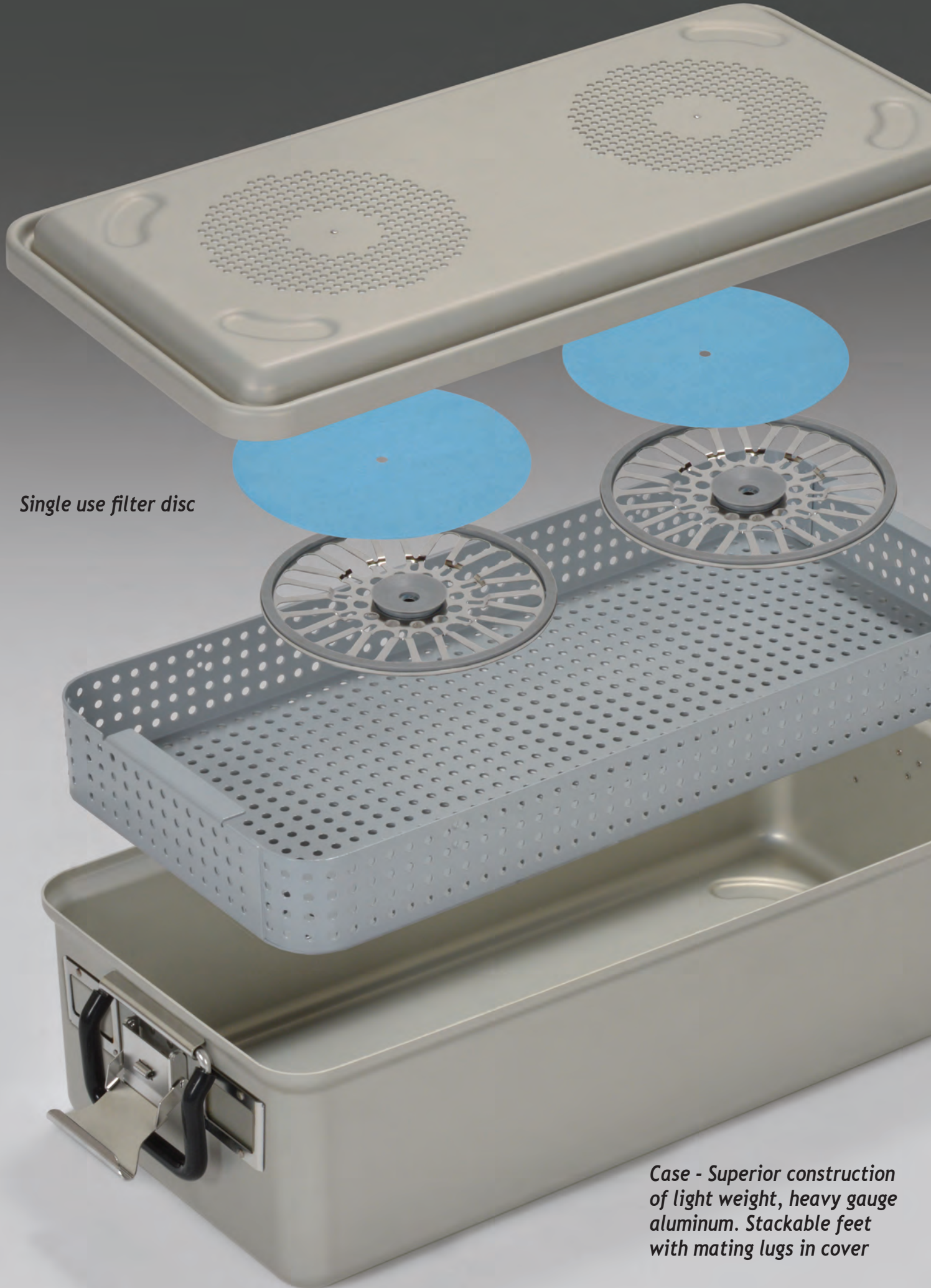


JEWEL RIGID CONTAINER



MODULARIZE | ORGANIZE | STERILIZE



Single use filter disc

Case - Superior construction of light weight, heavy gauge aluminum. Stackable feet with mating lugs in cover

JEWEL RIGID CONTAINER SYSTEM

Introduction

Jewel Precision is proud to introduce its new line of sterilization containers. The Jewel Reusable Rigid Sterilization Container is a 510k cleared product which offers the health care community a simple and dependable system for managing instrument processing, storage, and transport.

