

WMX++™

Water System



Description

The WMX++ water system is a machine that can adjust the water that is used in a subsequent process.

The WMX++ water system can add oxygen, change the pH, add an enzyme or other catalyst, heat, and increase the pressure of the water. Each parameter can be independently adjusted so that the subsequent process will operate more efficiently.

A secondary water output can condition the water, with, for example, a degreasing agent. An extra water input can take water from the downstream process and use it to save on new water being used.

Separate flow meters on the machine indicate the amount of water used by the downstream process.

This product is designed, developed, and assembled by Power Knot in Silicon Valley, California.

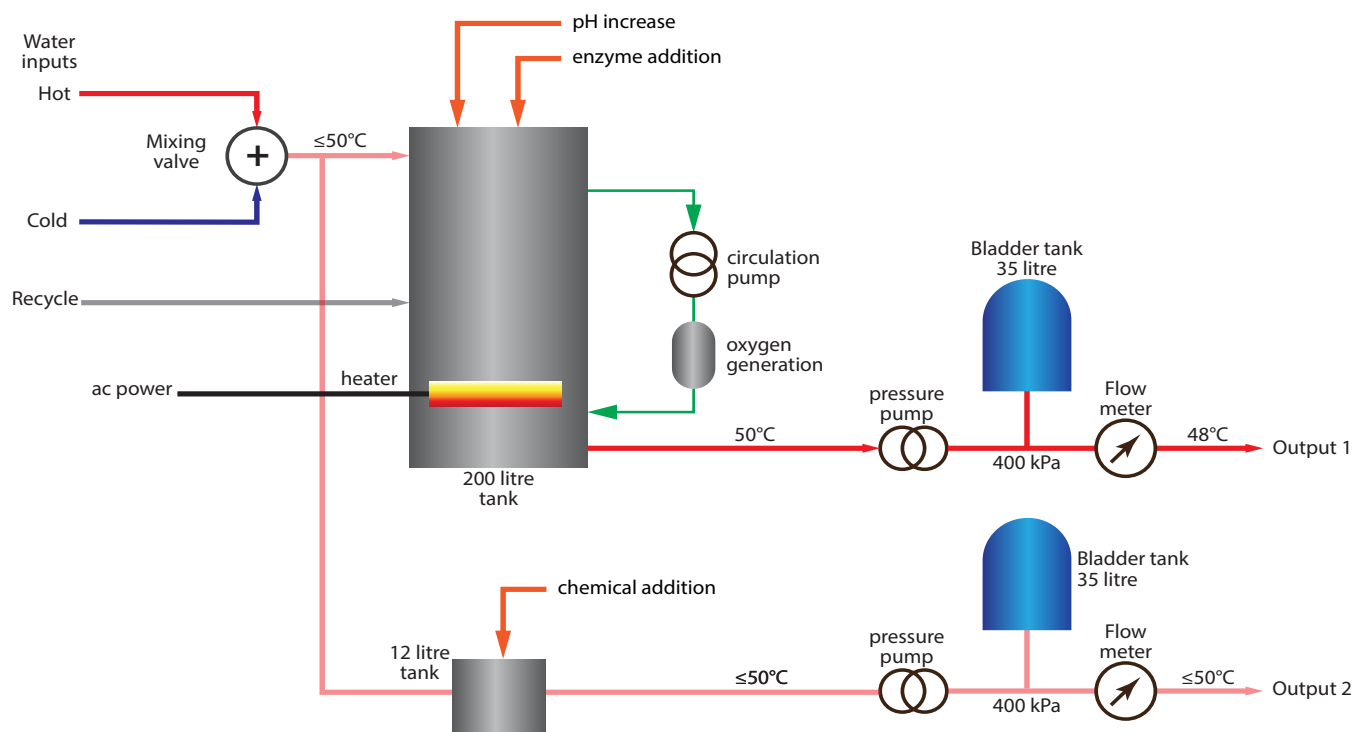
Features

- Increases oxygen level up to 20 ppm
- Increases pH up to 10

- Adds enzymes up to a concentration of 250 mg per litre
- Heats the water up to 50°C
- Increases the pressure up to 400 kPa (58 psi)
- Can reuse water from the downstream process
- Can take hot water from your facility to save heating in the WMX++ water system
- Secondary water output can add degreaser or other chemical
- Alkaline resistant plumbing components ensure better performance and longevity
- Connects to the internet so all parameters can be monitored externally

Benefits

- Can significantly improve the efficiency of the downstream process
- Conditioning the water allows the downstream process to perform where otherwise it may not be able to do so
- Helps to ensure the downstream process complies with legal and regulatory requirements



