



# DDC Pulp Macerators

Designed to pulverise and dispose of both single-use medical pulp containers and human waste, DDC's range of PULPMATIC® bedpan macerators are the sluice room equipment of choice for thousands of healthcare facilities around the world.





# What Is A Pulp Macerator?

Pulp macerators are machines which pulverise and dispose of single-use medical pulp containers and human waste.

The technology of choice for thousands of healthcare facilities around the world, a macerator is a fast and easy to use human waste disposal solution, providing safe and efficient alternative to washing bedpans by hand, or using a washer disinfector.

Macerators are opened and closed using hands-free technology. This allows a pulp container - along with its contents - to be placed inside the machine without the need to wash or dispose of items elsewhere. Once the lid is closed, the maceration cycle will be complete in as little as 65 seconds - giving your staff much more time to care for your patients or care home residents.

During the maceration process, the pulp container and its contents are quickly and effectively pulverised into a watery slurry, using high speed rotating blades. The slurry is discharged into the main sewage system, similar to a conventional toilet.



# **Key Benefits**

- Reduce cross-contamination of infectious materials and minimise the risk of HCAI outbreaks. NHS England's 2011 survey on healthcare-associated infections and antimicrobial use estimated that 300,000 patients a year in England acquire a healthcare-associated infection because of care within the NHS.<sup>1</sup>
- Reduce your facility's budget spend with low operating costs (a macerator can use as little as 9.5 litres of water per cycle) and prevention of facility shutdowns due to infections. In 2016/2017, HCAIs were estimated to have cost the NHS an estimated £2.1 billion.<sup>2</sup>
- Save clinicians' time and increase productivity by removing the need for cleaning reusable items. The DDC PULPMATIC\* Uno has a cycle time of just 65 seconds 88% quicker than the 9-minute cycle time of the average bedpan washer.<sup>3</sup>

 $<sup>^1\ \</sup> Infection\ prevention\ and\ control,\ NICE,\ https://www.nice.org.uk/guidance/qs61/chapter/introduction$ 

<sup>2 &#</sup>x27;Modelling the annual NHS costs and outcomes attributable to healthcare-associated infections in England', Julian F Guest, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7045184/

p.762, S. Hatt et al. / American Journal of Infection Control 48 (2020) 761–764, Washer disinfector and alkaline detergent efficacy against C. difficile on plastic bedpans'

# What Makes Us The Market Leader?

With 30 years of experience, **DDC** specialises in manufacturing and supplying sluice/dirty utility room equipment, including bedpan washer disinfectors, medical pulp macerators, and infection control solutions for healthcare facilities worldwide.

Guided by our vision, "Protecting Lives Through Smarter, Safer Healthcare" we serve six continents, 50 countries, and over 5,000 sites. We offer the UK's most advanced service and maintenance solutions, supported internationally by factory-trained partners.



# **DDC's PULPMATIC**<sup>®</sup> **Macerators:** Setting the Standard in Infection Control

DDC's PULPMATIC® macerators are the foundation of infection control strategies in thousands of facilities worldwide. Our three market-leading models are designed to meet the diverse needs of the healthcare sector.

# **Key Features Include:**

#### **Eco-Friendly & Hygienic:**

The most environmentally friendly, economical, and hygienic macerator technology available.

#### **Large Capacity:**

Dispose of up to six items per cycle.

#### Fast Cycles:

Quick maceration cycles starting from just 65 seconds.

#### **Antimicrobial Protection:**

Polymer surfaces infused with antimicrobial additives to prevent bacterial growth.

#### **Low Water Usage:**

Uses as little as 9.5 litres per cycle.

#### **Contactless Operation:**

Fully touch-free functionality minimises cross-contamination risks.

#### **Advanced Waste Management:**

Continuous free-flowing output to drain with open-flow maceration technology.

#### **Durable Build:**

Constructed with high-quality materials, including high-grade stainless steel.

#### **Automatic Drain Flush:**

Programmable during low-use times to prevent stagnant water and reduce the risk of Legionella.

#### Flexible Start Options:

Choose from self-start or auto start modes to suit your facility's requirements.

#### **Quiet Operation:**

Advanced materials reduce noise for quieter performance.

#### **Audio Guidance:**

Voice prompts available in any language, reducing training needs and staff errors.

With PULPMATIC® macerators, you can rely on superior performance, reliability, and infection control in one streamlined solution.

