# Instrument Processing

We believe design is about more than the space or technology being used.

As antimicrobial resistance and the emergence of novel viral pathogens loom larger in headlines, the need for infection control across health systems has reached a new urgency. Keeping patients and staff safe is at the heart of any effective infection control measure, so a better understanding of and adherence to instrument processing best practices is truly essential for every facility.
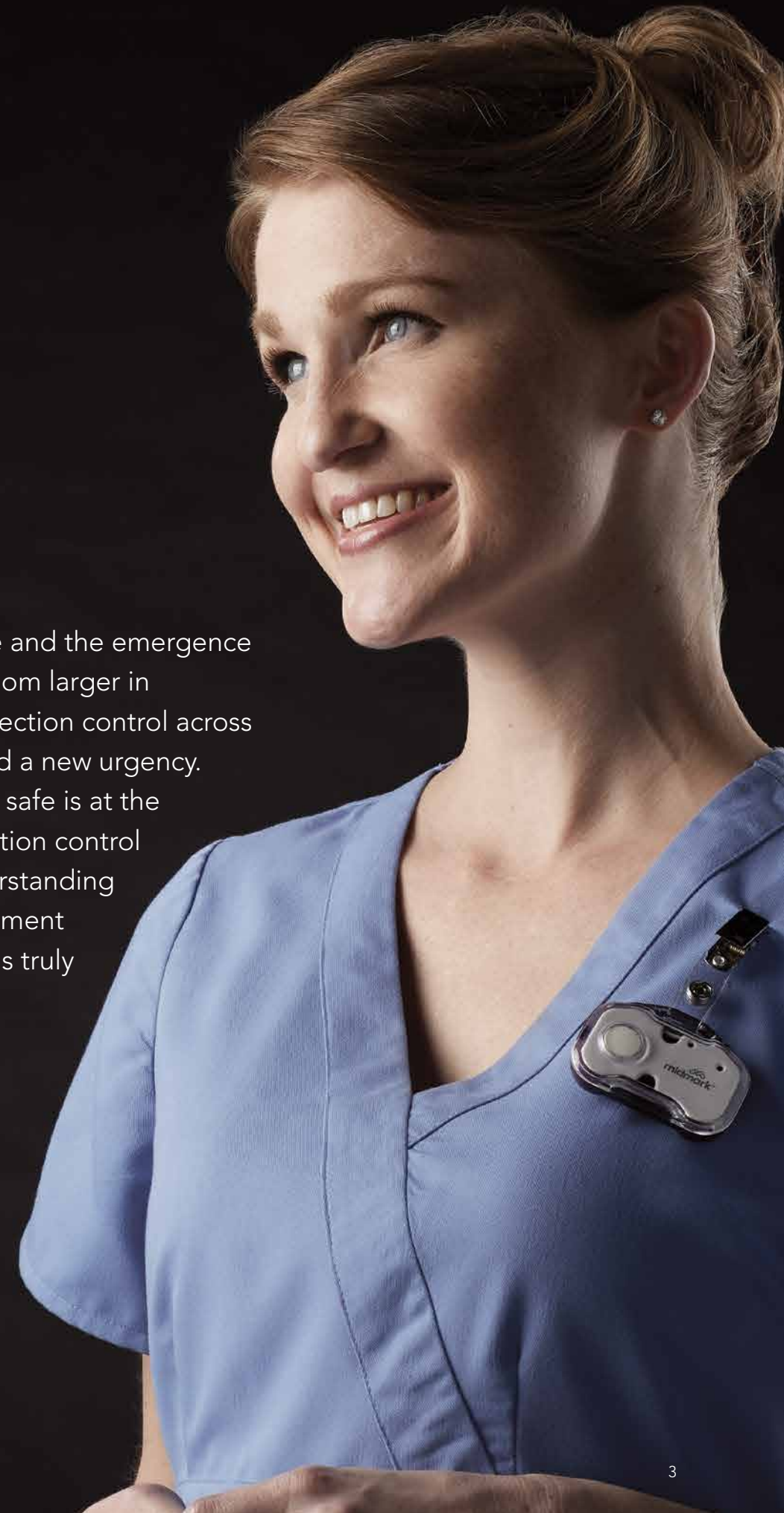
Infection Prevention Matters

Every day patients walk into healthcare facilities to be treated and walk out with a healthcare acquired infection (HAI). These types of infections can have devastating medical and financial implications—worse, they can be deadly.[1] And these types of infections are not limited to hospitals. Don't take chances with the health of your patients and staff, or the safety standards of your health system.

