

## Cleaning Process Indicators for washer-disinfectors

### General Information

Cleaning processes can be monitored with cleaning process monitoring indicators, i.e. with artificial or real test soils. The RKI-KRINKO recommendation for the reprocessing of medical devices stipulates the use of a "cleaning indicator" for each batch when critical B instruments are cleaned. Which indicator or test soil can be usefully applied on site in a cleaning process?


Different cleaning processes are necessary, as instruments from e.g. orthopaedics, gynaecology, urology, dental etc. are cleaned with different processes. Contaminants such as blood, bone meal, mucus, body secretions or dental cement etc. all behave differently and therefore also require different programmes and cleaning agents. These can differ, for example, in time and temperature, cleaning agents with a high or low pH value can be used, a cleaner can contain enzymes, surfactants, oxidising agents, complexing agents, silicates etc.

Furthermore, there is no definition for "clean". Cleanliness depends on the subsequent use and must be defined by the medical professional, e.g. in the healthcare sector. Thus, a "clean" implant must even be free of endotoxins.

### Application

For routine monitoring in washer-disinfectors (WDs) and endoscope washer disinfectors.

Cleaning processes must be adapted to the soiled instruments, are therefore very different and depend on many parameters (cleaning agent, water quality, temperature, spray impulse, etc.).



All indicator versions are tested in a trial run. The indicator with the longest wash-off time, which is just washed off in the validated process, is suitable for routine monitoring. The result can be documented and used as a reference when assessing later test results.

For process monitoring, an indicator should be used in the WD and endoscope WD in each batch and program to ensure that no changes have occurred in the process parameters.

### Product Description

#### Indicators:

Five GKE-CPIs identified by colours with different wash-off characteristics are available. Each indicator sheet contains 16 indicator pairs. The additionally available Multi-Colour-Indicator combines three different wash-off properties (red | blue | green) on one indicator.

#### Plastic holder:

Holder made of durable PVDF plastic for securely holding the indicator with spring-loaded clip to fix to an instrument basket.

#### Hollow Flow-PCD:

During cleaning in the WD and endoscope WD, hollow instruments are connected to adapters. A special Hollow-Flow PCD enables the flow situation to be monitored. It contains two adapters for holding the indicator. The adapter with a gap width of 2 mm produces a higher flow rate and thus stronger cleaning performance. In the adapter with a gap width of 4 mm, the cleaning performance is lower and the test requirement is therefore higher.

## Performance Characteristics

The 8 test soils described in the standard EN ISO 15883-5 are intended to simulate real soils, but are not suitable for everyday use because they have to be prepared manually and used immediately. GKE-CPI are specially designed for routine everyday use. They are produced in an automated process, always have the same wash-off characteristics and are used as a process monitoring indicator for each cleaning cycle.

The indicator substance is non-toxic, is dissolved or dispersed by most cleaning agents and is removed from the RD process with the wash liquor. The indicators can be stuck on after use for documentation.

## Benefits

- Selection of different indicators to suit the process.
- Use of synthetic test soils instead of natural test soils with blood, which could contain pathogenic germs, thus long stability and durability.
- Very good price-performance ratio due to rational production, thus for the first time a permanently economical routine monitoring is possible.
- No test devices required due to different indicator difficulty levels.
- Self-adhesive, thus easy documentation.
- Holder and flow PCD made of high-quality materials require no maintenance and can be used for a long time.
- The indicators are tested against reference test contaminants according to EN ISO 15883-5 using a reproducible test method.

## Order information

### Cleaning Process Monitoring Indicators

Art.-No.	Quantity	Product Code	Color	Application
810-101, -102, -103	160, 480, 960	W-CPI-Y	Yellow	Cleaning process monitoring indicators (CPI) for routine monitoring of washer-disinfectors with different wash-off characteristics
810-201, -202, -203	160, 480, 960	W-CPI-G	Green	
810-301, -302, -303	160, 480, 960	W-CPI-B	Blue	
810-351, -352, -353	160, 480, 960	W-CPI-P	Purple	
810-401, -402, -403	160, 480, 960	W-CPI-R	Red	
810-901, -902, -903	160, 480, 960	W-MC-CPI	Green/Blue/Red	

### Holder and Hollow-Flow PCD

Art.-No.	Product Code	Content	Application
800-102	W-PHO	10 Plastic holders, color: orange	for reproducible location of CPI on a tray/basket in the WD
800-111	W-HF-PCD	1 Hollow Flow PCD with 2 adapters 2 LL-connectors, 2 silicone tubes with 0.3 m length	to be connected WD machines to simulate hollow devices

700-021 EN V28 11-2022