# Insight Into The PULPMATIC® Range

## **PULPMATIC**® ULTIMA

The PULPMATIC® Ultima is our largest capacity bedpan macerator, suitable for busy hospital wards and care homes, capable of disposing of up to 6 pulp items per cycle.

The unique nine bladed macerator technology allows for a rapid disposal cycle of just 120 seconds, without compromising on efficiency, water usage or noise levels.



#### **Benefits**



Reduce cross contamination of infectious materials and minimise the risk of ward outbreaks, keeping staff and patients safe.



Save clinicians' time and increase productivity by reducing the need for cleaning of reusable items.



Exceptionally economical, using little water and energy to operate.



Reduce hospital budget spend with low operating costs and prevention of ward shut-downs due to infections.

## **PULPMATIC® UNO**

The PULPMATIC® Uno is our low-use bedpan macerator for smaller hospital wards and care home environments. Capable of processing 1-2 pulp items per cycle, it provides a quieter, economical solution where maceration is a requirement, but demand is minimal.

The Uno's seven blade macerator disc provides rapid, low-noise maceration for minimal disruption to a small ward setting, with a cycle lasting just 65 seconds.



#### **Benefits**



Reduce cross contamination of infectious materials and minimise the risk of ward outbreaks, keeping staff and patients safe.



Save clinicians' time and increase productivity by reducing the need for cleaning of reusable items.



Exceptionally economical, using little water and energy to operate.



Reduce hospital budget spend with low operating costs and prevention of ward shut-downs due to infections.



Versatile unit for low demand areas, be it a dirty utility room or a private patient room.

# **PULPMATIC®** FLEX

The PULPMATIC® Flex is the latest innovation in our macerator range, designed to transform waste management in healthcare settings.

Its cutting-edge features and user-friendly design ensure efficient, hygienic, hands-free operation, making it essential for hospitals and clinics.

Hygiene is a priority with antimicrobial surfaces on the front and top panels, along with a durable 304L stainless steel cabinet.

This design promotes cleanliness and endurance in demanding medical environments.



#### **Benefits**



Our most economical machine, using very little water and energy to operate.



Reduce cross contamination of infectious materials and minimise the risk of ward outbreaks, keeping staff and patients safe.



Save clinicians' time and increase productivity by eliminating the need for cleaning of reusable items



Reduce hospital budget spend with low operating costs and prevention of ward shut-downs due to infections.

The chemical system facilitates efficient sanitation without compromising performance.

The PULPMATIC® Flex offers hands-free operation via a Sonic Foot Sensor with a light indicator and two modes:
Standard and Auto Start, enabling efficient use and patient care focus.

A 5-inch GUI touch screen streamlines cycle selection, chemical settings, and maintenance. Three maceration cycles—Lite, Standard, and Heavy—accommodate various waste types and volumes for optimal efficiency.

Its internal overflow system and adjustable drain height simplify installation. Combining advanced technology with safety and efficiency, the PULPMATIC\* Flex sets a high standard for medical pulp maceration, meeting modern healthcare demands and enhancing waste management.

7

# Which PULPMATIC® Is Best For Your Facility?

	PULPMATIC° UNO	PULPMATIC° FLEX	PULPMATIC* ULTIMA
Capacity	Up to 2 items	Up to 4 items	Up to 6 items
Cycle Time	From 65 seconds	From 70 seconds	From 120 seconds
Machine Dry Weight	63.5 Kilos	80 Kilos	84.5 Kilos
Dimensions	400 x 975 x 510mm (Lid clearance 1500mm)	450 x 1020 x 605mm (Lid clearance 1400mm)	500 x 1040 x 600mm (Lid clearance 1500mm)
Water Consumption	From 9.5L	From 13L	From 26L
Electrical Consumption per cycle	From 0.011 kW	From 0.017 kW	From 0.025 kW
Programmable Options	Yes	Yes	Yes
Contactless Operation	Yes	Yes	Yes
Programmable Audio	Yes	Yes	Yes
Automatic Drain Flush	Yes	Yes	Yes
Automatic Chemical Dosing	Yes	Yes	Yes
Advanced Open Flow Technology	Yes	Yes	Yes
Visual Machine Status Display	Yes	Yes	Yes
Typical Location	ICU, Patient Bedroom	Care Facility/Hospital	Care Facility/ Hospital
GUI Screen	No	Yes	No
User Cycle Selection	No	Yes	No

PULPMATIC® macerator technology is unlike any other brand on the market. Let's take a closer look...

