE	ITEM	Q'TY
01.06.BAK2500	BAK - Phenolic mounting resin, wood filled, black. For routine use	2.5kg / box
01.06.EPOFINE1000	EPOFINE - Epoxy resin black, glass filled, fine grained. For superior edge retention.	1kg / box
01.06.EPOFINE2500	EPOFINE - Epoxy resin black, glass filled, fine grained. For superior edge retention.	2.5kg / box
01.06.EPOBIG1000	EPOBIG - Epoxy resin black, glass filled, coarse-grained. For superior edge retention.	1kg / box
01.06.EPOBIG2500	EPOBIG - Epoxy resin black, glass filled, coarse-grained. For superior edge retention.	2.5kg / box
01.06.TOPEX1000	TOPEX - Acrylic transoptic resin. High transparency for easier sample identification.	1kg / box
01.06.TOPEX2500	TOPEX - Acrylic transoptic resin. High transparency for easier sample identification.	2.5kg / box
01.06.DAP1000	DAP - Diallylphthalate resin glass filled, excellent edge retention. Blue.	1kg / box
01.06.DAP2500	DAP - Diallylphthalate resin glass filled, excellent edge retention. Blue	2.5kg / box

For FTP - series

## SILICON CARBIDE ABRASIVE PAPERS

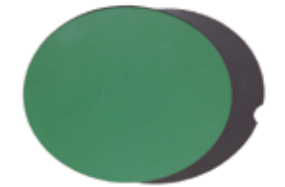
φ 200  
φ 250  
φ 300



CODE	ITEM	Q'TY
01.01.250WSP80A	Silicon carbide abrasive paper, adhesive, φ 250mm, Grain P80	100pcs / box
01.01.250WSP120A	Silicon carbide abrasive paper, adhesive, φ 250mm, Grain P120	100pcs / box
01.01.250WSP180A	Silicon carbide abrasive paper, adhesive, φ 250mm, Grain P180	100pcs / box
01.01.250WSP320A	Silicon carbide abrasive paper, adhesive, φ 250mm, Grain P320	100pcs / box
01.01.250WSP400A	Silicon carbide abrasive paper, adhesive, φ 250mm, Grain P400	100pcs / box
01.01.250WSP600A	Silicon carbide abrasive paper, adhesive, φ 250mm, Grain P600	100pcs / box
01.01.250WSP800A	Silicon carbide abrasive paper, adhesive, φ 250mm, Grain P800	100pcs / box
01.01.250WSP1200A	Silicon carbide abrasive paper, adhesive, φ 250mm, Grain P1200	100pcs / box
01.01.250WSP2000A	Silicon carbide abrasive paper, adhesive, φ 250mm, Grain P2000	100pcs / box

※ Distortion of abrasive paper can be prevented by using it together with EZ-DISK & Magnet base. Moreover, exchange is easy.

## EZ-DISK & MAGNETIC BASE



Easy stick'n'release disk for abrasive papers / cloths (to be use on magnetic base)

CODE	ITEM	Q'TY
01.04.200.EZDISK	EZ-DISK stick & release disk for adhesive paper / cloths(to be used on magnetic base) φ 200mm	1pc / box
01.04.250.EZDISK	EZ-DISK stick & release disk for adhesive paper / cloths(to be used on magnetic base) φ 250mm	1pc / box
01.04.300.EZDISK	EZ-DISK stick & release disk for adhesive paper / cloths(to be used on magnetic base) φ 300mm	1pc / box

## MAGNETIC BASE FOR STEEL WHEEL

CODE	ITEM	Q'TY
01.04.200.BASE.M	Base.M - Magnetic base φ 200mm (for steel wheel)	2pcs / box
01.04.250.BASE.M	Base.M - Magnetic base φ 250mm (for steel wheel)	2pcs / box
01.04.300.BASE.M	Base.M - Magnetic base φ 300mm (for steel wheel)	2pcs / box