Midmark instrument processing solutions provide the solid foundation you need for worry-free infection prevention measures, based on best practices you can trust.

2 MILLION
PEOPLE DEVELOP AN HAI
EACH YEAR IN THE US.[2]
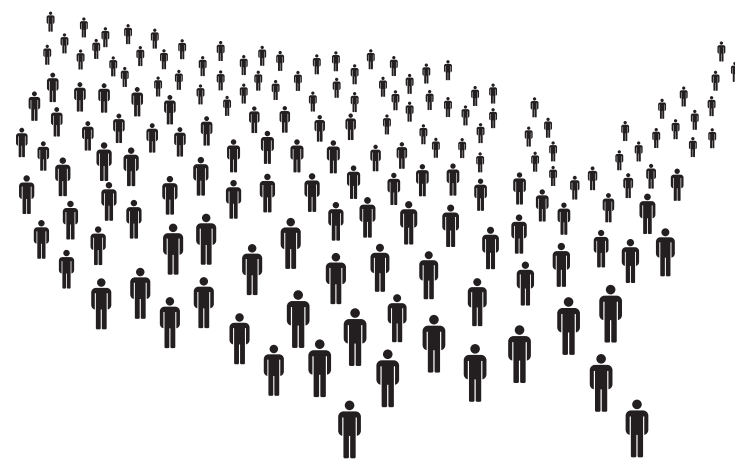
Instrument Processing Essentials

Follow the instrument processing best practices established by the CDC[3] to create a smooth workflow from dirty to clean, helping contain contamination and maximizing the efficiency of your instrument cleaning and sterilization processes.

STEP 1
Receiving, Cleaning + Decontamination
Reusable instruments, supplies and equipment should be received, cleaned and decontaminated in one section of the processing area.

STEP 2
Preparation + Packaging
Cleaned instruments and other supplies should be inspected, assembled into sets or trays, and wrapped or packaged for sterilization.

STEP 3
Sterilization
The sterilization area should include the sterilizer and related supplies with adequate space for loading, unloading and cool down.

STEP 4
Monitoring/Sterility Assurance
Use and keep record of mechanical, chemical and biological monitoring to ensure the effectiveness of the sterilization process.

STEP 5
Storage
The storage area should contain space for sterile items and disposables. Supplies and instruments should not be stored under sinks or in other locations where they might become wet.

The Critical First Step
QuickClean® Ultrasonic Cleaners

If an instrument is not clean, it will not become sterile. That's why it's so important to ensure that instruments are thoroughly cleaned prior to sterilization. QuickClean Ultrasonic Cleaners eliminate hidden residues manual cleaning may miss, providing powerful, effective cleaning with consistent results. And QuickClean uses advanced technology to help create a safer, more efficient work environment by decreasing worker exposure to contaminants and sharps injuries while reducing the time and effort needed for cleaning.


01 Choose the option that best fits your space and workflow needs. QuickClean comes in three tabletop sizes (1.2-, 3.3- and 6.6-gallon).

