

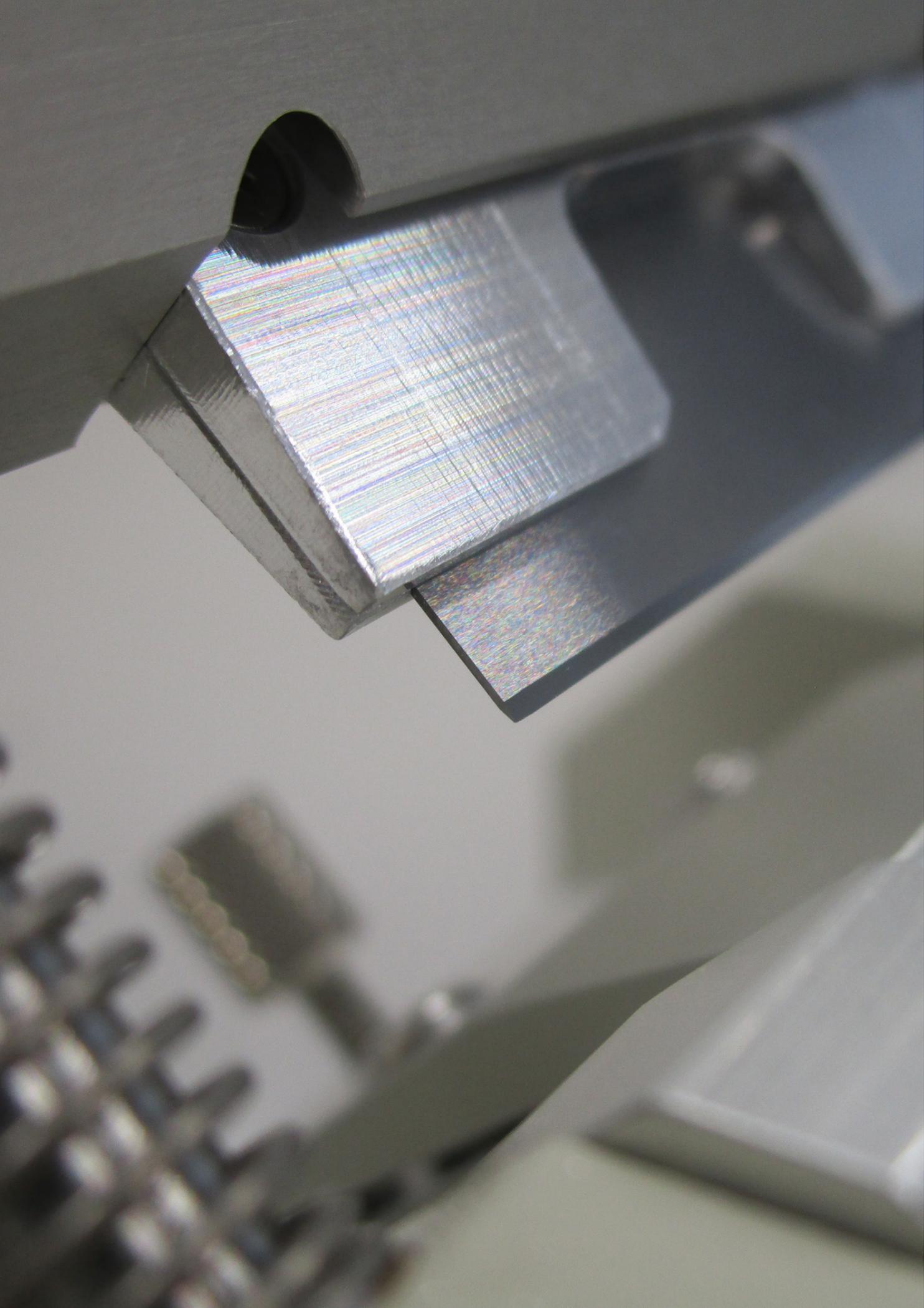
SliceMaster

Micro Sample Preparation Series



JASCO

Performance
Innovation
Reliability



Originally developed for FTIR microscopy, SliceMaster is a line of compact precision cutting tools that may also be used for any variety of applications requiring extremely thin sample sections, such as packaging materials, films, laminates or pellets. The SliceMaster is an economical tool that can repeatably slice thin sections without damaging samples.

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SliceMaster Series

Precision Cutting from 10-200 μm

The SliceMaster range of compact precision cutting tools includes four models for a variety of sample preparation from simple 90° angle model for vertical cutting, a fixed 15° angle to expose large surface area, a variable angle model for versatile cutting, and a dedicated pellet slicer for exposing clean and flat surfaces.

Low Cost

As a replacement for more expensive microtomes, the SliceMaster can repeatedly cut thin sections without damage to the sample.