# **Infection Control Strengths**

## **Easy Clean Surfaces and Antimicrobial Additives**

Surfaces on our machines contain an antimicrobial additive.

When a microbe lands on a surface which is impregnated with antimicrobial additives, the microbe is destroyed or damaged, rendering it unable to reproduce. Its use can therefore reduce the spread of HCAIs by eliminating cross-contamination routes. This is particularly effective in the sluice room environment, where both clean and dirty items are handled.

The antimicrobial additive is tested to ISO 22196 and JIS Z 2801:2000 standards, demonstrating fast inhibition or elimination of bacteria. Better yet, this protection will remain active for the expected service life of the machine.

The result? Reliable reduction of the number of bacteria within the medical environment, allowing you to ensure more effective protection against the spread of infection.

#### **Reduced Aerosolisation**

The PULPMATIC\* range of machines have been independently tested and proven\* to release no aerosolised bacteria during the maceration cycle. This will give you the confidence that your clinicians and patients are working and recovering in safe environments that aren't compromised by airborne pathogens.







<sup>\*</sup>There is currently no formal standard for the determination of aerosols from Medical Macerators, therefore, the following study was developed in conjunction with DDC Ltd using standard microbiological techniques and utilising guidance from ISO 15883-1: 2009/A1: 2014 (Ref 3), ISO 15883-5: 2021, and adapting the methodology described in the Environment Agency Document - Healthcare Waste: Appropriate Measures for Permitted Facilities (July 2020).

# **Smart Chemical Use**

We all know that strong chemicals can kill bacteria – however, when and how you use them is often what makes the critical difference to your infection control strategy.

All PULPMATIC\* macerators feature variable chemical dosing modes, allowing you to choose the most economical and effective way to use your macerator chemicals, including increased dosing when an outbreak of infection occurs.

In addition, the PULPMATIC® Flex features status updates when the chemical is running low, allowing you to ensure that the machine is always well-equipped to work at its optimum.

Specially formulated disinfectants are also available in selected markets.

8

# **Medical Pulp**

Our medical pulp products are designed for use in surgeries, hospitals, and care facilities. They are cost-effective and provide healthcare providers with the confidence that safety and quality are prioritised in their design and manufacture, supporting infection control.

Ergonomically designed for ease of use, with a smooth, high-quality finish, they help maintain hygiene and reduce the risk of cross-contamination. Our range includes items for everyday nursing situations, such as holding vomit, urine, or faeces.

Made from recycled, maceratable pulp material, our products comply with PAS29:1999 for healthcare disposables and are Class 1 (per Annex VIII, Rule 1 of Medical Devices Regulation (EU) 2017/745). They are specifically designed to contain human waste for at least 4 hours.



# Bedpan (Figure 8) Liner & Accessories

Suitable for general toileting of patients and can be used in bed or commode chair. The liner is placed inside the support before use. Ideal for patients confined to bed due to illness or after surgery.



# Slipper Pan & Support (Midi)

Recommended for general toileting purposes of patients with limited mobility in bed, can be slipped under the patient without rolling or lifting. Used along with a reusable plastic support these pulp liners improve hygiene and infection control.



# Slipper Pan Liner & Support (Maxi)

Recommended for general toileting purposes of patients with limited mobility in bed, can be slipped under the patient without rolling or lifting. Used along with a reusable plastic support these pulp liners improve hygiene and infection control.



## Male Urinal Bottles & Accessories

10

Supports independent patient toileting. The round design suits in-bed use, while the square design stands upright. A single urinal bottle holder is also available, along with wall, floor, and bed-mounted racks for pulp boxes.



### Commode Pan & Accessories

Designed for general toileting in a commode chair. Also available Commode Pan Liner Dispenser rack.



# **General Purpose Bowls & Accessories**

General purpose bowls designed for ease of use available in 1 litre and 3 litre sizes. Also available General Purpose 1 litre dispenser rack.



## **Detergent Proof Wash Bowl**

Holds warm water and detergent for up to 2 hours with a maximum 4 litre capacity.



# **Kidney Dish**

General use receptacle for holding dressings, wipes, surgical instruments and other medical items.



# **Graduated Jug**

General purpose jug with ergonomic handle for enhanced grip.



## **CS Receiver**

General use receptacle for holding dressings, wipes, surgical instruments and other medical items.

11











