TOTO®

Small Profile High-Efficiency Urinal

UT105U(V)(G)

The organically shaped, ADA compliant TOTO 0.125gpf urinal features a compact design that occupies less wall space than traditional urinals. TOTO HEU's are engineered to work with the EcoPower® flush valves, offering the ultimate in water conservation and flushing performance. Using only one pint of water per flush when paired with a TOTO EcoPower® 0.125gpf flush valve, the urinal saves 88% more water than a 1.0gpf urinal. The urinal is available in top spud and back spud installation options.

Performance Dashboard

Features & functionalityy

0.125gpf when paired with a TOTO 0.125gpf EcoPower® flush valve

Washout flush action with 3/4" top or back spud inlet

Compact urinal with concealed integral trap

Complete with low profile dome strainer

Wall-mounted

ADA compliant

Visit TOTO for more product specifications

Environmental performance

Saves 88% more water than standard 1.0gpf urinal

Upcycling of post industrial porcelain waste into ceramic floor tile

ecoScorecard™ listed

WaterSense® certified

Total impacts = 11.13 mPts/per 10 years of service

Learn about SM Single Score results

See LCA results & interpretation

SMART FACT

WATERSENSE®

- Promotes water efficiency and enhances the market for water-efficient products, programs, and practices.
- The WaterSense label helps consumers identify water-efficient products and programs.
- Products with the WaterSense label will perform well, help save money, and encourage innovation in manufacturing.

ecoScorecard

SM Transparency Report™

VERIFICATION	Report
Certified	✓ NSF
Self-declared	
	LCA
3rd party verified	✓ NSF
Self-declared	

Validity: 10/18/14 – 10/18/17
TOT – 10/18/14 – 007

LCA SCOPE

- ✓ **Cradle to grave**
- ○ Cradle to gate with options
- ○ Cradle to gate

The LCA was independently verified in accordance with ISO 14040-44 and the Sustainable Minds Transparency Report™ Framework (Draft version 2.0).

NSF International
P.O Box 130140
789 N.Dixboro Road
Ann Arbor, MI 48105, USA
www.nsf.org
+1 734 769 8010

TOTO USA
1155 Southern Road
Morrow, GA 30260
www.totousa.com

Contact us

LCA results & interpretation

Small Profile High-Efficiency Urinal UT105U(V)(G)

Scope and summary

✔ **Cradle to grave** ○ Cradle to gate with options ○ Cradle to gate

Functional unit

10 years of use of a urinal in an average U.S. commmercial environment.
One urinal in an average U.S. commercial environment. 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 commerical 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.

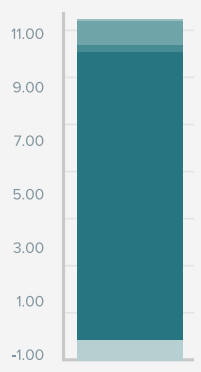
Default use phase scenario

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

Material composition greater than 1% by weight

PART	MATERIAL	AVG. % WT.
Ceramic	Ceramic	83%
Packaging	Corrugated Board	11%
Flange, spud, nut & hanger	Brass	5%
	Other	1%

Total impacts by life cycle stages [mPts/func unit]



LIFECYCLE STAGE	AVG. MPTS/FUNC UNIT
Production	10.01
Construction	0.23
Use	1.54
End of life	0.06
Recovery	-0.71

Total impacts = 11.13 mPts
per 10 years of service

What's causing the greatest impacts

All lifecycle stages

The production stage is dominating all impact categories.
Results show that the use stage is less dominant than the production stage, yet it is still significant in most of the impact categories. This is mostly due to the embedded energy arising from acquisition, treatment and distribution of the water used during the operation of the product (4-26%). The contributions covered under the construction/installation stage are mostly associated with the product delivery to the market. The recovery stage includes recycling benefits by preventing the need to produce primary materials. Recycling is a relevant factor for some of the impact categories, offsetting a portion of the impacts caused by production. Additionally, the delivery of the product to the construction/installation site as well as the processes for dismantling the product and final waste treatment during the end of life stage are slightly relevant in the global warming impact category.

Production stage

The ceramic parts dominate all impact categories except for eutrophication, non-carcinogenics and carcinogenics.
The brass parts together with the turning brass process have dominating contributions to the eutrophication, non-carcinogenics and carcinogenics impact categories. The remaining parts and processes contribute between 2% and 32% of the overall impacts in the rest of the categories

Sensitivity analysis

There are no sensitivity results that lead to variations greater than 10% in the LCA results.

TOTO PeoplePlanetWater™ programs improving environmental performance

- **Dual-Max, E-Max, Double Cyclone, 1G, and EcoPower technologies reduce water consumption in the use phase**
- **Energy efficiency programs optimize the firing process**
- **50% electricity from renewable energy**
- **100% of post-industrial ceramic waste is recycled**

See how we make it greener

LCA results

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

SM 2013

Impacts per 10 years of service	10.01 mPts	0.23 mPts	1.54 mPts	0.06 mPts	-0.71 mPts
Materials or processes contributing >20% to total impacts in each lifecycle stage	Ceramic parts production together with brass parts and injection molding process.	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.