Simple and Safe Handling

The very sharp blade is retained behind a safety guard and adjustment is very easy with a micrometer adjustment for the section thickness and hand operated cutting action.



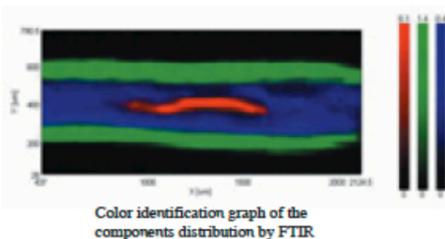
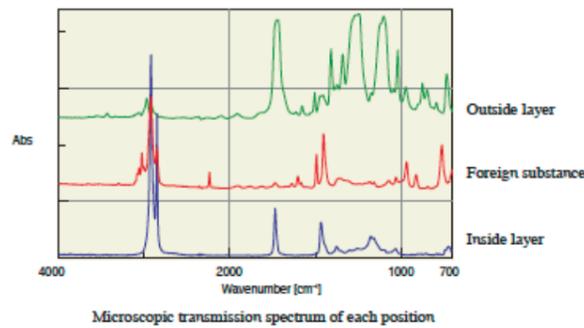
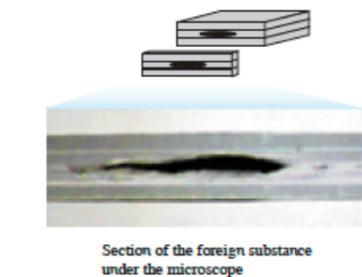
HW-1

HW-1 | Multi-Angle Slicer

The most versatile slicer with adjustable angles from vertical to 45°. Ideal for exposing the surface of multilayer laminates for FTIR microscopic imaging and measurement.

Analysis for Foreign Substances (Fisheye) in Film by Microscopic FTIR

Separating tiny foreign substances in film by knife can be challenging. Foreign substances can be exposed by the SliceMaster's pinpoint cutting. Not only applicable for the qualitative analysis, microscopic FTIR is also useful for identifying the position of foreign substances and the investigation of the contamination layer, by observation of the section.

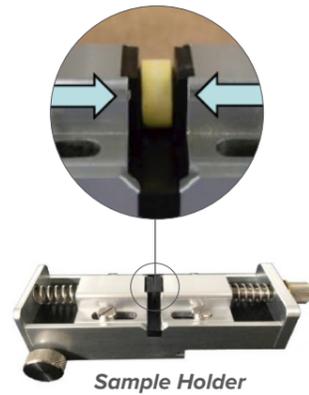


TS-10 | Pellet Slicer

In addition to the benefits of the Multi-Angle Slicer, the Pellet Slicer includes a dedicated holder for irregular sized pellets, seeds, caplets and tablets. This holds the sample for exposing flat surfaces and shaving thin sections from a sample.



TS-10



Sample Holder

Images of Cutting Surface



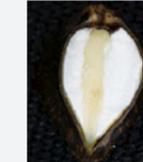
Lemonade Candies



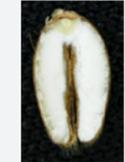
Health Food (Triangle)



Rice



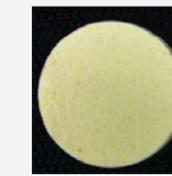
Soba



Wheat



Tapioca



Cold Medicine (Pellets)



Cold Medicine (Caplets)



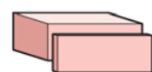
Lateral Observation

Blade Angle and Cut-Off Example

Sample Name	Sample Shape	Sample Cut Section Size	Sample Thickness	Blade Angle
Health Food A	Round (Pellets)	φ9.0 mm	6.0 mm	75°
Health Food B	Triangle (Pellets)	9.0 x 8.0 mm	4.0 mm	76°
Pharmaceutical Pellets A (Antibacterial)	Round (Pellets)	φ10.0 mm	4.0 mm	77°
Pharmaceutical B (Cold Medicine)	Football Shape (Couplet)	13.0 x 7.0 mm	5.0 mm	77°
Pharmaceutical C (Stomach Medicine)	Round (Pellets)	φ10.0 mm	4.0 mm	76°
Food A (Mouth Freshener)	Spherical	φ2.5 mm	2.5 mm	90°
Food B (Freshener)	Round (Pellets)	φ7.0 mm	3.0 mm	78°
Food C (Lemon Candies)	Spherical	φ4.0 mm	4.0 mm	90°
Food D (Chocolate)	Spherical with Icing	φ4.0 mm	4.0 mm	90°
Food E (Tapioca)	Spherical	φ2.5 mm	2.5 mm	90°
Grain A (Soba with Shells)	Triangular Pyramid	7.0 x 4.0 mm	4.0 mm	90°
Grain B (Wheat with Shells)	Oval	7.0 x 3.0 mm	3.0 mm	90°
Grain C (Rice with Hulls)	Oval	8.0 x 3.0 mm	2.0 mm	90°
Industrial Products A (O Ring)	Doughnut (Rubber)	φ9.0 mm	1.0 mm	90° (Using Liquid Nitrogen)
Industrial Products B (Sealing Materials)	Doughnut (Resin)	φ7.0 mm	5.0 mm	85°
Industrial Products C (Pet Food)	Cylindrical	10.0 x 4.0 mm	4.0 mm	90°