02 QuickClean is available in two recessed options (3.3- or 6.6-gallon).

03 The stainless steel finish and attractive design coordinate well with most décor.

Simple, Powerful Technology

QuickClean® is easy to use right out of the box, so your staff can be up and running with minimal training time. Advanced Frequency-Leap technology helps ensure your instruments are fully cleaned the first time, every time no matter where they are placed in the basket.
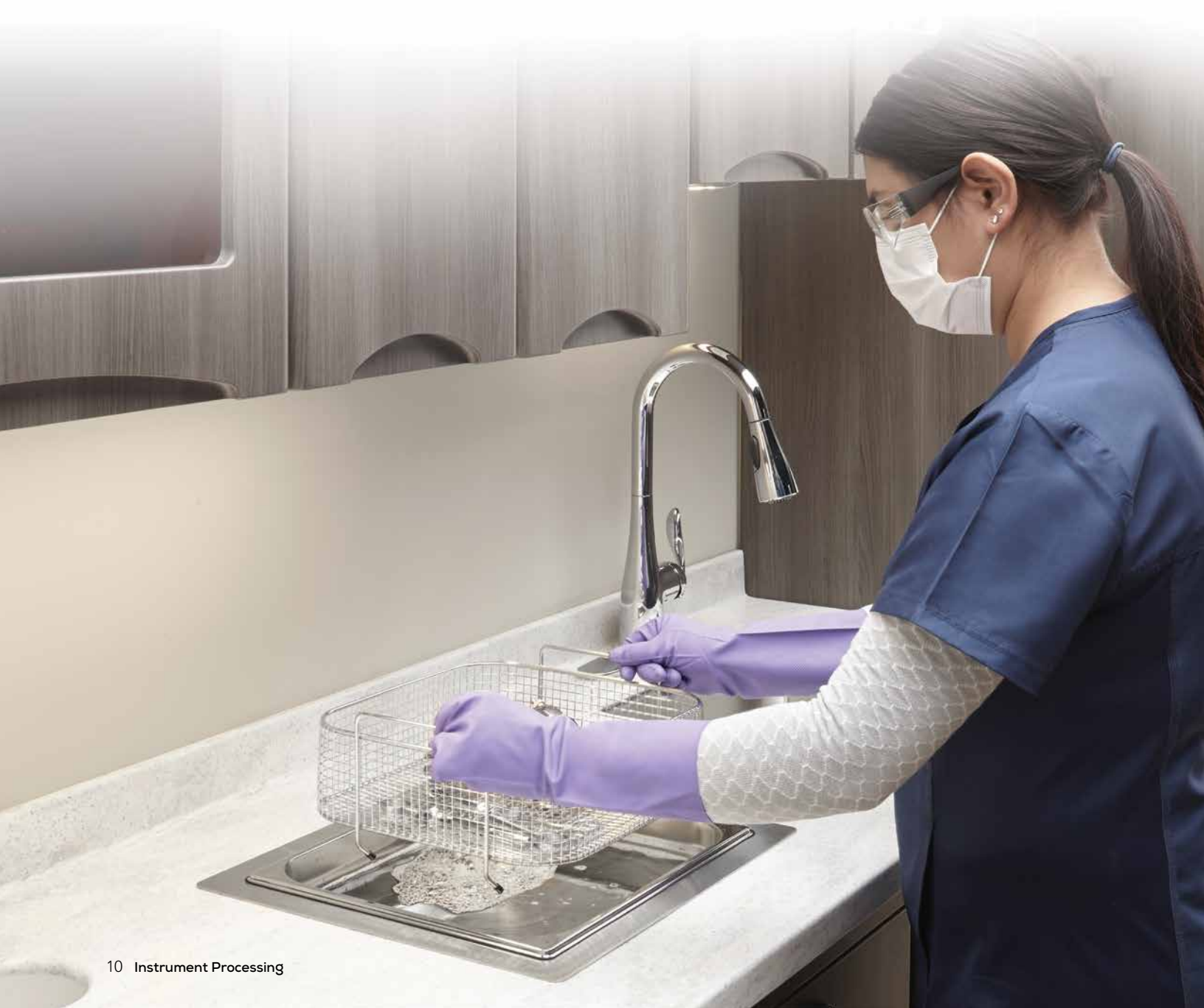
ACCESSORIES + SERVICE PARTS

Beaker Accessories
9A612001 - QC1 – 2 Beaker Accessory
9A613001 - QC3/QC3R – 4 Beaker Accessory
9A614001 - QC6/QC6R – 6 Beaker Accessory

Extra Safety Baskets
002-10007-00 - QC1 Safety Basket
002-10008-00 - QC3/QC3R Safety Basket
002-10009-00 - QC6/QC6R Safety Basket

Cleaning Solutions
9A296001 Midmark General Purpose
         Cleaner (32 oz)
9A297001 Midmark Tartar and Stain
         Remover (32 oz)
9A298001 Midmark Enzymatic Cleaner (32 oz)

QUICKCLEAN MODELS

	QC1-01	QC3-01	QC3R-01	QC6-01	QC6R-01
Type of Unit	Tabletop Unit	Tabletop Unit	Recessed Unit	Tabletop Unit	Recessed Unit
Capacity	1.2 Gal/4.5 L	3.3 Gal/12.5 L	3.3 Gal/12.5 L	6.6 Gal/25 L	6.6 Gal/25 L
Size of Unit	13.5" L x 10.2" W x 10.4" H (34.5 x 20 x 26.5 cm)	14.7" L x 16.5" W x 10.4" H (37.5 x 42 x 26.5 cm)	15.55" L x 14.37" W (39.5 x 36.5 cm)	21.6" L x 16.5" W x 14.3" H (55 x 42 x 36.5 cm)	22.48" L x 14.37" W (57.1 x 36.5 cm)
Size of Tank	11.8" L x 5.9" W x 5.9" H (30 x 15 x 15 cm)	13" L x 11.8" W x 5.9" H (33 x 30 x 15 cm)	13" L x 11.8" W x 5.9" H (33 x 30 x 15 cm)	19.9" L x 11.8" W x 7.9" H (50.5 x 30 x 20 cm)	19.9" L x 11.8" W x 7.9" H (50.5 x 30 x 20 cm)
Limited Warranty	3 Years	3 Years	3 Years	3 Years	3 Years
Average Sound Level (with lid on)	68 dB	61 dB	61 dB	69 dB	66 dB