Learn about SM Single Score results

TRACI

LIFECYCLE STAGE		PRODUCTION	CONSTRUCTION	USE	END OF LIFE	RECOVERY
Ecological damage						
Impact Category	Unit					
Acidification	**kg SO_2 eq**	8.50E-01	1.54E-02	1.34E-01	3.29E-03	-2.55E-022
Ecotoxicity	**CTU_e**	1.59E+02	5.77E+00	1.23E+01	7.63E-01	-9.01E+00
Eutrophication	**kg N eq**	1.74E-01	2.23E-03	1.13E-02	3.08E-04	-7.59E-03
Global warming	**kg CO_2 eq**	8.60E+01	3.42E+00	1.99E+01	1.50E+00	6.44E-01
Ozone depletion	**kg CFC-11 eq**	3.58E-06	3.71E-09	8.39E-07	5.75E-08	-1.73E-07
Human health damage						
Impact Category	Unit					
Carcinogenics	**CTU_h**	1.31E-06	3.14E-08	4.21E-07	7.95E-09	-1.23E-07
Non-carcinogenics	**CTU_h**	4.54E-05	3.01E-07	1.87E-06	5.58E-08	-5.99E-06
Respiratory effects	**kg $PM_{2.5}$ eq**	6.18E-02	2.91E-04	8.88E-03	2.59E-04	-3.22E-03
Smog	**kg O_3 eq**	4.37E+00	4.29E-01	9.27E-01	8.63E-02	-3.05E-01
Resources depletion						
Impact Category	Unit					
Fossil fuel depletion	**MJ surplus**	1.65E+02	4.10E+00	1.35E+01	9.86E-01	-2.23E+00

References

LCA Background Report
TOTO Sanitary Ceramic Products LCA Background Report (public version), TOTO 2014

SM Transparency Report Framework
Part A: Part A: LCA Calculation Rules and Background Report Requirements (Draft V2) (based on ISO14040-44, ISO14025 and EN15804)
Part B: Product Group Definition – Commercial Urinal

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 life-cycle environmental performance.

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

Green Globes for New Construction and Sustainable Interiors
NC 3.5.1.2 Path B: Prescriptive Path from Building Core | **NC** 3.5.2.2 and **SI** 4.1.1 Path B: Prescriptive Path for Interior Fit-outs

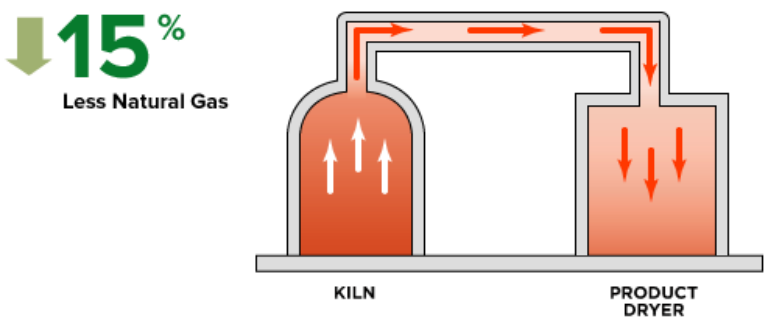
How we make it greener

Small Profile High-Efficiency Urinal UT105U(V)(G)

