

TOTO®

EcoPower® Ultra-HE Urinal Flush Valve

TEU1UN - Exposed Valve 0.125gpf
TEU2UN - Concealed Valve 0.125gpf

Planet-friendly, superior flushing performance is easy to achieve with the EcoPower Ultra High Efficiency Urinal Flushometer Valve. Engineered to require no electricity or routine battery replacement, the EcoPower Flushometer Valve saves energy and water while providing maximum performance in even the most demanding commercial spaces. Available as an exposed unit or choose the concealed option for a sleeker look.



Performance Dashboard

Features & functionality

0.125gpf EcoPower® Ultra High-Efficiency Urinal (HEU) electronic flushometer valve
Hydropower self-generating system
Automatic sensor activated
12 hour automatic flush for trap seal protection
Piston valve technology
Manual override button
ADA compliant

Visit TOTO for more product specifications for:

[TEU1UN](#)
[TEU2UN](#)

Environmental performance

Improved by:

Powered by the sheer force of running water
Saves 88% more water than standard 1.0gpf valve
Metal parts and electric components are recyclable at the end of service

Certifications & rating systems:

WaterSense® certified
CALGreen® compliant
Contributes to earning credits in LEED®

[See LCA results & interpretation](#)

CSI MasterFormat® #22 42 43



ECO-POWER® VALVES

- Powered by water to create an electrical current that is stored in rechargeable cells to power the Smart Sensor System of the faucet or valve.
- Reduces electricity use, lower maintenance costs and hands-free, automatic-shut-off functionality.



SM Transparency Report™

VERIFICATION

Report

Certified



Self-declared

LCA

3rd party verified



Self-declared

Validity: 10/30/15 – 10/30/18
TOT – 10/18/15 – 014

LCA SCOPE

☒ **Cradle to grave**

☐ Cradle to gate with options

☐ Cradle to gate

The LCA and Report are independently verified and certified to the SM Transparency Report Framework and ISO 14025.

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LCA results & interpretation

TEU1UN & TEU2UN

Scope

☒ Cradle to grave

☐ Cradle to gate with options

☐ Cradle to gate

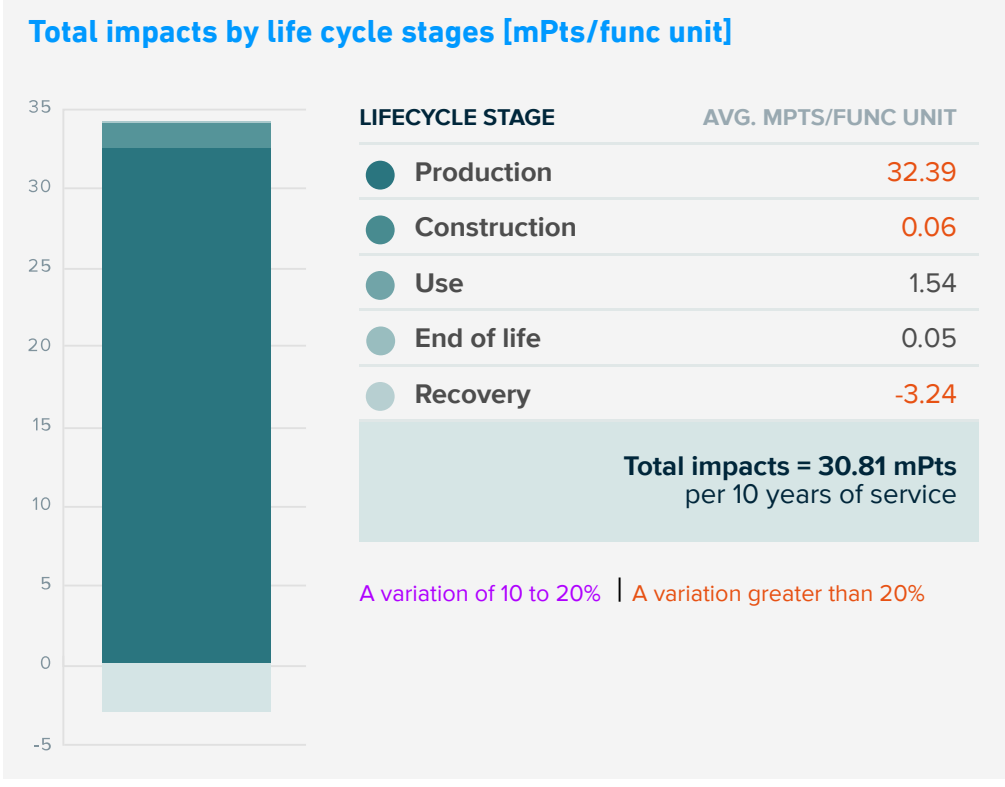
Functional unit
One average flush valve for urinals in an average U.S. commercial environment for 10 years. The period of 10 years is modeled as the period of application based on the average technical lifespan for commercial applications. The economical lifespan of commercial applications can be longer or lower due to aesthetic replacements or more intense use. The implication is that the LCA model assumes that the application ends at year 10 and that the materials will be treated in an end-of-life scenario.

