



ASP™-1000

AUTOMATED SPECIMEN PROCESSOR

*Uncompromised Biological Specimen
Preparation for Transmission EM,
Immuno EM Pre- & Post-embedding,
& Serial Block Face Scanning EM*

Microscopy Innovations introduces the ASP-1000, your automated solution for biological specimen preparation for electron microscopy (EM). Simply select your preprogrammed protocol, load your specimen into the mPrep™ capsules, set up your reagents, and press Start.

Then walk away.

The ASP-1000 not only frees you from time-consuming reagent exchanges to work on other tasks but also vastly reduces total time required for processing samples. Covering the gamut of biological specimen preparation, the ASP-1000 excels at

- Routine tissue processing
- Labor-intensive procedures
- Lengthy and/or complex protocols



YOUR Workflow...

UNIQUE ASP-1000 ADVANTAGES

INCREASED PRODUCTIVITY

Walk-away Convenience

While you focus on other lab projects, the ASP-1000 automates EM sample processing, even alerting you (via text message, email, bell, or indicator light) when you need to return to the instrument. Tissue specimens are resin-infiltrated entirely within the capsule, ready to transfer to the oven for curing. Thus, no need to transfer sticky, resin-infiltrated specimens from baskets to embedding molds, and no messy clean up.

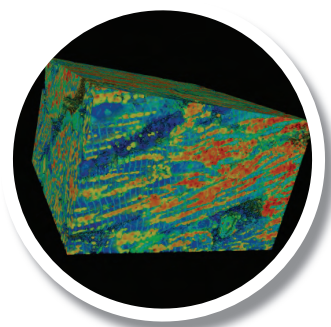
In addition, the ASP-1000 reduces processing time with no reduction in specimen preparation quality. The ASP's continuous, automated pipetting enhances fast infiltration and dehydration compared to manual methods.

The ASP-1000 Speeds Specimen Processing

SPECIMEN	ASP-1000	MANUAL METHOD *
Kidney	46 minutes	6 - 12 hours
Muscle	133 minutes	6 - 12 hours
Liver	133 minutes	6 - 12 hours

Times noted span post-fix rinse through 100% resin infiltration

* Estimates based on publicly available protocols.
See <https://bit.ly/ASP-speed> for references.



Rat heart right ventricle serial block face SEM colorized volume rendering

UNCOMPROMISED, QUALITY RESULTS

One-touch Sample Handling, Consistency, and Reproducibility

With one-touch specimen handling, the ASP-1000 reduces the potential for sample damage or loss. The ASP's automation guarantees consistent processing from sample-to-sample and batch-to-batch. In addition to reducing the training required for new lab technicians, the ASP-1000 also eliminates technician-to-technician variability, ensuring data quality, reproducibility...and the reputation for quality work coming out of your lab.



Rat skeletal muscle (gastrocnemius) TEM

UNMATCHED FLEXIBILITY

Your Lab, Your Protocols, Your Way

The ASP-1000 is preprogrammed with protocols to prepare kidney, liver, and muscle tissues as well as eukaryotic cells. You can use these protocols as-is, tweak them to conform with your lab practices, or create new protocols to run again and again. The controller software provides an easy-to-use interface that walks you through each step of the protocol. You can even share protocols with other ASP-1000 labs.

In addition, the ASP-1000 uses minimal reagents, which are dispensed from standard microplates and reservoirs. Up to 72 reagents or rinses can be incorporated into a single protocol. With the ability to run multiple specimens in parallel, or simultaneously run multiple specimens with variable conditions to optimize your protocols, the ASP-1000 enables precise control and programming.

Simplified

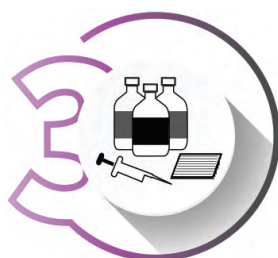
A SIMPLIFIED WORKFLOW WITH WALKAWAY CONVENIENCE



SELECT PROTOCOL



LOAD SPECIMEN



LOAD REAGENTS



PRESS START
...and walk away

ASP-1000 SPECIFICATIONS

Base Unit	Approx. dimensions with fume enclosure (W x D x H): 48 cm x 61 cm x 64 cm (19" x 24" x 25")
	Weight: 34 kg (75 lbs)
	6 ANSI/SLAS format 96-well or 12-column reservoir microplates
	Integrated, removable fume enclosure
Pump Module	8-channel head
	Dimensions (W x D x H): 21 cm x 21 cm x 31 cm (8" x 8" x 12")
Laptop Controller	Weight: 7.25 kg (16 lbs)
	Dimensions (W x D): 25 cm x 36 cm (10" x 14")
	Weight: 1.6 kg (3.5 lbs)
	Windows 10, solid-state drive
Capsule Requirements	Software with multiple preinstalled protocols and unlimited storage for user-defined protocols
	mPrep/s™ or mPrep/g™
Power Requirements	100-240 VAC, 47-63 Hz
Net Weight	43 kg (95 lbs) Shipping Weight 131 kg (288 lbs)