Trust the Best

RITTER® M3, M9 + M11 STEAM STERILIZERS

When you invest in Ritter sterilizers, you can be confident you are getting the best—our sterilizers are the market leaders year after year. Ritter sterilizers are designed to be safe, dependable and easy to use. In fact, every unit is inspected and ASME-certified by a third-party, licensed inspector. And all our sterilizers are backed with over 100 years of manufacturing experience built into each one.

SAFETY FEATURES

Programmed Controls: Once a pre-programmed cycle is selected, the unit is designed to sterilize automatically without any operator assistance.

Smart Technology: If the door isn't closed completely or the water level is low, the sterilizer will automatically stop and alert the operator to take proper action.

Open-Door Drying: Once sterilization is complete, the door opens automatically and quietly to dissipate steam and dry your instruments.

01 **Ritter M11® Steam Sterilizer**
Its 11" x 18" chamber makes it the largest of any standard countertop sterilizer on the market.

02 **Ritter M9® Steam Sterilizer**
Pack all the reliable sterilizing power you need into a compact unit perfect for areas with limited space.

03 **Ritter M3™ Steam Sterilizer**
Sterilize unwrapped instruments in 6 minutes and pouched instruments in just over 10 minutes.

ACCESSORIES THAT HELP ADD VERSATILITY + FUNCTION

STANDARD CYCLE PARAMETERS

Pre-Programmed Cycle	Sterilization Temperature	Hot Cycle Time (Fill, Heat-Up + Vent in minutes)			Sterilization Time (in minutes)			Dry Time (in minutes)			Total Hot Cycle Time w/o Dry (in minutes)			Total Hot Cycle Time w/ Dry (in minutes)		
	All Units	M11	M9	M3	M11	M9	M3	M11	M9	M3	M11	M9	M3	M11	M9	M3
Unwrapped	270°F (132°C)	19	11	2.5	3	3	3.5	30	30	25	22	14	6	52	44	31
Pouches	270°F (132°C)	20	12	5	4	4	5.5	30	30	30	24	16	10.5	54	46	40.5
Packs/Low Temp	250°F (121°C)	18	10	4.5	30	30	20	30	30	50	48	40	24.5	78	70	74.5
Handpieces	270°F (132°C)	26	15	N/A	4	4	N/A	30	30	N/A	30	19	N/A	60	49	N/A

ACCESSORIES FOR THE M9® + M11® STERILIZERS

M9/M11 Printer 9A599001
Records and prints critical sterilization cycle data including time, temperature and pressure.

Cool Hand Tool 9A307001
Designed to help reduce the risk of staff injury by making it safer and simpler to load and unload your sterilizer.

Pouch Rack 002-2108-00 + 002-2108-01
Designed to separate sterilization pouches for enhanced steam circulation and drying.

Sterilizer Data Logger 9A682001
Simplify and streamline the documentation of physical and mechanical performance (sterilization time and temperature) of every sterilization cycle.

Data Logger USB Device 002-10502-00
Replacement or additional USB devices are available for the Sterilizer Data Logger.

ACCESSORIES FOR THE M3™ STERILIZER

Top Cover Protector 9A404001
Use the cover protector to shield the M3 from scratches or damages.

M3 Printer 9A401001
Records and prints critical sterilization cycle data including time, temperature and pressure.
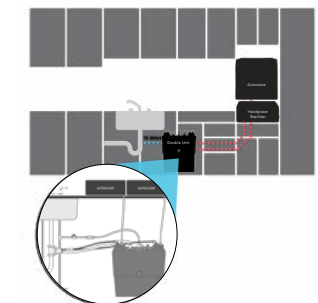

Door Tray 9A402001
The door tray accessory allows you to prepare an additional load for sterilization before the previous load is complete, saving valuable time.

VISTACOOL™ DIRECT-TO-DRAIN WATER ELIMINATION SYSTEM

Single VistaCool unit 9A586001
Designed to be compatible with the Ritter M3

Double VistaCool unit 9A586002
Designed to be compatible with any two current Ritter® sterilizers

The VistaCool Direct-To-Drain sterilizer wastewater elimination system makes labor-intensive condensate tanks unnecessary, freeing your staff to spend more time with patients and less time tending to equipment.

