



DDC Dolphin Canada Inc.

Technology to reduce adverse effects

Pulpmatic Ultima & Uno Macerators







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1. Improved outcomes & staff satisfaction

DDC Dolphin design and manufacture two sizes of Pulpmatic macerators.

The Pulpmatic Ultima is designed to dispose of up to 6x pulp items and to be sited in medium to heavily used areas within the facility.

The Pulpmatic Uno is designed to dispose of up to 1x pulp items and is deployed in low use areas or within private patient rooms.

Key Features	 	 
Hands-free lid operation	✓	✓
Automatic opening, closing & start options	✓	✓
Foot Cup sensor for easy lid opening	✓	✓
Range of programmable start options	✓	✓
Antibacterial Silver Ion Technology incorporated in the lid assembly	✓	✓
Anti-bacterial / Deodoriser chemical dosage at the conclusion of every cycle	✓	✓
Specialized blade design – with blunt beating technology for optimum pulp pulverization	✓	✓
Programmable audio prompting system for users (Optional)	✓	✓
Any brand of medical pulp products can be macerated	✓	✓
Continuous free flowing output to drain during cycle	✓	✓
Automatic drain flush – assisting with healthy drain management	✓	✓
Anti-pinch lid operation	✓	✓
LCD machine status display	✓	✓
Easy clean surfaces	✓	✓

2. Increased infection control

Foot cup & Audio Reminder



The Pulpmatic Ultima incorporates a foot cup at the base of the machine. Placing a foot inside the cup area will open the lid automatically, while an (optional) audio reminder can be recorded to alert clinicians as to what items should not be placed inside the machine.

Range of machine start options



DDC Dolphin's operating software has a vast array of adjustable options for operating the machine including fully automatic, semi-automatic and audible prompts. This level of customization offers options for individual Facility best practices. Every machine is fitted with an LCD display incorporating a hands free proximity sensor.

Anti-Microbial lid



All DDC Dolphin macerators have the entire lid assembly impregnated with silver ion anti-microbial properties, reducing the risk of cross contamination. The cabinet is made from grade 304 stainless steel for easy cleaning, chemical resistance and high wear protection properties. This design offers more clinical safety and reduction in cross contamination.

Audio system



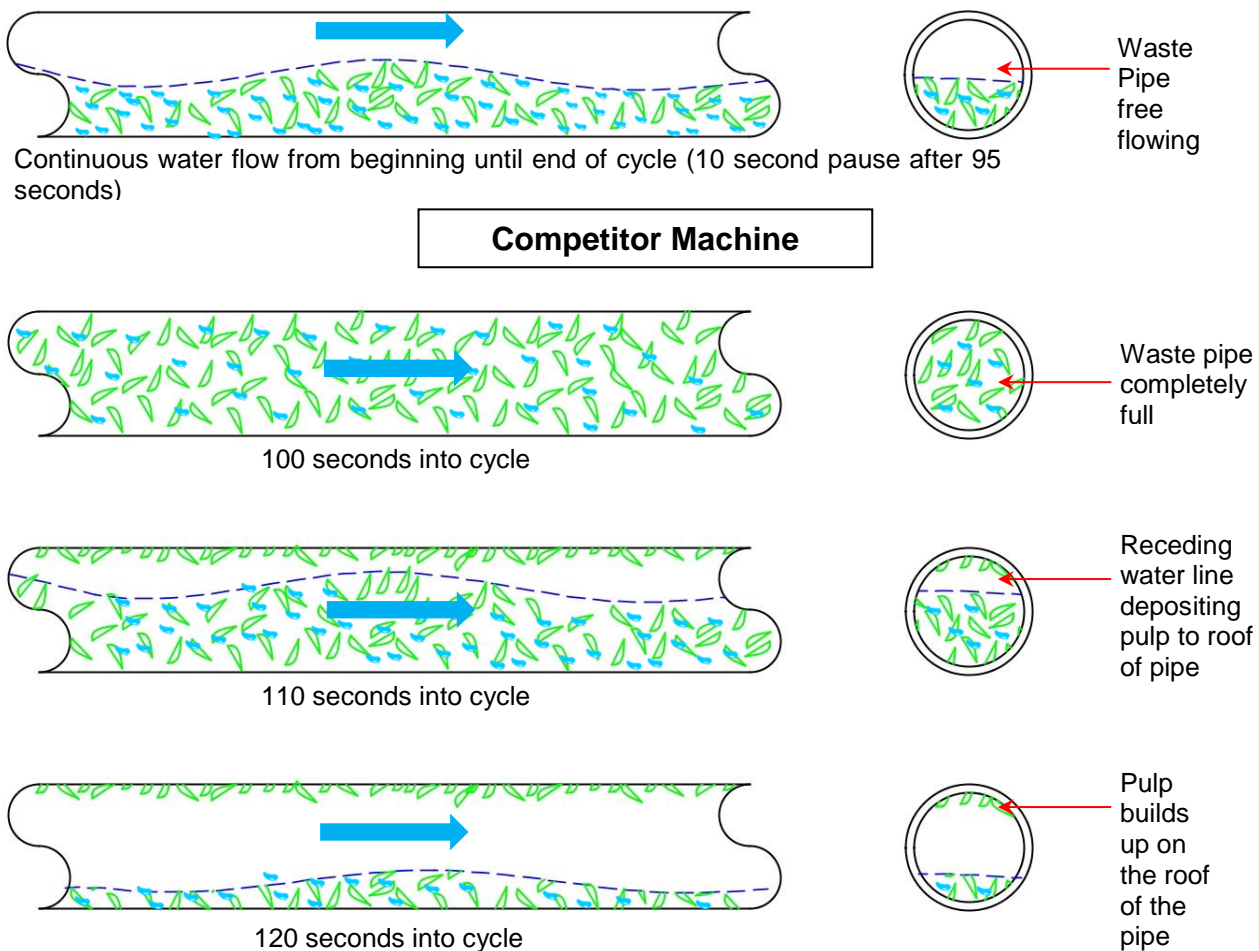
Using the latest innovation in audio instruction technology, DDC Dolphin's (optional) audio system delivers customized recorded messages each time the machine is operated. The message can be tailored and easily changed to cover the operational requirements of the site. This message normally covers which items should not be placed in the machine, therefore reducing foreign objects entering the drainage system.