Reference service life
The RSL is 10 years.





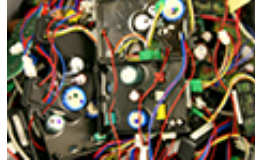
Reporting period
The manufacturer's data represents 2013.

Default use phase scenario
10 years of service in an average U.S. commercial environment in combination with a urinal with 0.125 gallon/use, 18 uses/day, and 260 days/year resulting in 5,850 gallons of water.

Material composition greater than 1% by weight		
PART	MATERIAL	AVG. % WT.
Valve body	Bronze (C836000)	31.0%
Packaging	Cardboard	16.2%
Bottom cover	Zinc die cast	14.3%
Top cover	Zinc die cast	12.7%
Tailpiece	Bronze (C836000)	3.7%
Cover plate	Stainless steel	3.5%
Paper	Paper	3.3%
Tailpiece nut	Brass	1.4%
Coil	Copper	1.2%
	Other	12.7%



LCA results

LIFECYCLE STAGE	PRODUCTION	CONSTRUCTION	USE	END OF LIFE	RECOVERY
Information modules: Included Excluded* *Installation and deconstruction/demolition are mostly manual. The sanitary fittings should not need repair, maintenance or replacement during the modeled life time. Reuse and energy recovery are not modeled for sanitary fittings.	A1 Raw Materials	A4 Transportation/ Delivery	B1 Use	C1 Deconstruction/ Demolition	D1 Recycling
	A2 Transportation	A5 Construction/ Installation	B2 Maintenance	C2 Transportation	D2 Recovery
	A3 Manufacturing		B3 Repair	C3 Waste processing	D3 Reuse
			B4 Replacement	C4 Disposal	
			B5 Refurbishment		
			B6 Operational energy use		
			B7 Operational water use		
					

SM 2013 Learn about SM Single Score results






Impacts per 10 years of service	32.39 mPts	0.06 mPts	1.54 mPts	0.05 mPts	-3.24 mPts
Materials or processes contributing >20% to total impacts in each lifecycle stage	Brass and zinc parts together to the printed wiring board together with manufacturing processes such as polishing and electroplating.	Transportation of the product to installation site or consumer and disposal of packaging.	Volume of water use during the operation of the product and the embedded energy use (such as electricity) in the water used.	Transport to waste processing, waste processing and disposal of material flows transported to a landfill.	Plastic and metal components' recycling processes.

TRACI v2.1





A variation of 10 to 20% | A variation greater than 20%

LIFECYCLE STAGE	PRODUCTION	CONSTRUCTION	USE	END OF LIFE	RECOVERY
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Ecological damage

Impact Category	Unit					
Acidification	SO ₂ eq	 1.62E+00	3.70E-03	1.34E-01	3.94E-03	-9.81E-02
Ecotoxicity	CTU _e	 4.79E+02	1.48E+00	1.23E+01	5.88E-01	-4.57E+01
Eutrophication	N eq	 9.85E-01	6.71E-04	1.13E-02	4.75E-04	-3.13E-02
Global warming	CO ₂ eq	 9.20E+01	8.86E-01	2.01E+01	4.91E-01	-6.69E+00
Ozone depletion	CFC-11 eq	 5.96E-06	1.23E-09	8.39E-07	6.05E-08	-4.13E-07

