



CONTAINERS AS EASY AS YOU THINK?

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Protection against evil spirits!

How containers started



Early in the twentieth century, chrome-plated containers were produced for the safe transport of sterile instruments.

At first it was common practice to keep all the sterile goods that were to be used throughout one day in a small number of containers.



The New Standard for Medical Packaging EN ISO 11607

- **Sterile Barrier System**

 - = Minimum package that prevents ingress of micro organisms and allows **aseptic** presentation of the product at the point of use

- **Protective Packaging**

 - = Configuration of materials designed to prevent damage to the sterile barrier system and its contents from the time of their assembly until the point of use

- **Packaging System**

 - = Combination of the sterile barrier system and protective packaging

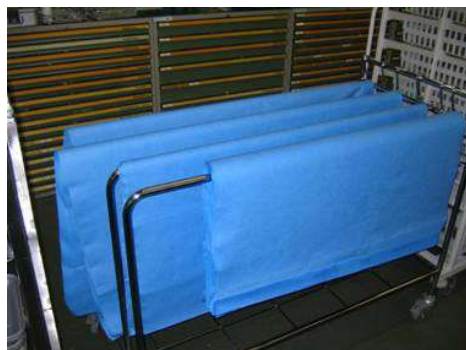
The New Standard for Medical Packaging EN ISO 11607 Sterile Barrier Systems



Sterile Container



Wrapping



Wrap needs extra protection



1st sheet = barrier system +
2nd sheet = protective packaging
= packaging system



Sterile containers belong to the group of **preformed sterile barrier systems** and are defined as **“rigid sterile barrier systems designed to be repeatedly used.”**

- Due to their constructive details **Sterile Containers offer both: the sterile barrier system and the protective function**
- Sterile containers **can be used, and are most commonly used, without wrapping the instrument tray inside.**



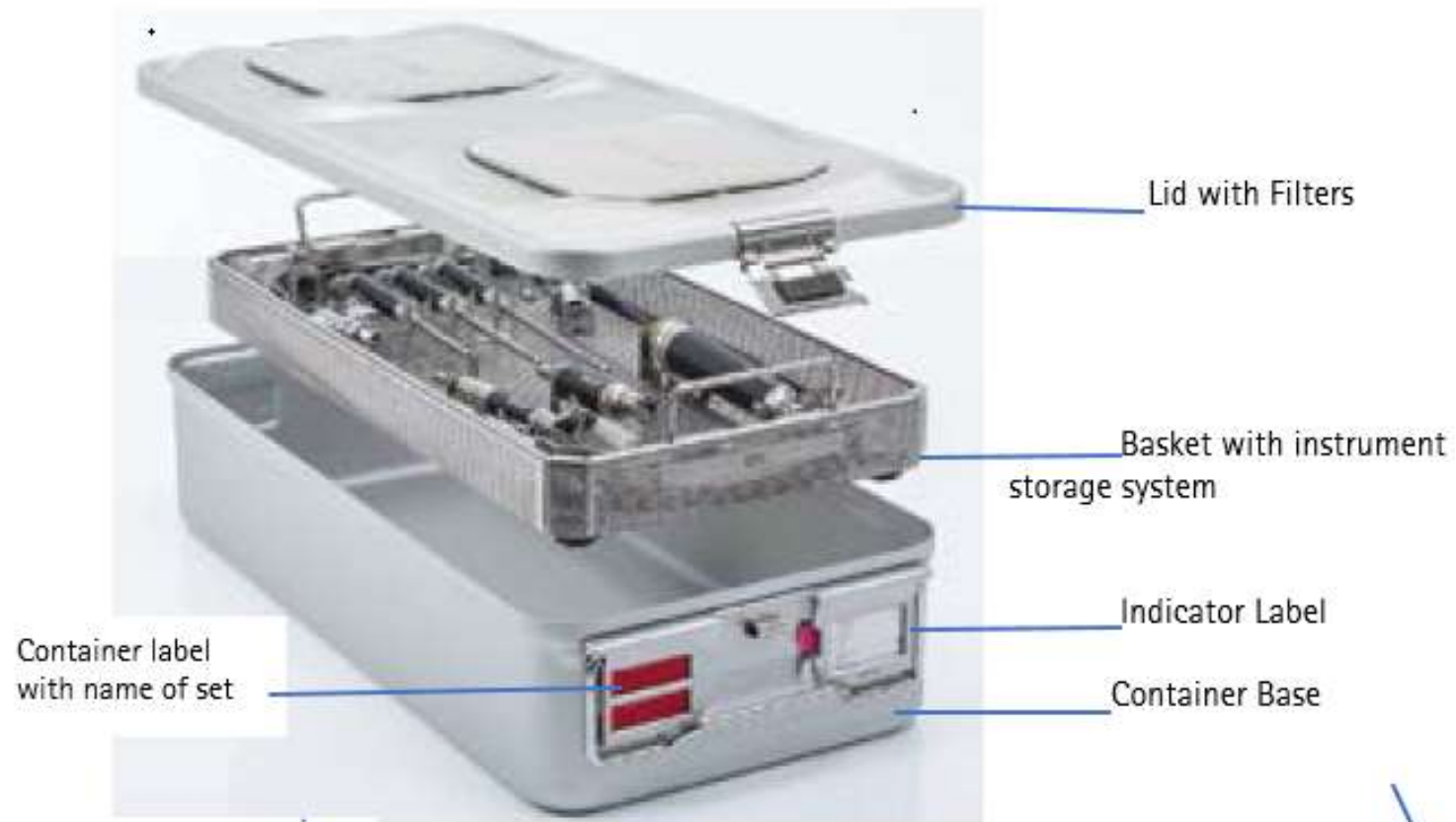
The first containers, as we know them today, were developed in Tuttlingen. Germany in 1960s.

