

DIRECTIONS FOR USE

for GKE Clean-Record® Cleaning process monitoring indicators (CPI) to monitor the efficacy in bedpan washers and urine bottles REF 810-000 | 810-001

Application

Bedpan washers are used for cleaning and disinfection of bedpans and urine bottles in hospital wards and nursing homes. They are operated around the clock and it must therefore be monitored that the cleaning and disinfection processes run faultlessly at all times. GKE Clean-Record® Cleaning Process Indicators (CPI) enable continuous routine monitoring of the cleaning processes.

Most programs in bedpan washers are designed to use tap water only. In some specific cases, for example, if a patient has been treated with fatty care products, a detergent can be added to the cleaning process. The programs differ considerably in temperature and regional tap water quality. Accordingly, there is no standardised cleaning process, but each cleaning process must be evaluated individually.

In bedpan washers process faults can occur at any time. Most common are changes of the spray geometry. The nozzles may be deflected or blocked by dirt or chalk. The basket is bent after prolonged use, so that the spray jets do not hit the areas to which they were originally directed. However, the spray pattern can also be disturbed because the objects are positioned incorrectly and there are spray shadows. These disturbances do not trigger an alarm of the machine, but only become visible when monitoring with test soils or with an indicator.

By placing the self-adhesive GKE -indicators in the machine or on test bedpans or test urine bottles, the different cleaning effects can be tested at different positions. The test result does not give any direct information about the cleaning result on the used bedpans and urine bottles themselves, but provides a reference test result, which should be identical in following processes.

Product description

GKE CPI are synthetic test soils, which therefore have a long stability and can be stored without any problems and without loss of quality. They are free of components such as blood that could contain pathogenic germs. The indicator consists of a temperature-stable and water-resistant plastic carrier and is provided with an adhesive back-side surface and plastic cover.

The CPI can be adhered to the inner wall of the chamber or directly onto a bedpan or urine bottle. The indicators are subtracted after use and can be adhered on paper for documentation later on.

Performance Characteristics

The standard EN ISO 15883-5:2020 describes 8 test soils. For the cleaning of "toilet aids" a test soil is mentioned, which is composed as follows: bovine albumin, mucin, maize starch ("RAMS"). GKE has developed a test equipment (spray test rig) to be able to compare real soils, test soils according to the standard as well as GKE Clean-Record® cleaning process monitoring indicators under the same test conditions.

In the GKE spray test rig comparative tests have been carried out between the GKE CPI and "RAMS" in order to obtain a direct comparison between the GKE cleaning process indicator "LO" orange and the RAMS test soil. The test soil was coated to stainless steel plates with Mayer rod No. 5 according to EN ISO 15883-5:2020 and dried. A food dye has been added to make it more visible but has not changed the wash-off characteristics of "RAMS".

The GKE CPI is optimized so that the wash-off characteristics are similar to "RAMS" results when mechanical forces are applied by a spray jet. The influence of the cleaning temperature is also comparable, so that the best test results with the indicator are only achieved with an appropriate program.

Accordingly, further rinsing processes with warm water should follow after the cold pre-rinse. With fundamentally different program designs, the wash-off characteristics changes both with the test soil and on the GKE CPI. The indicator makes comparable demands on the cleaning process as the test soil for "toilet aids", i.e. bedpans and urine

bottles, described in EN ISO 15883-5:2020.

Handling information

1. The indicators are stuck onto the surfaces of clean bedpans and/or urine bottles used as test objects for this test run and then go through the cleaning process.
2. At the end of the programme run, the indicators are visually checked to see how much indicator substance could be washed off at the various test sites. In order to be able to assess the degree of wash-off, the indicators are intentionally designed to be washed on in the usual processes, but not necessarily washed off completely.
3. The indicators can be removed from the test objects again and glued into a paper documentation - see documentation sheet.

Procedure for regular testing

It is recommended that machines of identical construction and operating with identical programs are monitored regularly using the following method:

Step 1: Determine a reference test result

Indicators are adhered to the test objects at specified test positions. Some positions, e.g. "bottom, inside" are already indicated in the form, as placement suggestions. Other self-selected positions can be filled in manually in "additional test position" fields. It is advisable to document the test positions with photos in order to always be able to repeat the test run identically. A test run with test objects and indicators is carried out. Since the test result should be used as a reference result, it is advisable to carry out the test run in a perfectly working machine, e.g. after maintenance.

The test result is documented in the form and stored as a reference document.

Step 2: Routine monitoring

All bedpan washers are tested in regular intervals, e.g. weekly, using the same procedure as the reference result (see step 1), i.e. with identical test objects and identical test positions to which the indicators are adhered.

Each result obtained during routine monitoring is compared with the reference test result. If differences are detected, this may indicate a process change. If only individual indicators deviate from the reference, this may indicate a local disturbance in the spray conditions, e.g. a dirty spray nozzle or a bent basket. If all or almost all indicators deviate from the reference, a fundamental disturbance may exist, e.g. a program error, different water quality, defect of machine (e.g. heating, pump), etc.

Storage and Disposal

1. For longer periods store all indicators in the original package.
2. Store indicators always between 5 to 30°C or 41-86°F and a humidity of 5-80% RH.
3. Do not store them together with chemicals, e.g. disinfectants, as this may cause polymerisation of the indicators and make them difficult to wash off. Also, if disinfectant solution is regularly used near the storage location and the indicators are exposed to the vapours, this may alter the wash-off characteristics.
4. Do not use indicators after expiry date. They can be disposed with normal waste.

For further technical details please contact your local representative or the GKE application laboratory. We will assist you with any technical questions. For more information visit our website www.gke.eu.

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