3. Reduction of adverse effects

DDC Dolphin prevents foreign objects from passing into the drainage system, as they are held within the upper chamber of the machine. Competitor machines may allow the passage of sharps, gloves and other non-maceratable products into the drain resulting in potential blockages, and significant costs to remedy.

DDC Dolphin reduces pipe obstructions by offering a steady stream of water & pulp slurry into the pipes, commencing at the beginning of the cycle. We do not 'dump' water & pulp as our competitors do, releasing the entire volume of water in chamber towards the end of the cycle. This method increases the likelihood of pulp 'hardening' in pipes, as it floats on top of the rushing water, which sweeps by quickly leaving behind the pulp. Over time these pulp formations build up, and can lead to pipe obstructions.

PULPMATIC ULTIMA









Blocked drains may also be the result of non-maceratable products being placed in the macerator, or a large amount of pulp trying to exit into the main drain over a very short release period. DDC Dolphin macerators combat both of these issues by keeping non-maceratable products within the upper chamber, and offering a steady flow of water and pulp which can only exit through the small 3.33 mm aperture, into drains.

4. Cost savings

DDC Dolphin macerators are verified to macerate pulp from any recognized manufacturer allowing open market sourcing from around the world, which can lead to a **cost saving in excess of 30%** on consumable products*.

* Subject to facility size and pulp volume requirements.

 Caution! Do not overload the machine	Large	Medium	Small
			

	4 Items	6 Items	6 Items
	1 Item	1 Item	2 Items
Reduce item quantities by 25% if using a mixture of maceratable wipes and or SAP			

5. SharePoint – Saving you time!

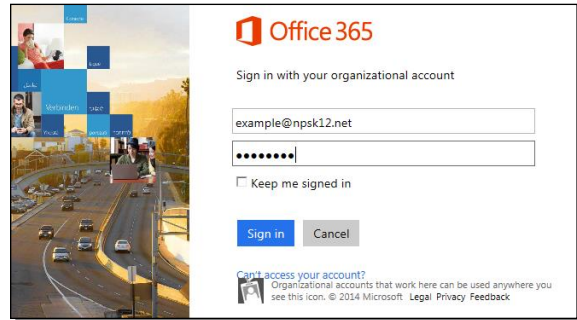
SharePoint is DDC Dolphin's online documentation and information portal, which offers our customers quick access to current support materials pertaining to their specific DDC Dolphin product(s), available anytime at their fingertips.

This impressive solution is driven by our customer's unique needs for relevant information applicable to the machine models that they have installed.