SliceMaster Series

Precision Vertical and Angled Cutting

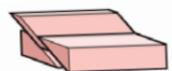


HS-1 | Vertical Slicer

Simple version of the HW-1 with fixed vertical cut (90°).



HS-1 Vertical Slicer	
1000 μm	Polypropylene Bottles
800 μm	Multilayered Paper Cartons
600 μm	Polyethylene Tubes
400 μm	PET Bottles
200 μm	Polyester Cards
10 μm	Straws, Copy Paper, Polyimide Sheets, etc.



HK-1 | Angled Slicer

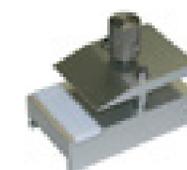
Fixed 15° angle slicer for cutting film and laminate materials leaving a wide exposed surface with up to 4 times the surface area compared with a 45° section. Includes removable sample holder.



HK-1 Angled Slicer	
200 μm	Polyester Cards
160 μm	Coated Paper
120 μm	Thick Bags for Tea or Zip Locks*
80 μm	Hair, Instant/Snack Food Bags*
40 μm	Polypropylene Cartons
10 μm	Polyvinyl Chloride and Polyvinylidene Chloride Wrappers, Polyethylene Bags, Aluminum Foil

*Polyethylene, Polypropylene, Polyester, Polyimide, Polyvinyl Alcohol, Polyvinyl Acetate, etc.

Consumables



Wide-Range Sample Holder No. 2000-0067

Can be used for vertical slicer and multi-angle slicer. Made of Teflon. 10 pcs/set



Sample Holding Sheet No. 2000-0083

Fits samples of thickness up to 8mm. For multi-angle slicer only. 10 pcs/set



Thin-Blade Holder No. 2000-0106

Used for attaching FEATHER S double-edged blades. Accommodates 10 blades. For vertical and multi-angle slicer only.

Replacement Blades

The standard accessories included with the SliceMaster series are FEATHER S single-edged blades (carbon steel, thickness 0.245 mm). Thinner FEATHER S double-edged blades (carbon steel blade: thickness 0.1 mm), must be used with the optional thin-blade holder. (For use with the HS-1 vertical and HW-1 multi-angle slicers only). The thin blade is recommended for sections of more delicate material that can be easily crushed; the standard single edge blades are recommended for tougher material.

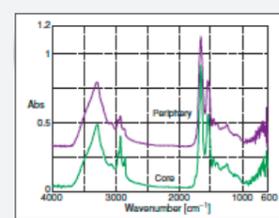
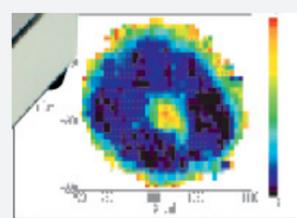
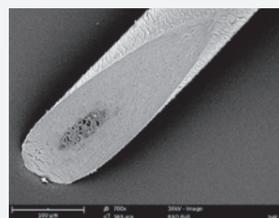
FEATHER S
Single-Edged Blades
No. 2000-0063
100 pcs/set

FEATHER S
Double-Edged Blades
No. 2000-0107
100 pcs/set

Specifications

	HS-1 Vertical Slicer	HK-1 Angled Slicer	HW-1 Multi-Angle Slicer	TS-10 Pellet Slicer
Cutting Angle (against surface)	90°	15°	45-90° Stepless Variable	70-90°
Sample Holder	Removable	Body fixed	Removable	Removable
Sample Stage	Feed screw type (500 μm/l rotation: stepless adjustable)			
Max. Thickness	3 mm	0.2 mm	2 mm	10 mm
Dimensions	85 mm (W) × 150 mm (D) × 110 mm (H)	95 mm (W) × 115 mm (D) × 65 mm (H)	85 mm (W) × 115 mm (D) × 95 mm (H)	85 mm (W) × 120 mm (D) × 110 mm (H)
Weight	Approx 730 g	Approx 1100 g	Approx 820 g	Approx 1100 g

Hair Cross Section Analysis



Hair cross section analysis by FTIR Microscope



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Products described herein are designed and manufactured by ISO-9001- and ISO-14001-certified JASCO Corporation