Your Instrument Processing Center

STERILIZATION GOALS MAY BE UNIVERSAL, BUT EACH FACILITY IS UNIQUE.

Even though you may be familiar with sterilization and instrument processing best practices, the needs and considerations of each facility can be different. These variations can make implementing a sterilization and instrument processing workflow that adheres to best practices a challenge.

Let us help you create an instrument processing center that addresses the specific needs of your facility, your team and your patients. We can help standardize your instrument processing workflow in one facility or across a network of sites.

Configure Your Space

From receiving to storage, your instrument processing space needs to work for you. These layout options are designed to follow the 5-step best practices in instrument processing while giving you the options your practice demands.
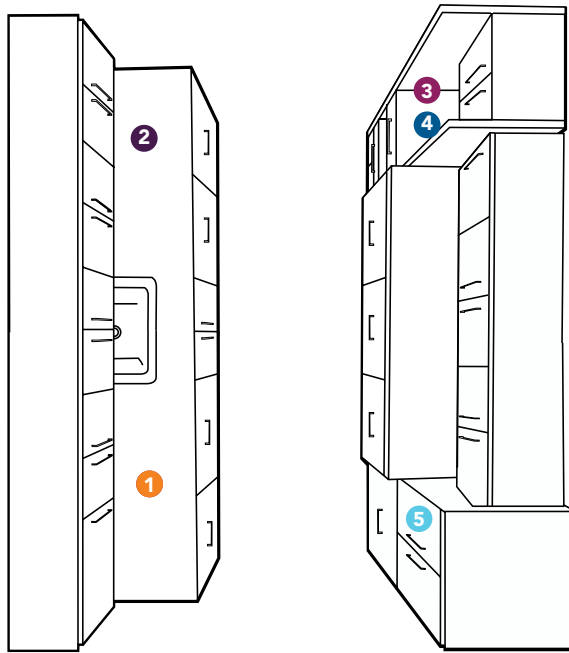
| STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
RECEIVING, CLEANING + DECONTAMINATION	**PREPARATION + PACKAGING**	**STERILIZATION**	**MONITORING/STERILITY ASSURANCE**	**STORAGE**

GALLEY

The galley layout consists of workspaces on two opposing walls with a single traffic lane between. This arrangement allows for easy access and efficient workflow, helping your staff keep the process moving using a linear flow while also keeping everything within reach.
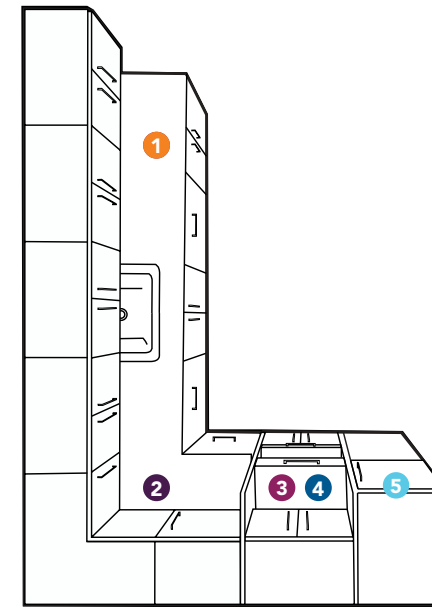

L-SHAPED

An L-shaped counter arrangement maximizes use of available space where elbow room is limited. The space you have can be all you need for a better instrument processing workflow.
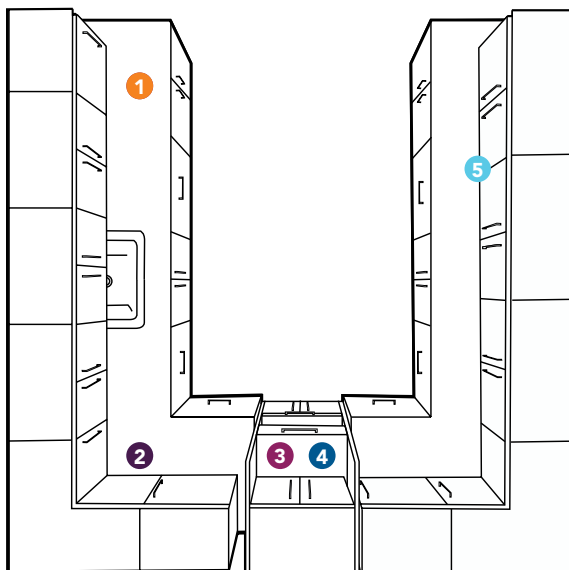
U-SHAPED