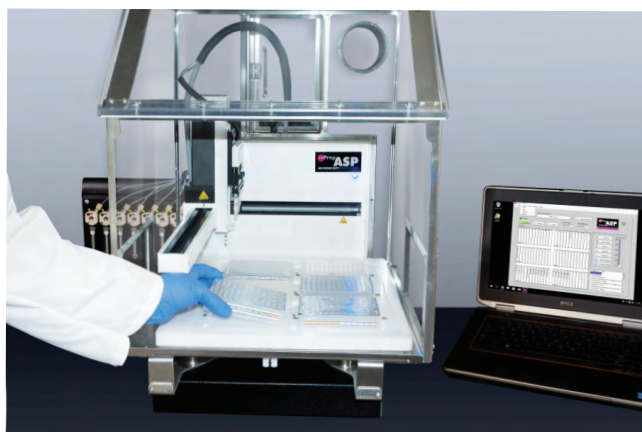
ASP-1000 FEATURES

- Simplifies sample management with one sample per capsule.
- Prepares up to 8 samples simultaneously.
- With accelerated specimen processing, runs multiple batches in a workday.
- Cleans up in less than 5 minutes.
- Reduces supplies and reagent consumption costs.
- Using mPrep/s capsules, enables one-touch specimen orientation to be retained during processing.
- Texts or emails when finished processing or when human input is required.
- Vents noxious vapors with an integrated, removable fume enclosure.
- Features a compact benchtop design.
- Provides 2-tiered access to laptop controller software: operator and developer.

ORDERING

See www.microscopyinnovations.com for a complete product list and pricing.

PRODUCT	CAT. NO.	
mPrep ASP-1000 System & Accessories		
mPrep ASP-1000 Automatic Specimen Processor	ASP1000	
mPrep/bench™ 6-well silicone rack	34000	
mPrep/f30™ Standard Filter Couplers	31500	
mPrep/f13 Extreme Filter Couplers	31600	
mPrep/s (Specimen) Capsules & Accessories		
mPrep/s Capsule Pack 8 capsules, 12 screens & 8 blank label sets in storage box	22200	
mPrep/s Capsules 96 capsules, screens & blank label sets	22500	
mPrep/s Insertion Tool	32010	
mPrep/s Workstation, complete	42100	
mPrep/g (Grid) Capsules		
mPrep/g Capsule Pack 16 capsules & blank label sets with storage box	21300	
mPrep/g Capsules 96 capsules & blank label sets	21500	
Reagent Reservoir Plates & Seals	Qty	
12-col reagent reservoir plates, PP	1	52501
	5	52503
	25	52502
96-well reagent plates, square well, 1.2 ml, PP	10	51010
	100	51011
96-well reagent plate, 500 uL, PP	10	51001
X-Pierce™ plate seal sheets	100	53010
Pierceable aluminum plate seal sheets	100	53050
Additional Items		
Extended Warranty		
Installation & Training		



The ASP-1000 base unit with fume enclosure (center), pump module (left), and laptop controller (right).

ABOUT MICROSCOPY INNOVATIONS

Microscopy Innovations creates innovative solutions for specimen preparation in electron microscopy laboratories. From one-touch specimen handling that maintains biological sample integrity to walk-away automation that guarantees consistency and quality, MI's technology is creating 21st century lab products to increase productivity and accelerate science. With best-in-industry customer support, Microscopy Innovations engages with and supports the microscopy community to advance scientific research.

FOR MORE INFORMATION

Microscopy Innovations LLC
213 Air Park Rd, Ste 101
Marshfield, WI 54449-8626

+1 (715) 384-3292
info@microscopyinnovations.com
www.microscopyinnovations.com

Micrographs, pg 1, from top down:

Kidney TEM.

On-grid TEM of whole mount bacterial flagella labeled with 10 nm gold (rabbit anti-flagella and goat anti rabbit IgG conjugated to 10 nm gold).

Canine nasal tissue TEM colorized rendering.

Rat brain cortex serial block face SEM.