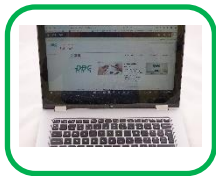
This tool helps facilities save time, increase technical efficiency and eliminate frustrations.

“Maximize Efficiency” – available 24/7

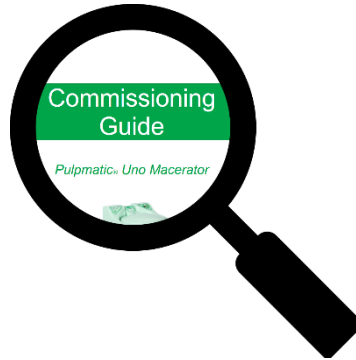
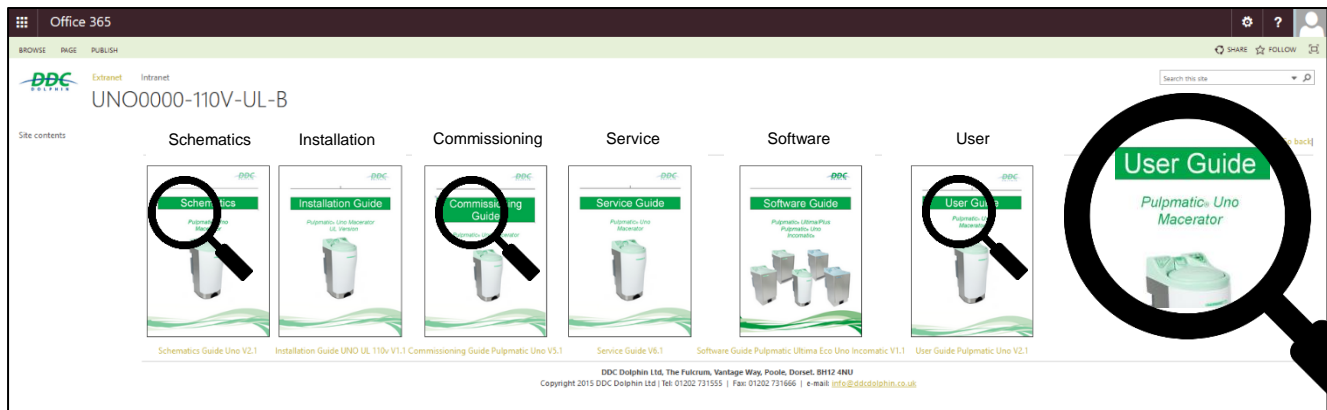
Access to SharePoint is achieved through the [Office 365](#) platform with a unique username and password which will be provided for you.



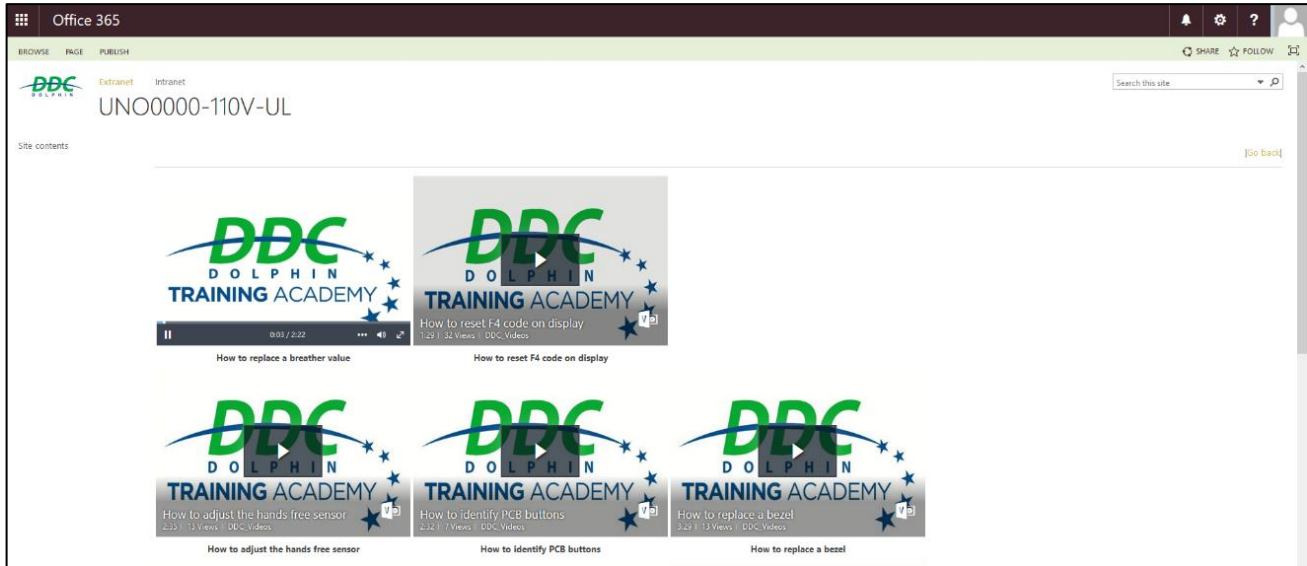
“Control & Manage Documentation” – anytime / anywhere