Multiple cleaners and sterilizers demand space—a U-shaped workspace design provides that and more. Ample surface areas allow more staff in the room to multitask and maintain a bustling workflow.
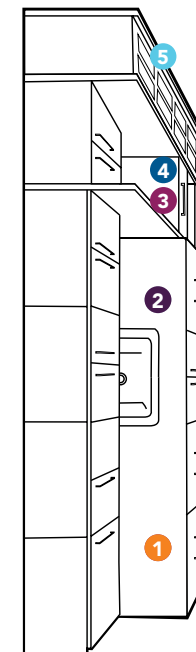
STRAIGHT LINE

Perfectly suited to the 5-step instrument processing flow, a straight-line workspace design is the picture of efficiency.

Synthesis® Color + Style Options

Synthesis Cabinetry offers different color and styling options to allow you to put your unique signature on a space, whether it is in one office or a multi-facility organization.
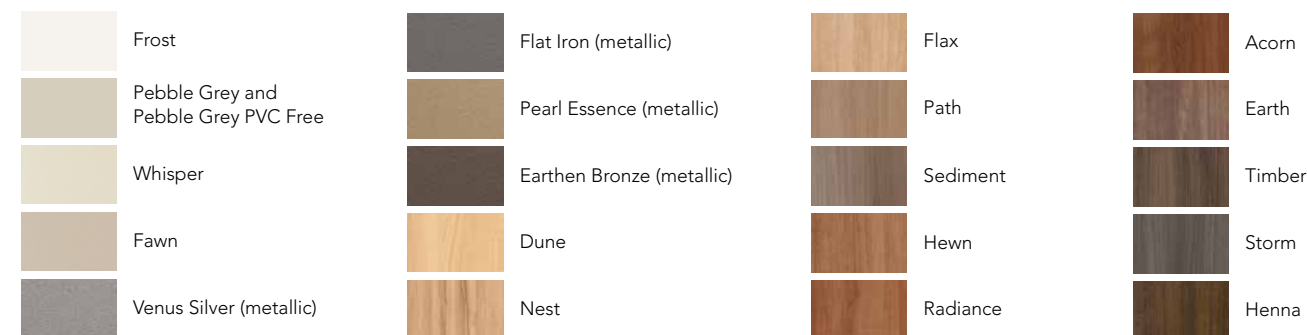
HANDLE STYLES

Arc	Flare	Bent and Anti-Microbial*	Bent	Edge

PANEL STYLES

Pinnacle	Serenity	Transcend	**Renew	Cove

CABINET FINISH

Frost	Flat Iron (metallic)	Flax	Acorn
Pebble Grey and Pebble Grey PVC Free	Pearl Essence (metallic)	Path	Earth
Whisper	Earthen Bronze (metallic)	Sediment	Timber
Fawn	Dune	Hewn	Storm
Venus Silver (metallic)	Nest	Radiance	Henna

*EPA Registration Numbers 84542-7 and 087753-CT-001
**Available in Pebble Grey or Pebble Grey PVC Free only

Midmark® Cabinetry vs. Local Millwork

Why Midmark? We can think of many reasons—and it all starts with a better design. The Synthesis cabinetry line is carefully designed and constructed with the clinical space in mind. We incorporate the functional features you will come to appreciate, such as full-extension drawers and asepsis-friendly surfaces that are easy to clean and maintain. We understand wanting to support the shop down the road, but local millwork alternatives are unlikely to match Midmark cabinetry solutions for quality, durability and design.

CABINET FRAME

01 Synthesis Cabinetry
- 18-gauge cold-rolled steel
- Modular design

02 Local Millwork
- Often made from 1/2" to 5/8" low-density particle board or various types of plywood
- Basic or limited designs

PANEL SUBSTRATES

01 Synthesis Cabinetry
- Medium-density fiberboard
- 3/4" panels

02 Local Millwork
- Low-density particle board
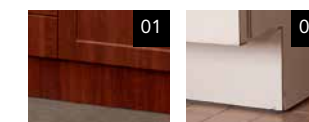- Various types of plywood

TYPES OF ASSEMBLY

01 Synthesis Cabinetry
- Mechanical fasteners (screws, pop rivets) and Tog-L-Loc® sheet metal joining system

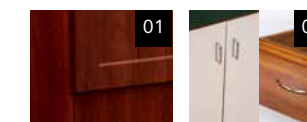**02 Local Millwork**
- Frequently use staple fasteners

