Compare Tabletop Microscope with SEM

TM4000III / TM4000PlusIII / FlexSEM 1000 II / SU3800 / SU3900

HITACHI
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Model	Tabletop Microscope TM4000III 	Tabletop Microscope TM4000PlusIII 	Scanning Electron Microscope FlexSEM 1000 II 	Scanning Electron Microscope SU3800 	Scanning Electron Microscope SU3900 
Magnification	×10 - ×100,000 (Photographic magnification)		6x - 300,000x (on photo)	5x - 300,000x (on photo)	
	×25 - ×250,000 (Monitor display magnification)		16x - 800,000x (on display)	7x - 800,000x (on display)	
Resolution			4.0 nm at 20 kV (SE, High Vacuum)	3.0 nm at 30 kV (SE, High Vacuum)	
			15.0 nm at 1 kV (SE, High Vacuum)	15.0 nm at 1 kV (SE, High Vacuum)	
			5.0 nm at 20 kV (BSE, Low Vacuum)	4.0 nm at 30 kV (BSE, Low Vacuum)	
Electron source	Pre-centered cartridge tungsten filament				
Accelerating voltage	5 kV, 10 kV, 15 kV, 20 kV		0.3 - 20 kV	0.3 - 30 kV	
Image signal	Backscattered electron (BSE)	Secondary electron (SE)	Secondary electron (SE)		
		Backscattered electron (BSE)	Backscattered electron (BSE)		
		Mix (BSE + SE)	Mix (BSE + SE)		
		UVD-CL	UVD-CL*		
		STEM*	STEM*		
Vacuum mode	Standard Charge-up Reduction	Conductor Standard Charge-up Reduction	6 - 100 Pa	6 - 650 Pa	
Sample stage traverse	Manual stage	Motorized stage	3-axis motorized stage	5-axis motorized stage	
	X : 40 mm		X : 0 - 50 mm	X : 0 - 100 mm	X : 0 - 150 mm
	Y : 35 mm		Y : 0 - 40 mm	Y : 0 - 50 mm	Y : 0 - 150 mm
	-	-	Z : 5 - 33 mm	Z : 5 - 65 mm	Z : 5 - 85 mm
	T : -15 - 45°*		T : -15 - 90°	T : -20 - 90°	
	R : 360°*		R : 360°		
Maximum sample size	80 mm (in diameter)		80 mm (in diameter) 153 mm (in diameter)*	200 mm (in diameter)	300 mm (in diameter)
Maximum sample thickness	50 mm		40 mm	80 mm	130 mm
Signal detector	High-Sensitivity 4-segment BSE detector		SE detector		
	-	High-Sensitivity Low-Vacuum SE detector	High sensitivity semiconductor BSE detector		
	-	-	Ultra Variable-pressure Detector (UVD)*		
Analysis system	Energy Dispersive X-ray Spectrometer (EDS)*	Energy Dispersive X-ray Spectrometer (EDS)*	Energy Dispersive X-ray Spectrometer (EDS)*	Energy Dispersive X-ray Spectrometer (EDS)* Wavelength dispersive X-ray spectrometry (WDS)*	

*option