

TYPHOON<sup>™</sup>, TORNADO<sup>™</sup> AND NINJO<sup>™</sup>

# Flusher disinfector range



# Proven efficacy<sup>1</sup> in helping to reduce healthcare associated infections

In the fight against healthcare associated infections (HCAI), managing human waste safely is crucial. Using flusher disinfectors to empty, flush, clean and disinfect bedpans, urinals and other human waste receptacles can significantly reduce the risk of cross-contamination and support efforts to contain and prevent nosocomial infections.<sup>1</sup>

In a 2018 study, our Ninjo, Tornado and Typhoon flusher disinfectors have been verified to effectively remove over 99.99% of C. difficile spores.<sup>2</sup>

Other benefits such as no-touch operation, functional accessories and a selection of durable material finishes make Arjo flusher disinfectors ideal for supporting a well-planned infection control system at your facility.

## Healthcare associated infections are a prevalent and global concern

## 4%

Hospital-admitted patients in a US study who acquired at least one HCAI.<sup>3</sup>

## **Over 2.6 million**

New patients identified as having HCAIs each year in the EU/EEA. $^4$ 

## 9.1%

Overall prevalence rate of HCAIs in Southeast Asian countries.  $^{\scriptscriptstyle 5}$ 



Arjo flusher disinfectors have shown to remove over **99.99%** of C. difficile spores.<sup>2</sup>

# Arjo flusher disinfectors

Powerful allies in preventing cross-infections



### Typhoon

Known for its View in Process (VIP) glass door which allows you to check on the progress at any time during the cycle. Typhoon also features a sliding door, and an automatically rotating holder as a standard feature.



## Tornado

With an enhanced software system, PACS350, Tornado offers a process control and tracking feature for traceability.

### Ninjo

Available in a selection of modular units and material finishes, Ninjo offers a high level of design flexibility to suit your needs and preference.







PRODUCT INROMATION	NIN
MODEL	
Free standing model	$\checkmark$
Under-counter model	$\checkmark$
Wall-mounted model	$\checkmark$
FLEXIBLE DESIGN	
Polymeric casing	$\checkmark$
Stainless steel casing	$\checkmark$
AUTOMATIC DOOR FUNCTION	
Using IR sensor	-
Using IR sensor with foot pedal	-
STEAM GENERATION FOR DISINFECTION	
Internal steam generator	•
DISINFECTION	
Time/temperature	$\checkmark$
A <sub>o</sub> value 60	$\checkmark$
A <sub>o</sub> value 600	$\checkmark$
$A_{o}$ value controlled process	-
Pipe System Disinfection	•
COOLING	
Blower with H13 HEPA filter	$\checkmark$
External cooling	-
PROCESS DOCUMENTATION	

Via printer or USB

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	• Standard equipment	<ul> <li>✓ Optional equipment</li> </ul>



# Ninjo

Attractive modern design meets excellent disinfection performance. The Ninjo delivers effective cleaning and disinfection results, and offfers a high level of design flexibility.

PRODUCT INROMATION			
OLUIN	Free standing	Under counter	Wall-mounted model
Weight	90 kg	70 kg	70 kg*
Dimensions (WxDxH) in mm	450x580x1320	450x580x1320	450x580x1320*
Noise level		53 db (A)	
Electric connection		230V, 1N, 50 Hz, 1x16A	
Energy consumption		0.16 kWh/cycle	
Water consumption		51	gram 11 litres/cycle ±10% gram 18 litres/cycle ±10%

\* Not including wall mounts and frame

COOLING FAN



Built-in cooling fan cools containers with HEPA-filtered air (H13). A VALUE DISPLAY

The user is given a clear indication of the disinfection level by the A<sub>o</sub> value display, to easily keep track of the disinfection progress.

REMAINING TIME SEQUENCE DISPLAY The remaining time sequence display allows staff to check on cycle progress, enabling them to plan their workflow more efficiently and eliminate time spent waiting for the process to end.

### PIPE SYSTEM DISINFECTION (PSD)

This feature disinfects the entire pipe and nozzle system at the end of each cycle, reducing the risk of contamination.

### FLEXIBLE DESIGN OPTIONS

Choose from stainless steel or colourful polymeric finish, as well as either free standing, under-counter or wall-mounted modules.

Tornado

cleaning and disinfection results.

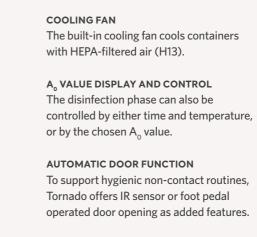
Tornado is a high-powered flusher disinfector for the emptying,

containers. Its automated operation features help further reduce

the risk of cross-contamination while delivering highly effective

cleaning, thermal disinfecting and cooling of human waste

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### PRODUCT INROMATION

ORNADO	Free standing	Under counter
Veight	100 kg	120 kg
Dimensions WxDxH) in mm	450x580x1320	900x620x870
loise level		53 db (A)
lectric connection		230V, 1N, 50 Hz, 1x16A
nergy consumption		0.16 kWh/cycle
Vater consumption	Normal prog	gram 11 litres/cycle ±10% gram 18 litres/cycle ±10% gram 25 litres/cycle ±10%

### PIPE SYSTEM DISINFECTION (PSD)

This feature disinfects the entire pipe and nozzle system at the end of each cycle, reducing the risk of contamination.