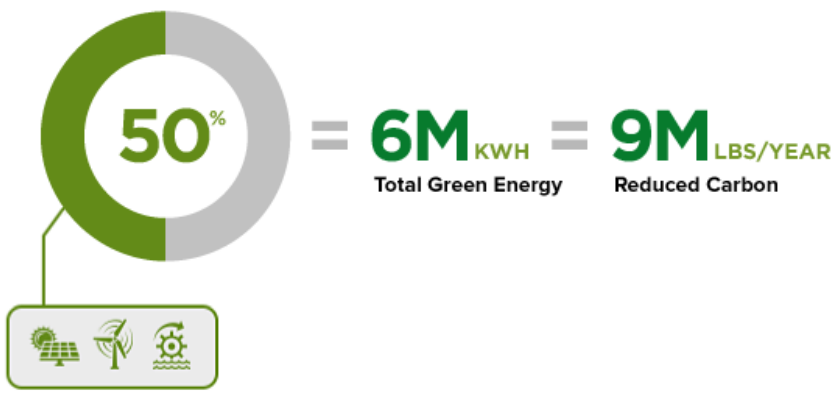
Collapse all

See LCA results by lifecycle stage

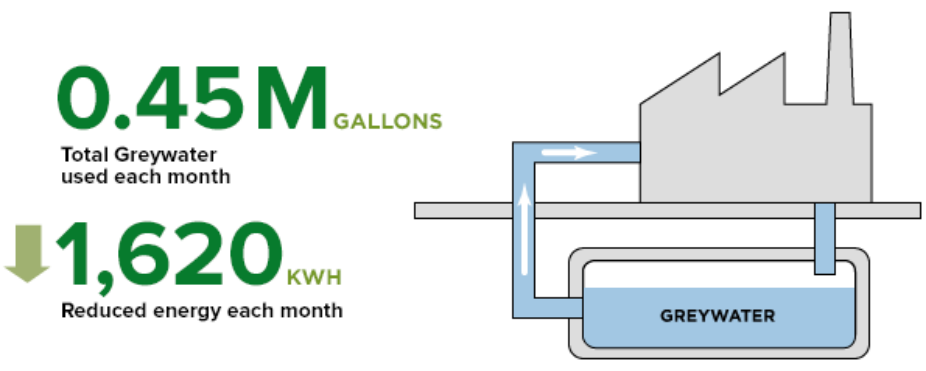
PRODUCTION



Waste heat from the kilns is routed to the product dryer. This reduces 15% natural gas consumption.



50% of the electricity that TOTO uses is based on renewable energy generation. It's 6 million kilowatt hours of green energy, which means over 9 million pounds of carbon reduced each year.



0.45 million gallons per month of greywater is used in TOTO's operations. 1,620 of kwh in energy is reduced due to less potable water.

65% of all cardboard used is 100% recycled content.

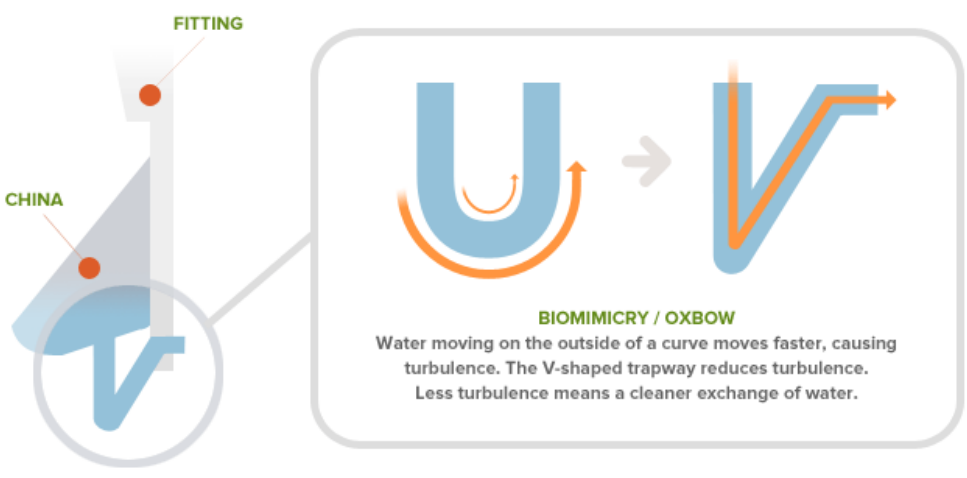
CONSTRUCTION

CARBON NEUTRAL SHIPMENT UPS

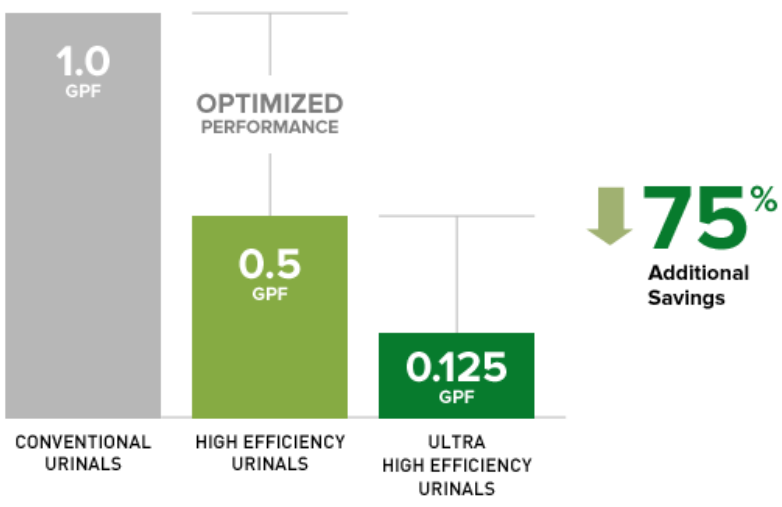
SmartWay Transport Partner — Getting There With Cleaner Air

UPS parcel shipments are carbon neutral. TOTO is a registered SmartWay® Transport Partner.

USE



Designed to work in combination with the EcoPower TEU1UN Urinal Flush Valve, the urinal was 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.



Designed to work in combination with the EcoPower TEU1UN Urinal Flush Valve, the 0.125 gallon per flush urinal reinforces TOTO's performance reputation while offering an additional water savings.