Human health damage

Impact Category	Unit					
Carcinogenics	CTU _h	 2.91E-06	8.09E-09	4.21E-07	7.09E-09	-3.03E-07
Non-carcinogenics	CTU _h	 2.86E-04	7.78E-08	1.87E-06	2.75E-07	-3.40E-05
Respiratory effects	kg PM _{2.5} eq	 2.11E-01	7.11E-05	8.88E-03	4.71E-04	-1.17E-02
Smog	kg O ₃ eq	 1.08E+01	1.01E-01	9.27E-01	9.39E-02	-1.21E+00

Resources depletion

Impact Category	Unit					
Fossil fuel depletion	MJ surplus	 5.25E+01	1.06E+00	1.35E+01	7.62E-01	-5.33E+00

References

LCA Background Report
TOTO Sanitary Fittings Products LCA Background Report (public version), August 2015

SM Transparency Report Framework
Part A: LCA Calculation Rules and Background Report Requirements | Version 2015 (Based on EN15804+A1; in compliance with ISO 14040-44, 14025)
Part B: Product Group Definition – Commercial Flush Valves

SM Transparency Reports enable purchasers and users to compare the environmental performance of products on a life cycle basis. They are designed to present information transparently to make the limitations of comparability more understandable. SM Transparency Reports of products that comply with the same Product Group Definition (PGD) and include the same life cycle stages, but are made by different manufacturers, may not sufficiently align to support direct comparisons. They therefore, cannot be used as comparative assertions unless the conditions defined in ISO 14025 Section 6.7.2. 'Requirements for Comparability' are satisfied.

Rating systems

The intent is to reward project teams for selecting products from manufacturers who have verified improved lifecycle environmental performance.

LEED BD+C: New Construction | v4 - LEED v4
MR Building product disclosure and optimization
Environmental product declarations

SM Transparency Report product credit values:	
<input type="radio"/> LCA self-declared, Report self-declared	0 product
<input type="radio"/> LCA verified, Report self-declared	1/4 product
<input checked="" type="radio"/> LCA verified, Report certified	1 product

Green Globes for New Construction and Sustainable Interiors
NC 3.5.1.2 Path B: Prescriptive Path for Building Core and Shell
C 3.5.2.2 and SI 4.1.2 Path B: Prescriptive Path for Interior Fit-outs


