

Recommendations by the Quality Task Group (33) Mesh Trays and Their Implications for Successful Cleaning in the Washer-Disinfector

Clean instruments are a precondition for safe disinfection and sterilisation. The cleaning performance in a washer-disinfector is a function of the mechanical action, chemical products, hold time and temperature, which must be tailored to the type, quantity and degree of drying of the items being cleaned as well as to the detergent.

Apart from the quantity and type of load, the design of the → **MESH TRAYS** also has implications for successful cleaning in the washer-disinfector and for how easily they can be handled in everyday practice.

→ **THE DESIGN OF THE MESH TRAYS** has implications for successful cleaning

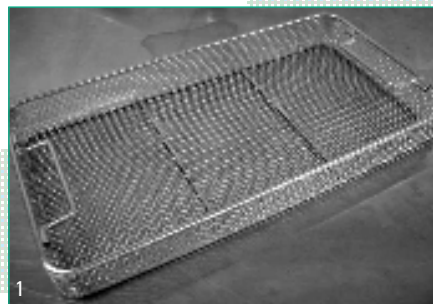
Wire mesh tray (Figure 1–3)

Advantages:

- Water gains uniform access to all items being cleaned
- Little spray shadowing
- Easy to handle when loading washer-disinfector

Disadvantages:

- Risk of injury posed by detached wires
- Instruments can fall out through the meshed network at the sides
- Different mesh sizes produce cleaning and drying results of varying quality



Perforated plate tray (Figure 4 and 5)

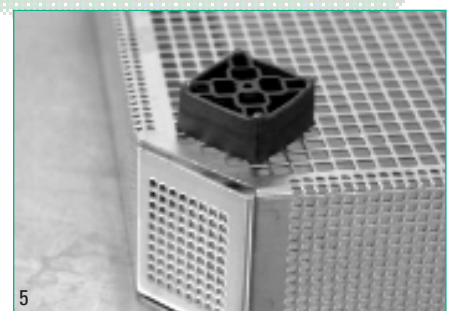
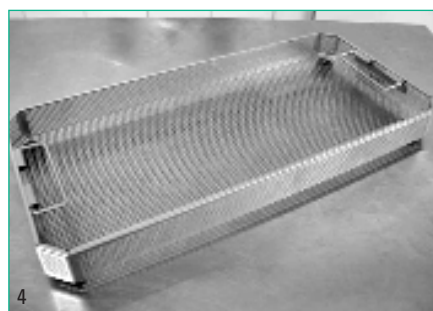
Advantages:

- High mechanical strength, hence little risk of injury when handling
- Less chance of instruments falling out

Disadvantages:

- Coarser tissue residues become trapped in mesh tray
- Spray jet interrupted
- Adverse effect on drying
- Not possible to slide in by its legs when loading the washer-disinfector
- Legs sticking out from soft packaging
- The smooth inner surface hampers packing, and instruments slip easily

TIP: Rectangular legs can be replaced with semi-round ones, or be fully removed. There are also mesh trays available which have no legs



Storage tray (old) (Figure 6)

- Not suitable for processing medical devices in the washer-disinfector



Plastic trays (Figure 7 and 8)

Advantages:

- Ideal fit for storing instruments

Disadvantages:

- Ideal fit adversely affects cleaning results
- The number of perforations is generally not enough for cleaning

Protective systems for delicate instruments (Figure 7 and 8)

Different mats and retaining systems

Advantages:

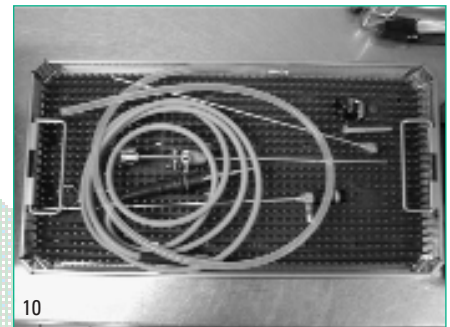
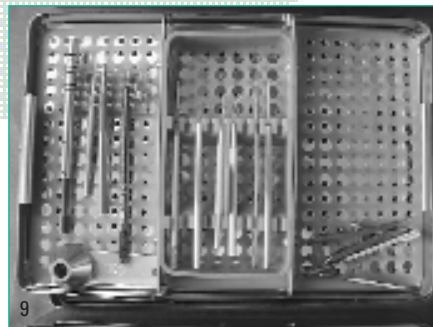
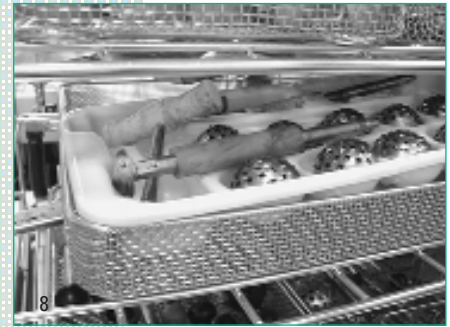
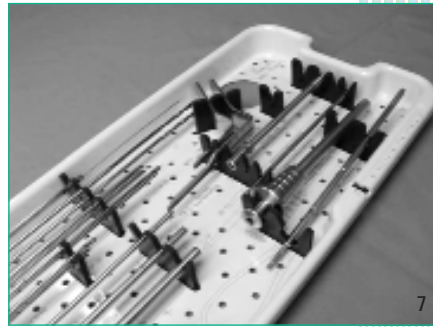
- Anti-slip storage
- Protect against damage
- Secured with knobs or bars
- Clear layout of tray

Disadvantages:

- Spray shadowing from below, depending on size, arrangement and number of holes
- Poor heat conductors
- Water stagnation, thus possible entrainment of chemical products
- Adverse effect on drying

Instructions for use:

- Use as few silicone mats as possible
- Do not use on all surfaces
- Sizes can be individually matched by making cut-outs



Conclusion:

To optimise the cleaning results, the choice of mesh trays and storage aids should not be underestimated.

When purchasing new mesh trays the advantages and disadvantages outlined above should be borne in mind. One should also bear in mind the different weights of the mesh trays on offer as well as their dimensions in respect of the washer-disinfector and containers.

Before validating washer-disinfector processes, the → **CHARACTERISTICS** of the mesh trays and retaining systems should be taken into account, and efforts should be made to optimise these.

By focusing on the quantity and type of load, the topics addressed in this article will be continued in one of the forthcoming editions of *Central Service*.

Any suggestions or contributions to discussion are always most welcome!

→ **THE CHARACTERISTICS** of the existent mesh trays and retaining systems should be taken into account