### PROCESS RECORD

Enables traceability with detailed records of disinfection operations. Tornado offers the option of recording and tracing processes via printer or USB.



## Accessories and design

Further customise your Arjo flusher disinfector to suit your needs and preference with functional accessories and design options.

# Typhoon

Efficiency meets high performance in Typhoon, a fully automated flusher disinfector with a range of user-friendly features.

PRODUCT INROMATION		
TYPHOON		
Weight	135 kg	
Dimensions (WxDxH) in mm	600x600x1840	
Noise level	60 db (A)	
Electric connection	230V, 1N, 50 Hz, 1x16A	
Energy consumption	0.25 kWh/cycle	
Water consumption	Economy program 25 litres/cycle ±10% Normal program 31 litres/cycle ±10% Intensive program 39 litres/cycle ±10%	







## AUTOMATIC DOOR FUNCTION

Built-in IR sensor supports touch-free operation. Simply wave your hand in front of the sensor and it opens or closes automatically.

## VIEW IN PROCESS (VIP)

Allows you to check the disinfection process at a glance.

### SLIDING DOOR

A sliding door is a sleek alternative to a swing door, and requires less space to access. In order to avoid splatter, the holder cannot start rotating until the door is closed.

### **ROTATING HOLDER**

Once the door is locked, the holder rotates 150 degrees and empties the receptacles, eliminating the need to manually invert them and thus reducing the risk of crosscontamination. The rotating holder also has integrated nozzles to achieve effective cleaning and disinfection results.

PIPE SYSTEM DISINFECTION (PSD) Rapid disinfection is delivered through all fixed and rotating nozzles at the end of each cycle, disinfecting the entire pipe and nozzle system and reducing the risk of contamination.



### Step 1: Choosing the right holder

While the universal holder fits most commonly used receptacles, we also offer a wide range of holders for other types of goods. These holders can handle a variety of bedpans, as well as most commode buckets and urine bottles. For best results, use only compatible holders with your Arjo flusher disinfectors.

### Step 2: Adding accessories

We also offer a number of accessories such as our unique, anatomically designed bedpan with lid, and our Arjo Liquids range of rinsing agents and cleaning detergents formulated to boost the efficacy of your flusher disinfector.

### Step 3: Designing a complete sluice room

Arjo considers every aspect of the sluice room and provides a wide range of support from training in good hygiene routines to advice on room layout and equipment selection. We also offer a complete furniture concept for the sluice room, enabling you to create a hygienic and safe working environment.





## A well-planned sluice room

In the care facility, a well-planned sluice room plays a central role in effective infection control.

An Arjo sluice room solution is always based on four cornerstones essential for maintaining good working practices and achieving a high level of infection control.

Arjo can assist you in all aspects of planning, designing and equipping a sluice room for your facility's needs. We also offer expert insights and detailed guidelines on room layout, and guidance on establishing an effective infection control system.

To find out more, contact your local Arjo representative or visit arjo.com to explore the Arjo Guide for Architects and Planners.

### 1. Soiled area

A collection point for soiled goods separated from clean areas.

### 2. Handwash station

A conveniently placed hand wash basin and accessories.

### 3. Flusher disinfector

For automated cleaning and disinfection of various bedpans, urine bottles or commode buckets.

### 4. Clean storage area

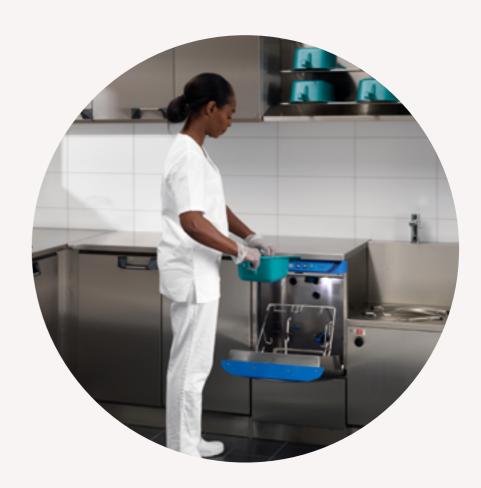
A storage location for clean goods separated from soiled areas.



## **Furniture** concepts for the sluice room

Along with our flusher disinfectors, Arjo offers a range of sluice room elements such as cabinetry, shelving and sinks. These elements are designed as modular solutions, allowing a high degree of design flexibility and enabling you to change individual furniture components with ease in the future.