An Integrated Approach to Reusable Rigid Containers

The demand for reusable rigid sterilization containers has risen substantially in the last few years. As health care facilities implement new green initiatives one growing trend has been the elimination of sterile blue wrap from their waste stream. The alternative has been reusable rigid container systems which utilize filters to allow sterilization of medical devices inside the container. One of the shortcomings of using such a system are the rudimentary perforated baskets that are offered along with most rigid containers. Jewel Precision bridges the gap with high quality cassettes designed specifically to integrate with Jewel rigid sterilization containers.

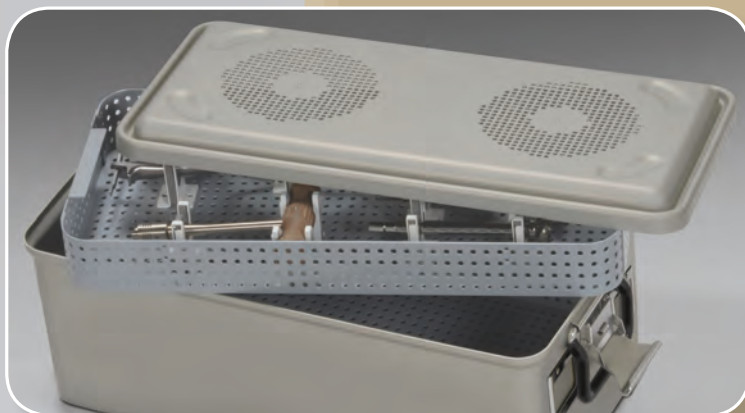
The Jewel Edge

- Single source case provider
- Internal high quality cassettes
- Effective cost reduction solution through the elimination of blue wrap
- Add graphics to case for better brand recognition in health care facilities
- Satisfies the increasing demands from health care facilities requiring reusable rigid container solutions for use with loaner instrument sets

Lid Design -
Constructed for
easy maintenance
and durability

Retention Plate &
Silicone Gasket

Perforated Tray
available in anodized
aluminum or nylon
coated finish



SAFE / COST EFFECTIVE REUSABLE CONTAINER SYSTEM

There are two common approaches for sterilizing & storing surgical instrument systems: Reusable rigid sterilization containers & blue wrap. Blue Wrap which is typically made of cellulose or polypropylene, is initially less expensive to purchase. It is designed for single use only, after which it must be discarded as medical waste. Depending on usage, blue wrap can account for up to 19% of all waste for a health care facility. Another common issue with blue wrap is the risk of the fabric being ripped or punctured during transport and handling, resulting in the need to re-wrap and re-sterilize the load.

Rigid containers are made from aluminum with stainless steel fittings. While the initial cost is higher, a rigid container can last many years when properly maintained compared to one procedure with use of single use blue wrap. The use of reusable rigid containers will result in a substantial reduction in waste and cost when compared to single use products. Other benefits of rigid containers are:

- Saving time and cost by eliminating the blue wrapping procedure, and reducing the risk of puncturing the blue wrap.
- A rigid container that protects valuable instruments & implants
- Easy to store and stack securely
- Safer to transport and carry with silicone covered stainless steel handles.



GREEN INTIATIVE to minimize waste stream

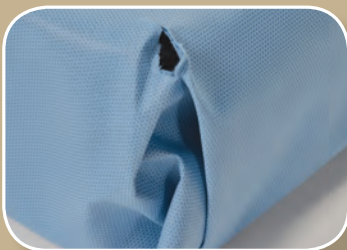
Roughly 19% of surgical services waste stream is from sterile blue wrap, which must be purchased for each new sterilization cycle. Blue wrap is not reusable and not always cost effective to recycle.*

(* Source: Healthcare Purchasing News, April 2008)

A compromise of the sterile boundary could lead to delays and added reprocessing costs

Blue Wrap is bulky and must be disposed of as medical waste after use. The excess material is wasteful and not cost effective.

Jewel Precision's blue sterilization filter discs are cost effective because they reduce medical waste disposal cost.



Cases wrapped using Blue Wraps are susceptible to tears and pinhole punctures by foreign objects.



Case Studies

Single-use, disposable sterile wrap, comprises approximately 19% of the OR waste stream. While many institutions are investigating mechanisms to recycle the prolific material, a number of leading hospitals reduce this expense by utilizing reusable sterilization containers.