DRAWERS

01 Synthesis Cabinetry
- Seamless, polystyrene drawers

02 Local Millwork
- Inside drawers are often varnished, painted or left unfinished

BASE MATERIAL

01 Synthesis Cabinetry
- Thermofoil over electrostatic, powder-coated painted steel (woodgrain and metallic colors)
- Electrostatic, powder-coated painted steel (solid colors)
- Integrated adjustable levelers

02 Local Millwork
- Basic plywood or particle board covered with laminate
- Wood shims used for leveling

FINISHES

01 Synthesis Cabinetry
- PVC thermofoil (woodgrain and metallic colors)
- PVC thermofoil and electrostatic, powder-coated paint (solid colors)

02 Local Millwork
- High-pressure laminate
  – Do not always follow proper application methods
  – May use low-grade substrate material
  – Less than 2 mm edgebanding
- Varnished, painted or left unfinished

DRAWER SLIDES

01 Synthesis Cabinetry
- Full extension ball bearing drawer system
- Secured to steel foundation

02 Local Millwork
- Typically use a single, undermounted runner (monorail glide) or slides common in kitchens (less durable)

HANDLES
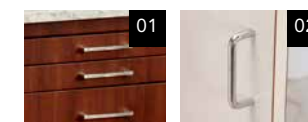
01 Synthesis Cabinetry
- Integrated and insert handle option
- Brushed nickel pull options
- Antimicrobial option

02 Local Millwork
- Most use "C" style pulls made of plastic or aluminum

Fabrication of local cabinets may vary. However, materials depicted are typical of local millwork cabinetry.

What You Get
With Midmark

PROVEN DESIGNS

Midmark instrument processing solutions are designed from the inside out to perform consistently throughout the life of the product. Our products do their job, so you can do yours.

EFFECTIVE TECHNOLOGY

What good is technology if it's not easy to use? Midmark instrument processing solutions are built to be simple to use right out of the box. And if you ever need help, we're here.

RELIABLE SUPPORT

You may not think about your instrument processing equipment until it goes down. But rest assured that if it does, we'll be there to get you back up and running quickly.

DESIGN SUPPORT

Whether you are building a new practice or remodeling your current instrument processing center, the prospect can be overwhelming. Our in-house design experts are ready to help you every step of the way, including partnering with your preferred dealer and working with existing floorplans and designs.
We can help you choose from a variety of designs, configurations and styles and all specific to your instrument processing needs. Let's design a better instrument processing experience.

SPECIFICATIONS

M11®

Length w/plug: 23.8" (60.5 cm)
Width: 17.8" (45.2 cm)
Height w/printer: 17.8" (45.2 cm)

Minimum Countertop Area:
17.8" W x 21" D (45.2 x 53.3 cm)

Chamber: 11" x 18" (28 x 45.7 cm)
6.5 gal usable volume (24.6 L)

Trays:
Two Large – 9" W x 15" L x 1.1" D
(22.9 x 38 x 2.9 cm)

Two Small – 6.6" W x 15" L x 1.1" D
(16.8 x 38 x 2.9 cm)

Pouch Rack: 6 slot

Unit Weight: 99 lb (44.9 kg)
Shipping Weight: 131 lb (59.4 kg)
Water Reservoir Capacity: 1.4 gal (5.3 L)

M9®

Length w/plug: 20.4" (51.8 cm)
Width: 15.3" (38.9 cm)
Height w/printer: 15.8" (40.1 cm)

Minimum Countertop Area:
15.3" W x 17.9" D (38.9 x 45.4 cm)

Chamber: 9" x 15" (22.9 x 38.1 cm)
3.5 gal usable volume (4.1 L)

Trays:
Two Large - 7.3" W x 12" L x 0.8" D
(18.6 x 30.5 x 2.2 cm)

Two Small - 5.6" W x 12" L x 0.8" D
(14.3 x 30.5 x 2.2 cm)

Pouch Rack: 5 slot

Unit Weight: 73 lb (33.2 kg)
Shipping Weight: 81 lb (36.7 kg)
Water Reservoir Capacity: 1.1 gal (4.1 L)

M9 + M11 ELECTRICAL REQUIREMENTS

115 VAC, 50/60 Hz, 15 A Single Phase
115 VAC has 1,425 W tubular
immersion heater

ALL RITTER® STERILIZERS

Meet the requirements of ASME Boiler
and Pressure Vessel Code

Canadian Registered – CRN number
is available

Recommend a separate (dedicated) circuit

1 Year Limited Warranty

M3™

Length w/plug: 22" (55.9 cm)
Width: 17.8" (45.2 cm)
Height: 6.9" (17.5 cm)