Care combination 900 mm, consisting of flusher disinfector and a slophopper





Care combination 1350 mm, consisting of flusher disinfector, a 450 mm base cabinet with hand basin and slophopper

Care combination 2250 mm, consisting of flusher disinfector, a 900 mm base cabinet with soaking basin, 450 mm base cabinet with hand basin and slophopper

## More colour options with the Ninjo and Tornado

Explore a wide range of design options with the Ninjo. Available as a freestanding unit which enables shoulder-height access, or as an under-counter unit to maximise counter space.

Choose from sleek, high quality stainless steel, or bring colour into your sluice room with a colourful polymeric coating (colour code: NCS S 2060-R80B) that is impact- and scratch-resistant, as well as fungistatic, easy to clean and stable. Both options are available as a material finish for the front panels and rinse chamber.

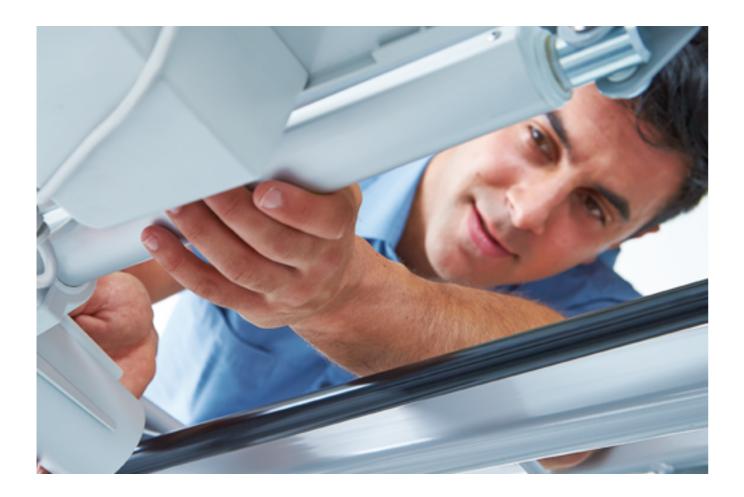
Complement your flusher disinfector with cabinetry and other functional furniture components, such as overhead cabinetry, shelving and storage racks for bedpan and urine bottle and customisable solutions to meet your individual space requirements.





## Arjo Care

Helping to ensure your Arjo equipment performs as it should.



Device failure can be an inconvenient and very costly occurrence. This is particularly the case if your staff must carry out operations manually, which requires more staff time, can be less effective, and puts the safety of your patients and staff at risk.

Arjo Care offers expert servicing for your equipment, from priority response in the case of equipment failure, to scheduled preventive maintenance and inspections to prevent issues before they occur. We perform inspections to provide a detailed assessment of your equipment condition, and perform necessary maintenance works. We supply only genuine validated parts and accessories, which we can source directly to ensure speedy availability. Supporting compliant processes, we provide the necessary documentation for all inspections and repairs.

Let Arjo Care help keep your equipment performing as it should, so you can focus on what matters: delivering high quality care.

Contact your local Arjo representative to find out more about our tailored service agreements.

# **Arjo Liquids**

Our high performance flusher disinfectors are complemented by a range of specially formulated liquids.



### Flusher detergent

A mild alkaline detergent effective in cleaning heavily soiled care utensils. Suitable for alkali-resistant surfaces such as stainless steel, ceramics, glass and resistant plastics.

### **Flusher Rinse**

A mild alkaline solution for preventing limescale deposits during the automated cleaning of human waste containers. Flusher Rinse decalcifies your flusher disinfectors and the containers at the same time. Suitable for alkali-resistant surfaces such as stainless steel, ceramics, glass and resistant plastics.



### References

- 1. Arjo Clinical Whitepaper. Flusher Disinfectors: Reducing the risk of cross contamination, 2019.
- Walder M, Nilsson B. Validation of Clostridium difficult spore elimination in Arjo flusher disinfectors: Tornado/FD18-series, Ninjo/ FD16-series & Typhoon SP6000. Department of Medical Microbiology, Faculty of Medicine, Lund University, 2018.
- 3. Magill SS, Edwards JR, Bamberg W, et al. Emerging Infections Program Healthcare-Associated Infections and Antimicrobial Use Prevalence Survey Team Multistate point-prevalence survey of health care-associated infections. N Engl J Med, 2014.
- 4. Cassini A, Plachouras D, Eckmanns T, et al. Burden of Six Healthcare-Associated Infections on European Population Health: Estimating Incidence-Based Disability-Adjusted Life Years through a Population Prevalence-Based Modelling Study. PLoS Med, 2016.
- 5. Ling ML, Apisarnthanarak A, Madriaga G. The Burden of Healthcare-Associated Infections in Southeast Asia: A Systematic Literature Review and Meta-analysis. Clin Infect Dis., 2015.

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At Arjo, we are committed to improving the everyday lives of people affected by reduced mobility and age-related health challenges. With products and solutions that ensure ergonomic patient handling, personal hygiene, disinfection, diagnostics, and the effective prevention of pressure injuries and venous thromboembolism, we help professionals across care environments to continually raise the standard of safe and dignified care. Everything we do, we do with people in mind.

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