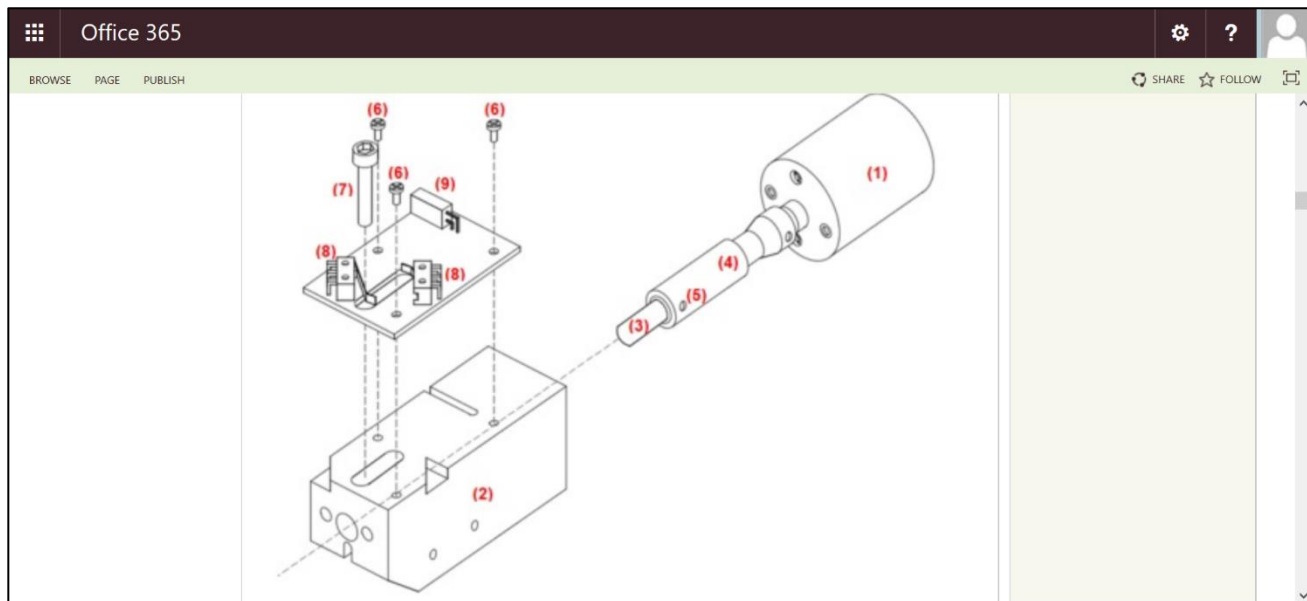
Document Library



“How to videos from our DDC Dolphin Training Academy”



“Latest technical updates”



<h2>Key Features</h2>	
Access to the latest technical manuals – including User, Installation, Commissioning & Service guides	✓
DDC Training Academy - How to guides & videos	✓
Searchable parts database (Coming Soon!)	✓
Company information	✓
Latest technical updates that affect your assets	✓

6. Architectural design approach

6.1 Planning for the optimal soiled utility room

Incorporating soiled utility rooms into the architectural design of new/refurbished care homes, hospitals and other care facilities needs consideration of all factors relating to, infection control, access, flow of work and layout.

Soiled utility room design requires an approach that meets the specific needs of the facility, as well as associated regulations. Most critically it requires a design specification that helps to reduce Healthcare Associated Infections (HCAI) resulting from cross infection from body fluids and human waste.

How DDC Dolphin adds value to design and planning

Advice on best design practice

Focus on infection control and hygiene

Optimum work flows to minimize staff time

Inclusion of latest macerator technology to reduce adverse effects to drainage systems

Range of 3D & BIM files available to aid design

Infection control is core

Infection control should be at the centre of any soiled utility room design strategy to ensure the reduction in risk of Healthcare Acquired Infections (HCAI).