How we make it greener

TEU1UN & TEU2UN


Collapse all


See LCA results by lifecycle stage

CONSTRUCTION




CARBON NEUTRAL SHIPMENT®



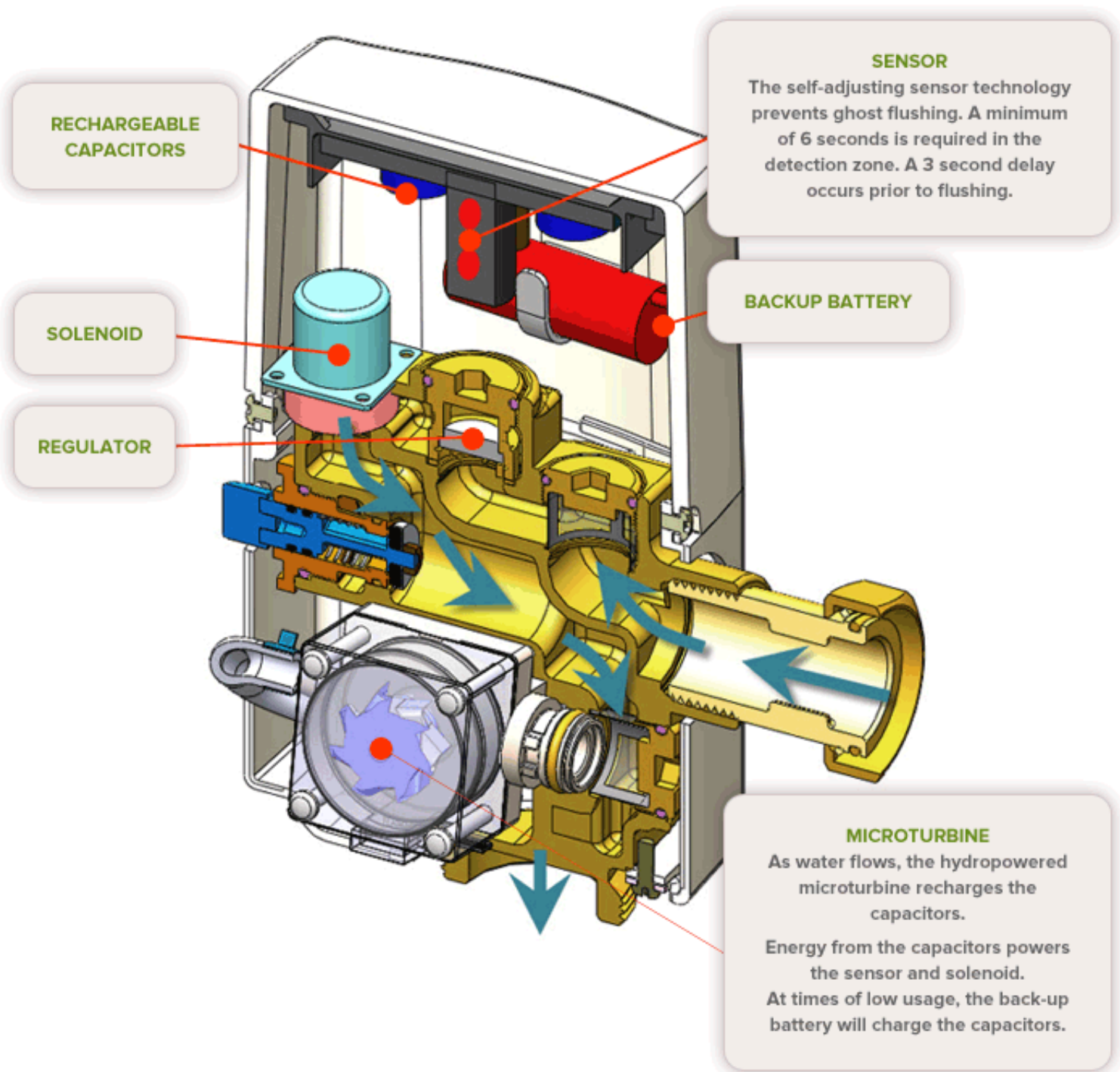


TOTO participates in the UPS Carbon Neutral program. TOTO is a certified SmartWay partner.

USE



TOTO's EcoPower® Urinal Flush Valves feature the highly regarded EcoPower technology. Engineered to reduce environmental impacts, TOTO's EcoPower products offer water and energy savings without sacrificing performance. Below are some of the features of TOTO's EcoPower technology.