- MetroWest Medical Center, Framingham, Mass., purchased 211 containers and achieved a 40% return on its \$75,000 capital investment within 1 year by avoiding \$29,843 in purchase and waste disposal costs for disposable sterile wrap.

- Mills-Peninsula Medical Center in Burlingame, Calif. also estimated an additional annual savings of \$26,000 in rewrapping costs for torn blue wrap sets. Other benefits include better instrument retention, improved workflow, and decreased turnover time in the Sterile Processing Department. -

(OR Nurse Journal - January 2014)

- BCH has saved over \$1 million in avoided supply costs since 2003 as a result of the program.

(Kai Abelkis, Sustainability Coordinator, Boulder Community Hospital, Boulder, CO)



The blue material wraps around the case which makes it bulky and hard to handle, the material can easily unwrap or be torn.



With the blue filters installed inside the case, the case is easy to carry and maintains sterility of contents until use.

Sterilization

The Jewel Precision Reusable Rigid Sterilization Container System is designed to be sterilized using a Pre-Pulsed Vacuum Steam Sterilization Cycle. Bench Testing has been performed on the Jewel Precision Reusable Rigid Sterilization Container System, fully loaded with reusable surgical instruments. The as tested tray weight was 25 pounds. The testing was conducted to meet the requirements for Pulsed Pre-Vacuum Sterilization at 270°F for 4 minutes (ANSI/AAMI ST77:2013); to specify procedures and acceptance criteria to validate Pulsed Pre-Vacuum Sterilization processes (ANSI/AAMI ST79:2010 & A1:2010 & A2:2011 & A3:2012 & A4:2013), and to verify that the Jewel Precision Reusable Rigid Sterilization Container System, fully loaded with reusable surgical instruments, meets moisture gain requirements when sterilized using full cycle sterilization processes published in ANSI/AAMI ST79:2010, A1:2010 & A2:2011 & A3:2012 & A4:2013, AAMI TIR 12:2010, and ANSI/AAMI/ISO 17665-1:2006.

Testing concludes that in single level (non-stacked) configuration, and that in two level (stacked) configuration within the autoclave, in three Pre-Vacuum sterilization cycles, 2 minutes @ 270°F was sufficient to sterilize the BI's in the Jewel Precision Reusable Rigid Sterilization Containers. Since these were half cycle validations, the 4 minute full cycle exposure time will provide the required sterility assurance level (SAL) of 10⁻⁶. This validated time of 4 minutes exposure is the minimum time recommended for the 270°F Pre-Vacuum autoclave cycles in AAMI ST79 for wrapped instruments.

Testing also concludes that the Jewel Precision Reusable Rigid Sterilization Container meets the criteria for the 270°F Pre-Vacuum sterilization cycle with a 4 minute cycle time and a 30 minute drying time in a single container, and in a stacked configuration of two containers. There was no evidence of moisture within the sterilized container and instruments.

