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## Description of CSSD Process

The regional hospital Horsens uses different types of packaging systems in their process. For many years they have mainly been using sterilization containers in two different designs:

- Containers with single use seals and single use paper filters
- Container microStop® with lifetime barrier system and reusable process indicator

The containers are only used for sterilization and storing/transporting of sterilized items. They are not used for any contaminated transports.

Especially the use of microStop® containers satisfy their needs, facilitate their daily work and give them the possibility to save a big amount of money each usage.

For reprocessing they are doing the following steps:

- Washing and disinfection in cabinet washers (scanzon chemicals) with 80 °C in the cleaning phase and 10 minutes exposure time.
- The sterilizers are especially programmed for the microStop® containers with MMM sterilizers and are fractionated drying phase for optimal drying results

All the containers are generally used for handling of sterilized items. The contaminated products are transported back in other closed boxes. All items like bottom, lid and the microStop® disc are separated for cleaning and disinfection.

The microStop® container system was purchased in 2003. So the hospital has now been using the container system for a long period of 13 years and they still like the system. Especially the easy handling procedures due to routine checks and controls facilitate their daily work. After cleaning and disinfection, the different parts (lid, bottom, microStop® disc) are checked for any deformation or cracks. Especially the easy routine control of the microbial barrier saves time in packing the system and gives a 100% security back to them. After packing and closing the container, it is labeled and the red/green-indicator is checked for its correct position.

The following process data gives an overview about the amount of reprocessing cycles:

Data description	Value
microStop® containers in total	180 pieces
Production days/year	225 days
microStop® containers reprocessing per day	40 pieces
Turnaround of containers all containers a day	17,78 %
Total container cycles within a year	9.000 cycles



## Economical reasons for microStop®

Beneath the handling aspects the microStop® container system is designed to reduce additional costs in the reprocessing of the CSSD.

With the fact that our system doesn't need any disposable materials for the sterilization process no consumables are applied. **This itself saves Horsens money of 4.000 Euros (29.900 danish Krone) within a year. Over the usage time of 13 years, this means total savings of 52.000 Euros.**

Moreover, no consumables during the process mean that our customer is able to create shorter and more efficient processes. This saves time and resources and leads to less costs for the process and qualified human resources.

KLS Martin has designed the container system in order to avoid any kind of further maintenance costs. The small number of normative maintenance can be done by the customer himself with the help of our maintenance schedule in the instructions for use. And if there has to be repaired something it's easy and fast for us to repair it. Horsens registered during the whole usage time of 13 years 1 broken handle and 2 broken lids. Maximum reliability!

The lifetime working parts of the microStop® system provide short amortization and a long service life as well. 13 years of usage in Horsens is a good sign of product reliability in the sterilization process of hospitals. Giving maximum security to staff and patients.

If finally a comparison between microStop® and the other container system in Horsens is made, due to low maintenance and process running costs, the microStop® system show its financial performance. After 5 years of usage in Horsens the higher investment of a microStop® container system is amortized compared to the container system with single use materials. Since 2008, Horsens is financially gaining every day when using microStop®. Moreover, even a complete exchange to new containers during the last 13 years wouldn't have influenced the financial situation negatively.



*"Yes the container maybe heavier as wrapped items. But we don't have to lift them so often especially in case of rupturing the wrapping material. Additionally the aseptic removal even without inner packaging is quite easy und helps us saving money."*

Helle Nielsen, CSSD and OR Manager



If you can rely on one thing, it is our sterilization containers.

Provided they are regularly inspected, they will provide faultless, enduring service for many years – without any compromises.

To see how you can play it safe, please have a look

[www.klsmartin.com/check](http://www.klsmartin.com/check)



## Responsibility towards users

The microStop® containers set the highest standards in process security and reproducibility. In terms of validating processes an outstanding feature for the regional hospital in Horsens.

The lid is made of PPSU and will not deform due to wear and tear compared to a metal lid. If there is something possible insecure related to maintaining sterility, the lid will obviously show it, since it will break or show damaged parts if there are any critical irregularities.

The bottom is made of thick aluminium sheets. The special geometry and the bordered rim bring highest possible stability to the container. So, perfectly made for daily wear and tear. Due to the absence of single use materials, the packing procedures are faster and easier. This gives more time for other topics like proper care of surgical instruments. Horsens is additionally using blue handles for logistic purpose. A perfect addition for all complex logistic tasks in reprocessing medical devices.

Finally the easy way to do routine checks, show the integrity of the microStop® container even after multiple years of use. This was finally published in Central Sterilization Service Issue 03/2015. For more information just scan the code on the left side.



*"Environmental protection concerns all of us. Whenever we can, we choose products where resources are spared and volume of waste is reduced."*

Helle Nielsen, CSSD and OR Manager

## Responsibility towards environment

Our system is a prime example regarding ecological aspects. We abstain from paper filters, plastic seals and even additional wrapping materials like Horsens is doing it.

During the usage time of 13 years the hospital has been saving around **175.500 paper filters** and **234.000 single use plastic seals**. A lot of trees have survived, about **2 barrels of oil** have been saved for the production of the plastic seals and finally don't forget the saved resulting waste of around **1,2 tons**.

But not only the customer can contribute to ecology with the microStop®. Every chain link of the value added process regards ecological topics. From efficient production line and workstations to the targeted use of packaging materials, which are mostly manufactured from recycled paper, KLS Martin already makes their contribution during the value added process to a sustainable environment. And if the product reaches it's end of life, the product can be disposed dismantled, so all parts can be recycled.

More environmental thinking is not possible!

Change to process security and join the sustainable success story by choosing microStop® and KLS Martin



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