AESCULAP Aicon[®] baskets (JJ series) – gently receiving your surgical instruments SCIENTIFIC INFORMATION

Instrument baskets are receiving vessels for surgical instruments and other medical devices. These are valuable assets for a hospital, therefore, they should be processed as gently and efficient as possible. Instrument baskets enable machine cleaning/ disinfection, packaging in a sterile barrier system and sterilization, as well as aseptic presentation in the operating room. Protecting the instruments on their journey from and to the OR is of crucial importance. The instrument organization system Aesculap InOS® may be used optionally with the AESCULAP Aicon® baskets to facilitate storage, especially of delicate items.



To verify stability and endurance of the AESCULAP Aicon[®] baskets the following tests were performed:

TEST



Stack pressure test based on DIN 58952-3:2012-4

1/1 basket is loaded with a weight of **10 KG** (hexagonal screws) and stacked on a second 1/1 empty basket. The test is carried out on baskets equipped with a suitable lid and without a lid. The holding time is **10 minutes**.

RESULT



No visible deformation and/or damage



Stacking stability

1/1 basket with **10 KG load** is stacked on an empty 1/1 basket with a lid. By means of a hook spring scale, the stacked basket is pulled longitudinally/diagonally/transversely with **40 N**.

Baskets show **no** deformation, baskets stacked safely with **no** uncontrolled slipping



Bearing load based on DIN 8952-3:2012-4

Basket loaded with **35 KG** is lifted by a tensile testing machine by 20 mm and held for 10 minutes.



No visible deformation and/or damage



Stability of closing mechanism of basket lid

The closing mechanism of the lid underwent 500 reprocessing cycles (ultrasonic bath, automated washing/disinfection, steam sterilization) followed by 1,500 snap in and release cycles.

No visible deformation and/or damage

An extensive investigation regarding the cleaning and drying performance was carried out by Dr. Gerhard Kirmse and Marcel Graf and published in the "Zentralsterilisation/Central Service – Volume 29 – 1/2021: "Comparison of the cleaning and drying performance of different instrument tray designs and accessories". This document is available on demand (reference D-ST21002).

An ergonomic study on the gripping and holding conditions was carried out by the Institute of Work Safety of the Technical University of Darmstadt. The corresponding evaluation report is available on demand.