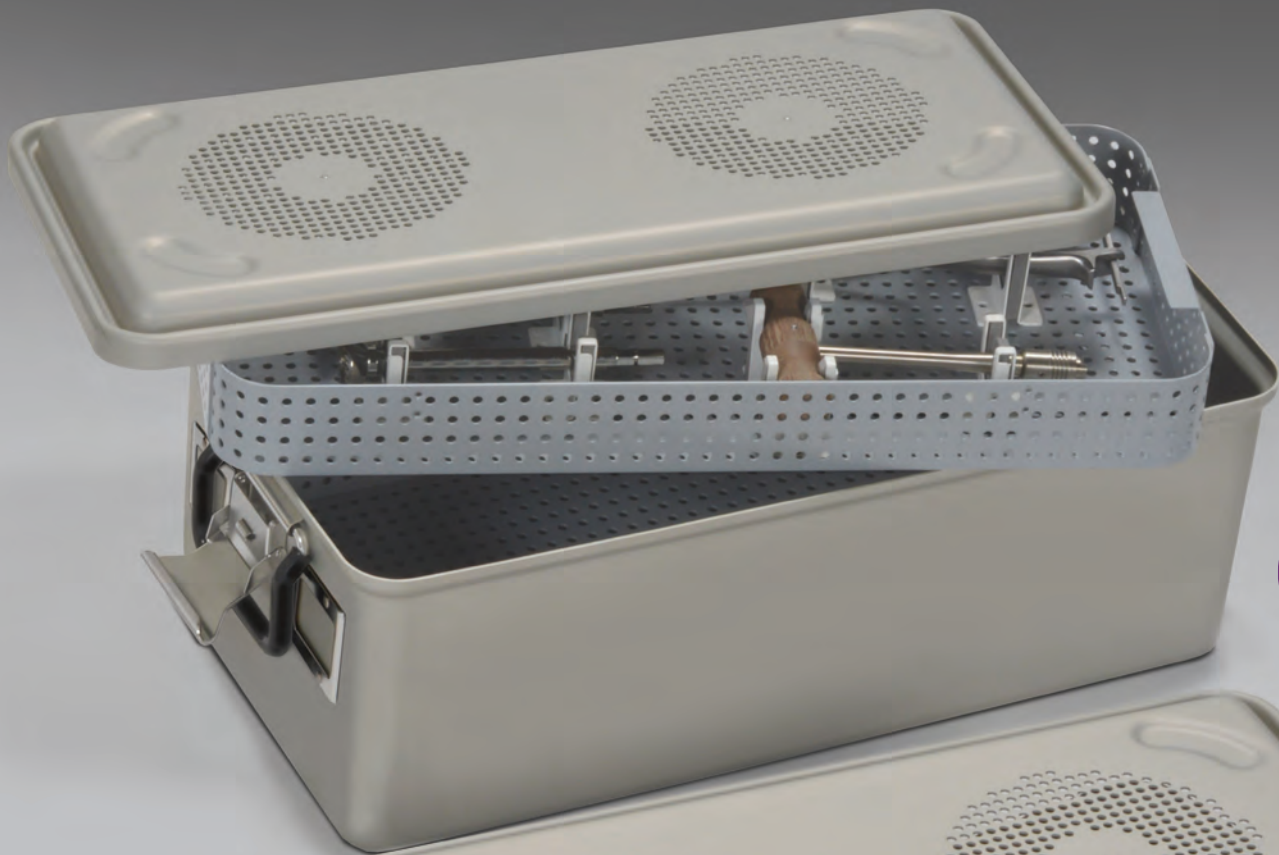
Validated Sterilization Parameters:

Method	Temperature	Exposure Time	Drying Time
Pulsed Pre-Vacuum Steam	270°F / 132°C	4 Minutes	30 Minutes

Cleaning and Reprocessing

Quantitative Protein and Hemoglobin and Recovery Efficiency was performed on Jewel Precision Reusable Rigid Sterilization Containers. A 100 cycle sterilization and worst case cleaning (both automated and manual) test protocol, concludes that both manual and automated cleaning methods were found to be effective. The Jewel Precision Reusable Rigid Sterilization Containers were visibly clean after each cycle. Protein and hemoglobin was not detected after 1, 25, 50, 75, and 100 cycles, and all acceptance criteria were met.

Jewel Precision
The Artists of the Industry



6"



*Lids, trays and cases
can be ordered in
custom colors*





Tamper evident container locks insure sterile integrity is maintained.



Load data card to track inventory, expiration date, etc.

- One step filter retainer operation allows for quick filter change.
- Secure retainer lock prevents accidental release.
- Contiguous seal between filter and lid.
- Alignment post on lid to ensure proper filter placement.
- Distinct click to secure placement on lid.



Stainless Steel sterile filter retainer.

ACCESSORY COLLECTION

Easily organize and protect your instruments with Jewel Precision's accessory systems.

Caution: Use Only Genuine Jewel Precision Replacement Parts.

Silicone Mat

- SI-015 041 Full Mat, 042 3/4 Mat, 043 Half Mat
Sizing Varies (Contact for Sizes).

Miscellaneous Implant Container

- SI-030 2" x 3" x 1.375", 51mm x 77mm x 35mm
Holds screw lengths up to 65mm.

100-0003. Disposable Filters
Single use only.

100-0004. Filter Retainer with Gaskets.
OEM Replacement part. Electro polished stainless steel with silicone gaskets and integral latch.

100-0005. Cover with Gasket. OEM Replacement part. Anodized aluminum perforated with sterilization vent holes, silicone gasket, and stainless steel latch pins for Filter Retainer.

100-0006. Load Data Cards. Identify container contents; keep track of inventory. Single use only.

100-0007. Container Lock.
Tamper evident plastic with frangible locking mechanism. Single use only.



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