These were the first containers made in anodized aluminium.

Aluminium provides optimal heat transference.

The lightweight anodized aluminium allows for easy handling and stacking.





Labyrinth system used by some container manufacturers.



Filters





The Plastic Lid

Plastic lids should only be purchased
If the hospital has an instrument
Washer and the final rinse cycle has no
Rinse Aids.

Tensides in the cleaning solutions remain
on the plastic lid and the heat of the autoclave
causes a reaction which makes the plastic
brittle and shortens it's lifespan as it cracks
Easily.



- Clasps must be sturdy and have a strong closure
- Clasps on the lids assist with removal of the lid by the circulating nurse
- Filter retainers must be easy to attach and remove
- Silicone gaskets must be firmly in place and be replaceable

Solid Base versus Perforated Base



Solid base for Pre-vacuum Cycle Sterilisation



Perforated base with Filter retainers
Used for Displacement Autoclaves



- Easy method of Identification
- Indicator label for recognition of having passed through the sterilisation cycle
- Method of locking the container so that tampering can be noticed.
- Handles with a 90° stop so that fingers can not be trapped.

Baskets – what to look for.....



- Made of Stainless Steel
- Number of different sizes and types to cover all theatre needs
- Easy to grip handles which lock in position
- DIN size – can be used in the instrument washer
- Close meshed side walls to prevent damage and breakage of fine instrument tips
- Smooth surfaces for preventing damage to surgical gloves
- Lids for protection of fine instruments.



Cleaning of Containers

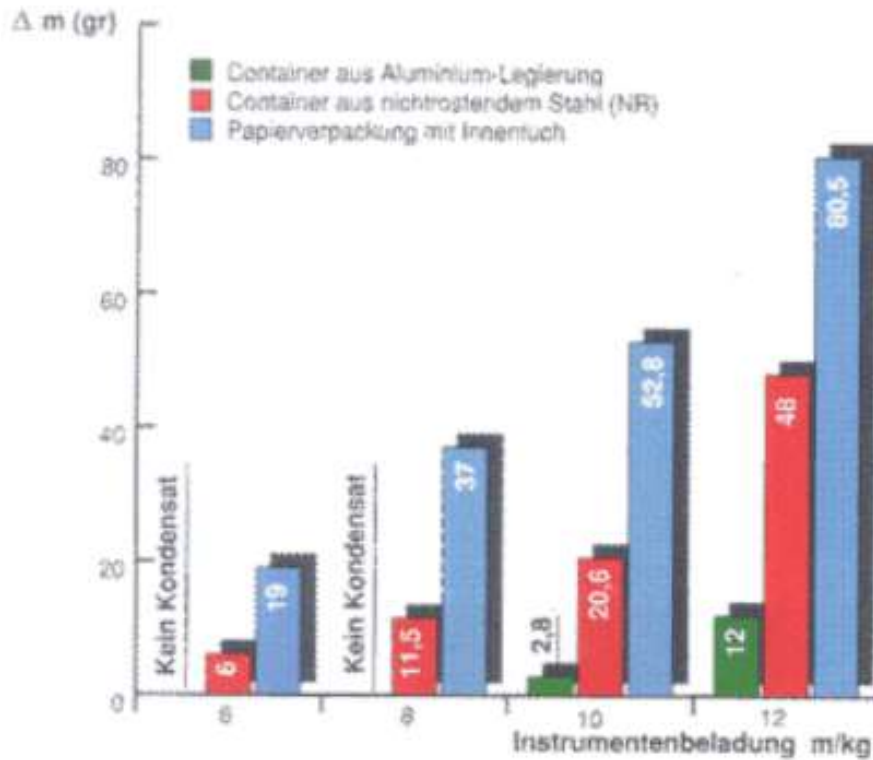
- Second Prize – Instrument washer.
- First Prize – Instrument washer with a Container Rack
- Aluminium cannot be washed in a highly alkaline or acid solution. – Must be pH neutral solution
- Instrument washer must therefore be able to have a container cycle where a different solution from that used in the instruments – depending on the pH balance.
- As with Instruments, containers can be hand washed, however it must be noted that hand washing does not leave items disinfected merely clean. – Disinfection renders items safe for handling.
- If containers are removed from the theatre before the start of the procedure, they may be wiped down with 70% alcohol with the understanding that the contact must be for 1 minute.
- 70% alcohol does kill CRE (carbapenem-resistant Enterobacteriaceae)