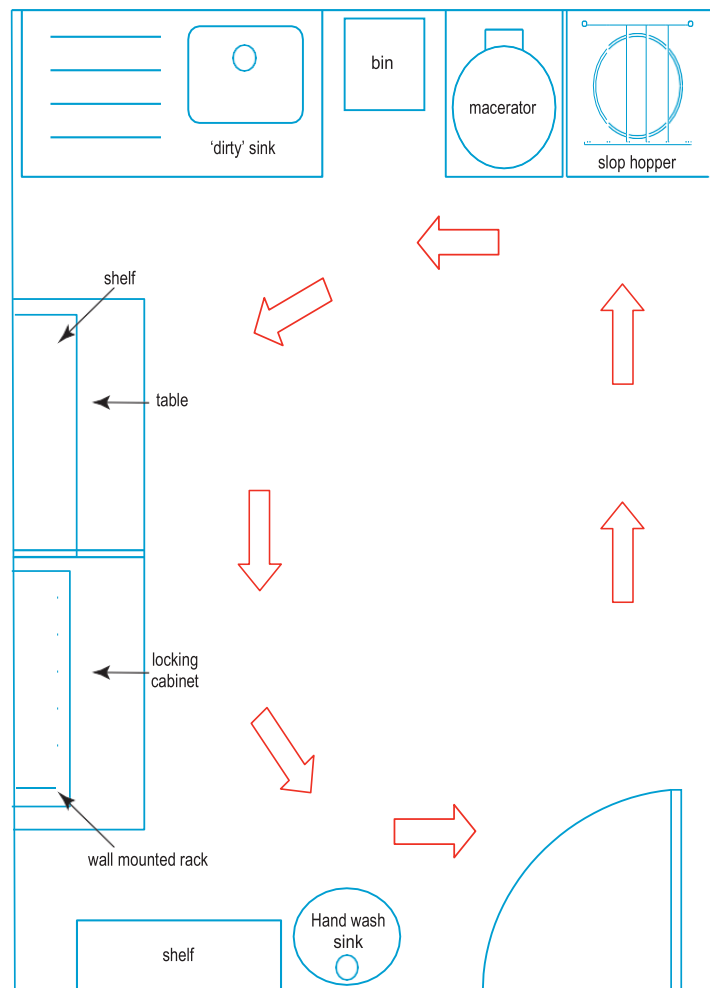
Minimizing the risk of HCAs directly reduces financial costs due to decreases in nursing time and use of antibiotics.

Safe disposal of human waste

Safe disposal of human waste and disposable pulp containers such as bedpans and urine bottles, are one of the most important operations for any infection control and maintenance departments: thereby minimizing the risk of cross contamination and increasing patient and healthcare staff well-being.

An efficient, modern soiled utility room which enables clean and effective human waste disposal and disinfection in a single area is critical to increasing infection control standards that can lead to positive outcomes throughout a healthcare facility.

The risks and costs of not undertaking infection control are evident; it is therefore critical that designing a soiled utility room with effective decontamination is key to delivering proper hygiene and strong infection prevention control solutions.



6.2 Maceration

Due to the increasing number of outbreaks of high risk microorganisms, such as C.diff, and the inability of washer disinfectors to completely eliminate risk of cross infection, many healthcare establishments are now moving away from the use of reusable human waste containers.

These are being replaced by single use ‘pulp’ containers, with subsequent maceration and disposal, as an alternative and extremely reliable means of total infection control.

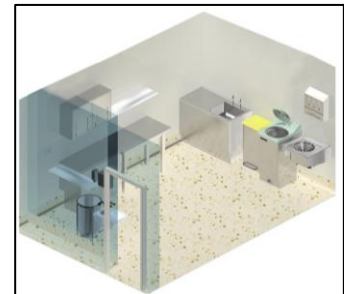
Such macerators will completely destroy disposable pulp bedpan/urine bottle container and contents, including macerator friendly wipes, by pulverising items into small particles using carefully designed blade technology.

In addition to selecting the best technology for use within a soiled utility room, there are certain key features required:

- Hands free operation
- Incorporating antibacterial materials creating a ‘Microbesafe’ surface
- Short cycle times to reduce water and electrical demands
- Easy loading leading to savings in staff time

6.2 BIM – Building Information Model

DDC Dolphin provide “BIM” files for download from www.ddcdolphin.com for all of our Pulpmatic macerators. For further information, please contact your local DDC Dolphin representative



The screenshot displays the software interface for a BIM model of a macerator. The central view shows a 3D model of the unit. To the left is the 'Properties' panel, and to the right is the 'Type Properties' panel.