WMX++

Details

Construction

All stainless steel (chassis, side panels, and main tank). Chassis is mirror finish (EN 10088-2 specification 2P)



Size (L x W x H)

1710 mm x 760 mm x 1760 mm
(67.3" x 29.9" x 69.3")

Operating environment

Indoors or covered patio
Must not be exposed to rain, snow, or sunshine

Ingress protection

IP54 – splash proof and dust proof

Operating altitude

0 to 3000 m (9800 ft)

Ambient operating temperature

10°C~40°C (50°F~104°F) when altitude is less than 1000 m (3300 ft); reduce linearly to 24°C (75°F) at 3000 m

Floor surface flatness required

± 15 mm (0.6")

Weight when empty

340 kg (750 lb)

Moving and positioning

Machine is rolled into place with casters

Casters are locked once in position

Weight when full

623 kg (1375 lb) maximum

Space required around machine

Left side: 25 cm (10") minimum, 50 cm (20") preferred. 100 cm (39") is required for servicing

Right side: 60 cm (24") minimum 1for access to tanks for pH, enzymes, and chemicals

Back: 30 cm (12") for plumbing pipes

Front: 60 cm (24") minimum for access to touch screen

Water inlets

Fitting: DN 15 (1/2") female

System includes gate valves, filters, back flow prevention devices, and pressure reducers

Pressure: 100 to 675 kPa

(15 to 98 psi, 1.0 to 6.9 kg/cm²)

Water outlets

Fitting: DN 15 (1/2") female

Output 1: 150 litre per hour (0.7 gpm) (typical)

Output 2: 150 litre per hour (0.7 gpm) (typical)

Drain

Need to plumb to a grade level drain for servicing

AC supply (order one type)

208 V (3L+PE), 50 Hz or 60 Hz
187 V to 230 V

400 V (3L+N+PE), 50 Hz or 60 Hz
360 V to 440 V

External circuit breaker required: 15 A

AC power cord

Length of cable on machine: 180 cm (6');
L 15-20 plug fitted on 208 V machine; no plug on other options

Maximum power

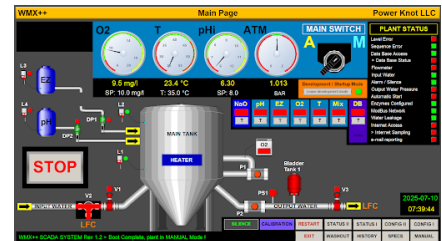
5.5 kW

Electrical energy per day

18 kWh typical

User interface

15" touchscreen with 65k colors



Ethernet

RJ45, 100 baseT DHCP or fixed IP address

Connect to Internet with direct cable, Wi-Fi client, or GSM modem

Automatically connects to WMX Cloud for remote support, reporting, and monitoring (included in purchase price)

Operating lifetime

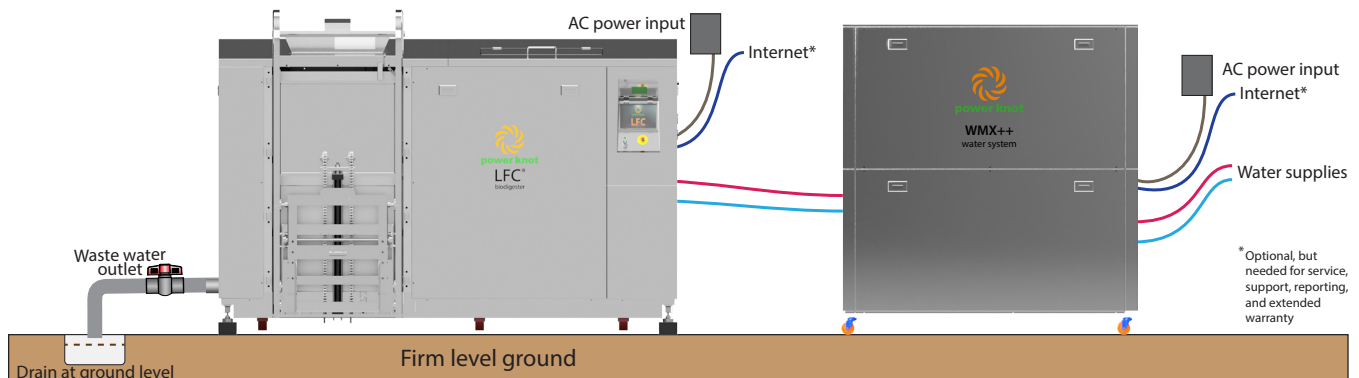
Expected to be 15 to 25 years

Warranty

3 year on parts and components
Subject to terms and conditions

Example usage

WMX++ water system with LFC-1000 biodigester



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