Sterilisation

- Textile Cycle - Packs - Drying cycle has air pulse injections
- Container Cycle – Drying cycle has steam pulse injections
- **Not all South African Manufactured Autoclave differentiate in this way.**

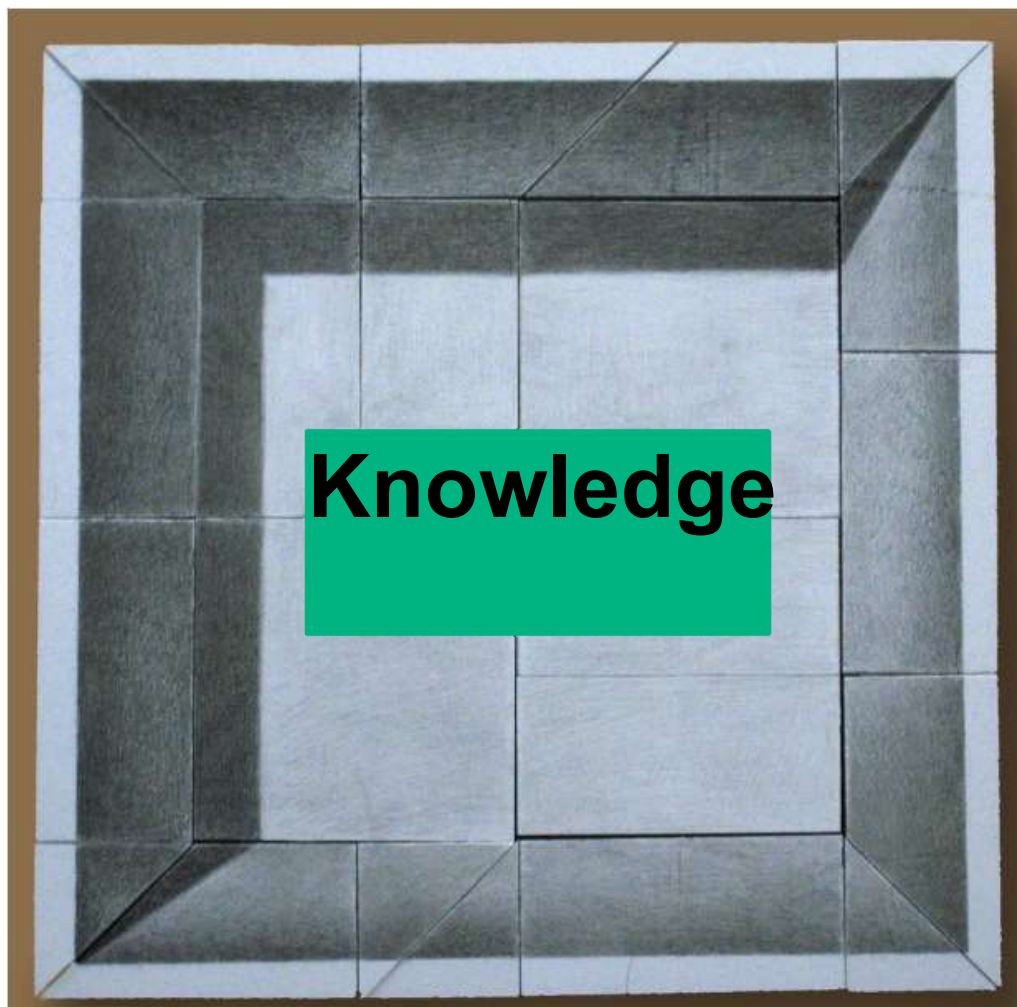
Tabelle 3: Restkondensat in Abhängigkeit von dem Instrumentenbeladungsgewicht bei verschiedenen Verpackungsarten (Mittelwert)

Residual condensate over instrument load weight for various types of packaging



Excellent drying properties of aluminium containers







THANK YOU
FOR YOUR TIME

Back Up