Properties Panel (Left):

- Family: NBS_DDCDolphinLtd_HlthCareDpslDsfctrUnits_PulpmaticUltima
- Type: PulpmaticUltima
- Constraints:
 - WasteOutlet-HeightOptimum: 220.0
 - WasteOutlet-HeightMinimum: 160.0
 - WasteOutlet-HeightMaximum: 250.0
 - WasteOutlet-CentreOffsetFromLe...: 88.0
 - WasteOutlet-CentreOffsetFromLe...: 412.0
 - Level: Level 0
 - Host: Level : Level 0
 - Offset: 0.0
- Construction:
 - OverflowConnectionRight:
 - OverflowConnectionLeft:
- Mechanical:
 - System Classification: Sanitary
 - System Type: Undefined
 - System Name:
 - System Abbreviation:
- Dimensions:
 - WasteOutlet-Height: 220.0
 - WasteOutlet-CentreOffsetFromLeft: 350.0

Type Properties Panel (Right):

- Family: NBS_DDCDolphinLtd_HlthCareDpslDsfctrUnits_PulpmaticUltima
- Type: PulpmaticUltima
- Type Parameters Table:

Parameter	Value
Data	
Weight	85 kg
WaterTankCapacity	24 L
WaterSupply	¾" BSP male fitting required
WaterPressureRange	0.5-10 bar
WaterConsumptionPerCycle	28.44 L
Waste	Nominal Bore 50 mm (2")
SuitableDisinfectantDetergents	n/a
OperationCycleDuration	2 mins
Operation	Automatic
MinimumFlowRate	12 L/min (at 1 bar)
MaterialsColourAndFinish	n/a
MaterialsBody	n/a
Form	Floor mounted, top access
EnvironmentalProductDeclaratio	n/a
ElectricalSupply	230V Single phase: connected to a
DisinfectionTankCapacity	5 L
DisinfectionDosingPerCycle	8 ml
Capacity	4-6 pieces of medical pulp
AcousticRating	59.5 dB
Accessories	n/a

7. Machine specifications – Pulpmatic Ultima

General	
Stainless steel grade	304
Dimensions: w x h x d	19 11/16" x 40 15/16" x 23 5/8" (500 x 1040 x 600mm)
Weight	Dry 165 lbs (75 kg) Wet 220 lbs (100 kg)
Capacity	3-4 pieces of pulp
Decibel rating	59.5 dba
Protection type	IP54
Electrical	
Voltage	110v/60Hz
Rated power input	1.1kW
Electrical protection class	1
Protection	110v – 15A
Motor power output	0.75kW
Rated motor speed	1445 min
Pump power	0.345kW
Disinfection	
Disinfection container volume	1.32 US Gallon (5L) (external bottle)
Recommended disinfection detergents	EcoCleanse+
Water	
Water supply	Cold water 3/4" 7.3 Psi – 145 Psi (0.5 – 10 bar)
Draining	2" (50mm)
Storage tank capacity	6.34 US Gallon (24L)
	PULPMATIC ULTIMA
Water consumption per cycle	6.87 US Gallon (26L)
Operation cycle time	120 seconds
Electrical consumption per cycle	0.025kWh



7.1 Machine specifications – Pulpmatic Uno

General	
Stainless steel grade	304
Dimensions: w x h x d	15 ³ / ₄ " x 38 ³ / ₈ " x 20 ¹ / ₁₆ " (400 x 975 x 510mm)
Weight	Dry 121 lbs (55 kg) Wet 154 lbs (70kg)
Capacity	1-2 pieces of pulp
Decibel rating	58.9 dba
Protection type	IP54
Electrical	
Voltage	110v/60Hz
Rated power input	0.8kW
Electrical protection class	1
Protection	110v – 13A
Motor power output	0.75kW
Rated motor speed	1445 min
Pump power	0.125kW
Disinfection	
Disinfection container volume	1.32 US Gallon (5L) (external bottle)
Recommended disinfection detergents	EcoCleanse+
Water	
Water supply	Cold water ³ / ₄ " 7.3 Psi – 145 Psi (0.5 – 10 bar)
Draining	2" (50mm)
Storage tank capacity	3.96 US Gallon (15L)
	PULPMATIC Uno
Water consumption per cycle	2.51 US Gallons (9.5L)
Operation cycle time	65 seconds
Electrical consumption per cycle	0.005kWh



8. Contact details



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