



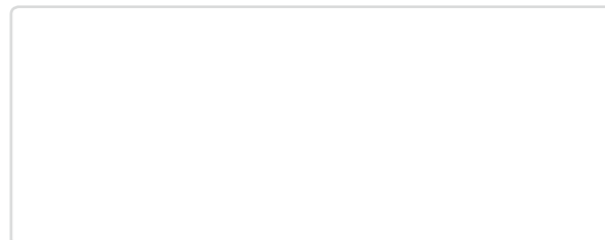
#### MMM Group

MMM has been operating worldwide as one of the leading system providers in the service of health since 1954. With a complete range of products and services relating to all aspects of cleaning, disinfection and sterilization systems in **Healthcare** and **Life Science**, MMM has positioned itself as a crucial quality and innovation driver in the German and international market.

Our products are adapted to the requirements of our customers throughout the world. Our production sites allow us to achieve a high degree of production depth and thus meet the challenging quality requirements of the medical technology sector. A total of more than 1000 employees apply their expertise and dedication to the mission of the MMM Group: **Protecting human health.**



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## The da Vinci® System Solution for Uniclean PL II



### Reliable Cleaning and Disinfection of complex Robotic Instruments

MMM. Protecting human health.



# Reprocessing complex robotic instruments

Modern surgery with robotic systems and complex instruments makes great demands on CSSD reprocessing. Together with Intuitive Surgical, MMM Group has developed a process for the cleaning and disinfection of da Vinci® instruments. This process consists of two phases. Both phases form an inseparable unit for the safe and validated reprocessing.

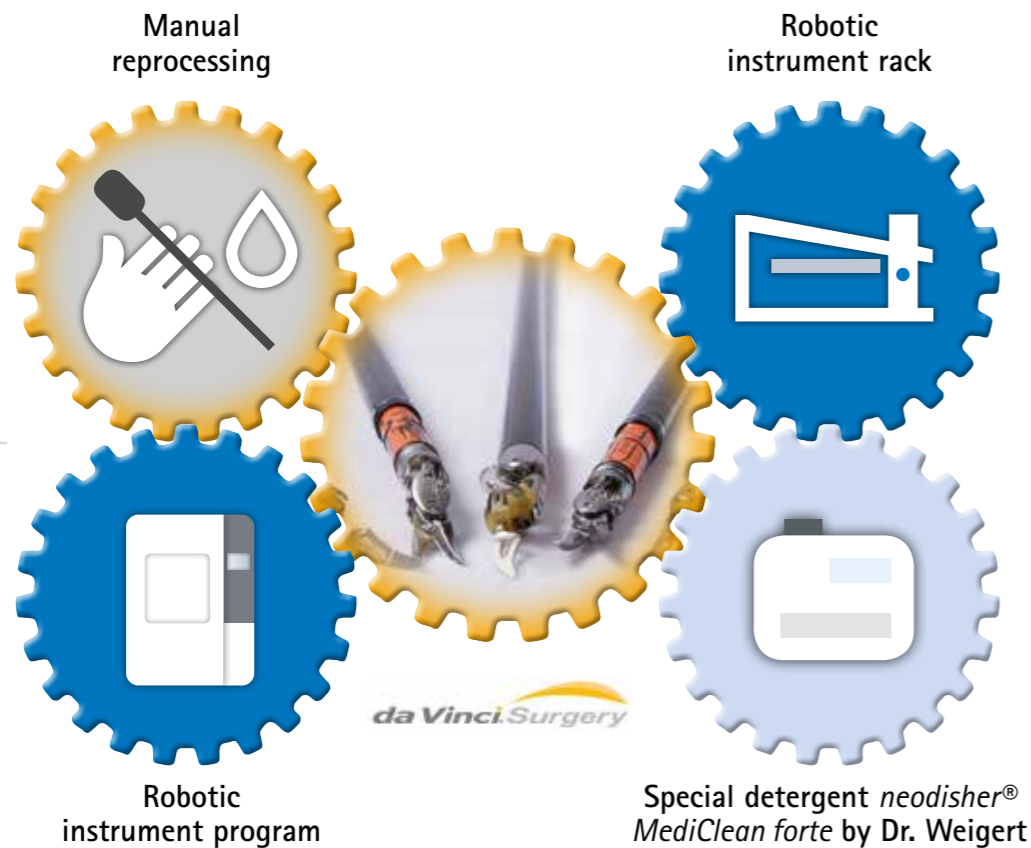
## A powerful system

### Phase 1: Manual Cleaning

Manual reprocessing is compulsory for successful machine cleaning and disinfection. It must be performed according to the routine reprocessing instructions of the instrument supplier (Intuitive Surgical).

### Phase 2: Automatic Reprocessing

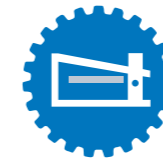
The MMM overall solution for the reliable and validated automatic processing of robotic instruments is based on three keystones: Robotic instrument rack, Robotic instrument program and Instrument cleaning chemistry.



## A powerful solution

The high performance Unclean PL II convinces by its sophisticated, high-quality concept. The washer-disinfector, the special rack, the process especially designed for robotic instruments and the matching process detergent add up to build a perfect combination for a powerful solution.

### Robotic instrument rack



The rack holds up to 8 *da Vinci® EndoWrist* instruments. It consists of the main rack and two insert modules which allow to connect four instruments each.

The modular concept offers comfortable handling and is designed to meet ergonomic requirements. For easy loading the modules can also be placed on the working table.

Each insert module has a removable microfilter preventing the deposit of small particles inside the instrument. The supply lines to the instrument provide Luer lock connections which offer an additional pressure test straight in front of the instrument.

The accessories of the *da Vinci® EndoWrist* operating sets can be placed on the lower level of the same rack.

- safe positioning of instruments and connections
- perfect automatic cleaning capacity
- high efficiency and reliability
- easy and ergonomic handling



Easy handling



Flush adapter for wrist and tip



Modules for 4 *da Vinci® EndoWrist* instruments each

### Robotic instrument program



The individual stages and pressures characteristics of the MMM robotic program perfectly matches the processing requirements of complex robotic instruments.

### Detergent



The MMM robotic program of Unclean PL II has been developed using the *neodisher® MediClean forte* by Dr. Weigert. This instrument cleaning chemistry and the MMM process form a perfect symbiosis.