Minimum Countertop Area:
22" W x 24" D (61 x 55.9 cm)

Chamber:
12.1" L x 7.6" W x 1.6" H
(30.7 x 19.3 x 4.1 cm)
0.49 gal usable volume (1.8 L)

Trays:
7.25" W x 11.25" L x 1" D
(29.8 x 18.4 x 2.5 cm)

Unit Weight: 71 lb (32.2 kg)
Shipping Weight: 80 lb (36.3 kg)
Water Reservoir Capacity: 1.2 gal (4.5 L)

M3 ELECTRICAL REQUIREMENTS

115 VAC, 50/60 Hz, 12 A
Single Phase

Heater power: 1,400 W
Maximum Power Consumption:
1,400 W

QC1 ULTRASONIC CLEANER

Tank Capacity 1.2 gal (4.5 L)
Length: 13.5" (34.5 cm)
Width w/drain: 10.2" (26 cm)
Height: 10.4" (26.5 cm)
Tank Size: 11.8" L x 5.9" W x 5.9" H
(30 x 15 x 15 cm)
Tabletop Unit Weight: 12.7 lb (5.76 kg)
Tabletop Shipping Weight: 14.6 lb (6.64 kg)

QC1 ELECTRICAL REQUIREMENTS

Input: 115 VAC +/-10%, 60 Hz, 110 W,
1.0 A
Output: 100 W

QC3/QC3R ULTRASONIC CLEANER

Tank Capacity: 3.3 gal (12.5 L)
Length: 14.7" (37.5 cm)
Width w/drain: 16.5" (42 cm)
Height: 10.4" (26.5)
Tank Size: 13" L x 11.8" W x 5.9" H
(33 x 30 x 15 cm)
Tabletop Unit Weight: 18.6 lb (8.42)
Tabletop Shipping Weight: 20.9 lb (9.5 kg)
Recessed Unit Weight: 22.3 lb (10.10 kg)
Recessed Unit Shipping Weight: 24.6 lb
(11.18 kg)

QC3/QC3R ELECTRICAL REQUIREMENTS

Input: 115 VAC +/- 10%, 60 Hz, 210 W,
1.8 A
Output: 200 W

QC6/QC6R ULTRASONIC CLEANER

Tank Capacity: 6.6 gal (25L)
Length: 21.6" (55 cm)
Width w/drain: 16.5" (42 cm)
Height: 14.3" (36.5 cm)
Tank Size:19.8" x 11.8" x 7.8"
(50.5 x 30 x 20 cm)
Tabletop Unit Weight: 29.6 lb
(13.44 kg)
Tabletop Shipping Weight: 32.6 lb
(14.78 kg)
Recessed Unit Weight: 32.9 lb (14.92)
Recessed Unit Shipping Weight: 35.8 lb
(16.26 kg)

QC6/QC6R ELECTRICAL REQUIREMENTS

Input: 115 VAC +/- 10%, 60 Hz, 410 W,
3.6 A
Output: 400 W

M9/M11 ACCESSORIES + SUPPLIES:

9A599001 Thermal Printer
002-2108-00 6 Slot Pouch Rack
002-2108-01 5 Slot Pouch Rack
9A307001 Cool Hand Tool
002-0396-00 Speed-Clean, 1
(16 oz/0.47 L) bottle
002-0396-05 Speed-Clean
Case – 12 bottles
9A586002 Double VistaCool Unit
9A682001 Sterilizer Data Logger
002-10502-00 Data Logger USB Device

M3 ACCESSORIES + SUPPLIES

9A401001 Printer
9A404001 Top Cover Protector
9A402001 Door Tray
9A586001 Single VistaCool Unit

QUICKCLEAN ACCESSORIES + SUPPLIES

9A612001 QC1 - 2 Beaker Accessory
9A613001 QC3/QC3R - 4 Beaker
Accessory
9A614001 QC6/QC6R - 6 Beaker
Accessory
9A296001 Midmark General
Purpose Cleaner (32 oz)
9A298001 Midmark Enzymatic
Cleaner (32 oz)
9A297001 Midmark Tartar and Stain
Remover (32 oz)
002-10007-00 QC1 Safety Basket
002-10008-00 QC3/QC3R Safety Basket
002-10009-00 QC6/QC6R Safety Basket

SOURCES

1 https://www.cdc.gov/hai/patientsafety/patient-safety.html

2 https://journals.sagepub.com/doi/10.1177/003335490712200205

3 https://www.cdc.gov/infectioncontrol/guidelines/disinfection/sterilization/sterilizing-practices.html

Designing better care.™

midmark™