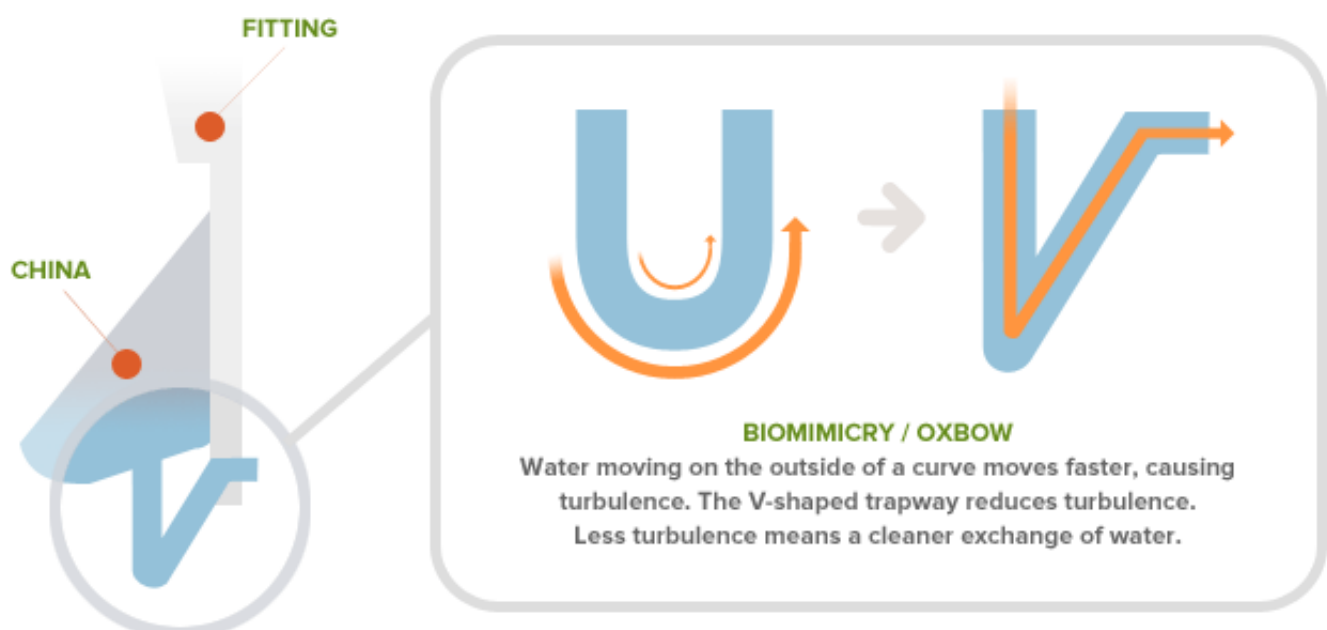


SENSOR:
Ensuring that water flows only when needed, the self-adjusting EcoPower sensor eliminates “ghost” flushing that wastes water. A minimum of six seconds presence in front of the sensor is required to get its acknowledgement, and a three second flush delay after stepping away from the sensing zone prevents excessive flushing.

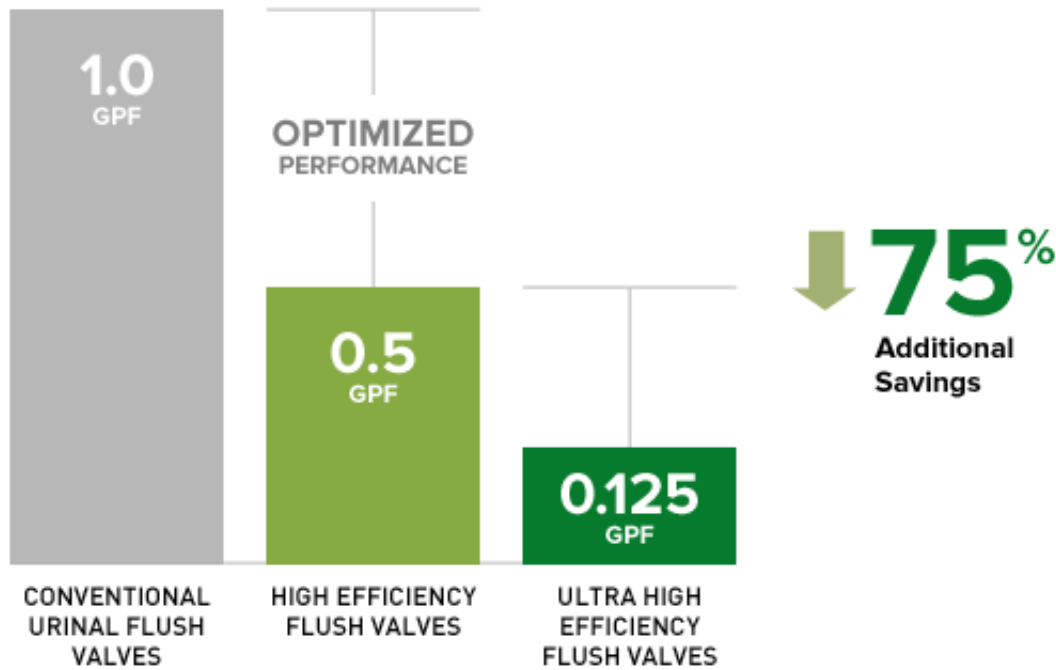
MICROTURBINE:
TOTO's EcoPower technology enables the product to operate 100% off grid. As water flows, the microturbine recharges the capacitor for the sensor and solenoid. Less reliance on the back-up battery results in much less battery waste. With as little as 45 uses a day, the back-up battery can last up to 10 years.

COURTESY FLUSH:
A 12-hr courtesy flush maintains trap seal during periods of low use, preventing the need for unnecessary cleaning.

SOLENOID AND REGULATOR:
The pressure compensating regulator and solenoid assembly with self-cleaning 360 degree screen maintains consistent flush volume under a range of supply pressures.



Designed to work in combination with the 0.125gpf urinal, the flush valve is engineered to utilize biomimicry, modeled after the oxbow affect found in nature. Water moving on the outside of a curve will move faster, causing turbulence. The 0.125gpf urinal utilizes a V-shaped trap to reduce turbulent flow, resulting in lower water use without compromising performance.



Using our proven EcoPower engineering, the 0.125 gallon per flush urinal flush valve reinforces TOTO's performance reputation while offering an additional water savings.



Metal and electronic parts can be recycled at the end of life.