

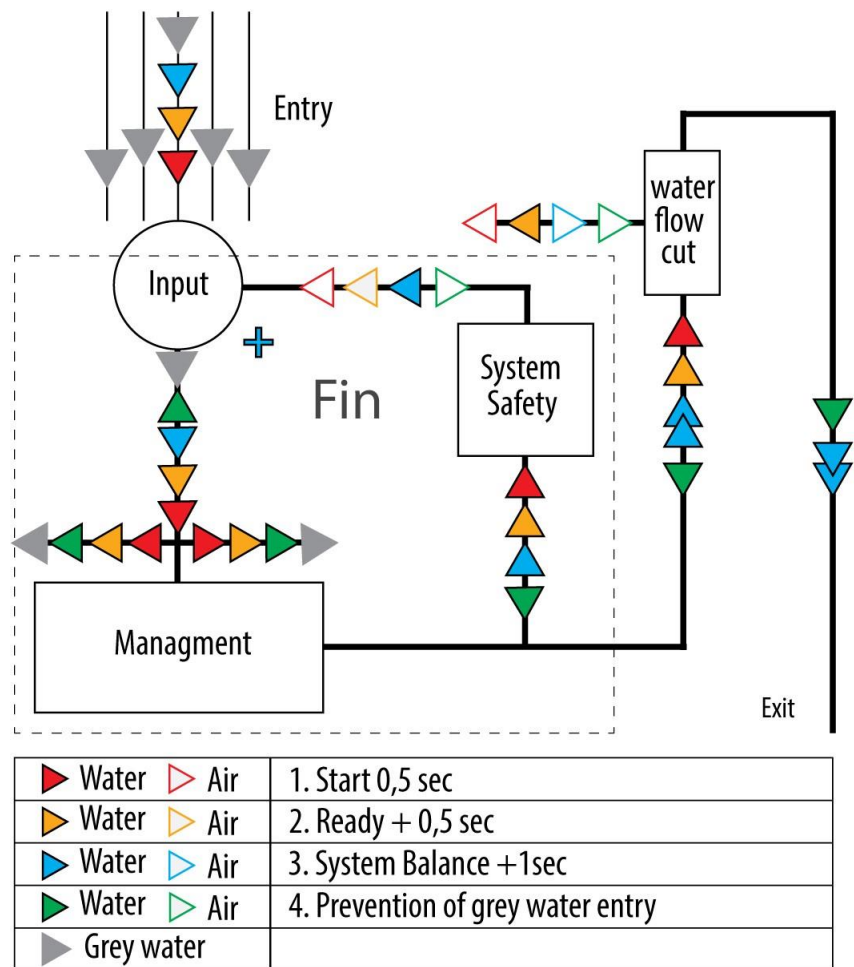
- Product** : **Fin**
- Owner** : TETHYS LTD – Water Saving Technologies
- Manufacturer** : KALFOPLAST – Moulds & Plastic Elements Production Factory
ELECTROCHEM DELIBALTAS DR DELIBALTAS LTD – Ultra Performance Silicones & Polymers
- Subject of inspection** : Statistics for Drinking Water Consumption during Wash Basin Uses.
Quality Features of Fin product.
Operating Cycle of Fin product.
Average Drinking Water Saving per Wash Basin Use.
- Place of inspection** : TETHYS LTD – Water Saving Technologies
12 Konstantinou Saratsi str., 55132 - Kalamaria, Thessaloniki, Greece
- Date of inspection** : 07/MAY/2018
- Inspection activities** : Table of water saving measurements during wash basin common uses with stable pressure 1,5 atm



Product dimensioning according to construction designs and prototype.



Operating Cycle of Fin product.



Product Installation and Operation



A test use has been conducted for Hand Washing with soap, with stable pressure 1,5 atm and total water consumption 3,00 lt. The clean water collection in the measurement vessel was measured 2,17 lt, water saving 72% (Manufacturer Specifications 67%).

A test use has been conducted for the Hot Water Waiting, with stable pressure 1,5 atm and total water consumption 4,00 lt. The clean water collection in the measurement vessel was measured 3,87 lt, water saving 97% (Manufacturer Specifications 95%).

Test uses have been conducted in the same way for the other uses and the measurement results were within the Manufacturer Specifications.

Requirements / Specifications

- : Fin technology collects the quantities of clean water that are wasted when a tap stays open at intervals of use or while waiting for hot water. The collection of clean water is achieved by taking advantage of the kinetic energy of the tap water column. Through a fixed hydraulic circuit and with fluid balances, clear water is allowed to pass and gray wastewater is prevented.

There are no specifications for the specific NEW innovative product.

Attachments

- : 1. Certificate ISO 9001:2015 by the manufacturer KALFOPLAST – Moulds & Plastic Elements Production Factory, for the “*Design, development, manufacture of moulds and plastic elements production*”.
- 2. Confirmation statement for the use of materials for the manufacture of Fin by the manufacturer KALFOPLAST for the materials “SABIC PP 412MK49 PP block copolymer for injection moulding & PE EXPANSOR 02771” that were used.
- 3. CE Certificate of Compliance for the silicon tubing by the manufacturer ELECTROCHEM DELIBALTAS DR DELIBALTAS LTD, Cert. No. 04-011, April 23rd 2018.
- 4. Patent Registration to the «United States Patent and Trademark Office».

Remarks

- : The water consumption statistics for the wash basin uses by a four-person family, that are presented in the measurement table by TETHYS LTD, were compared to a water consumption table of Northern Europe statistics by MESOGEOS SOS Network and they were found smaller. Therefore, the water consumption measurements per use do not exceed the real consumption and they are within the normal limits.

Water consumption in the sink by a family of four and water economy with the use of Fin

USES	Morning	Noon	Night	After using the toilet	After work	Total uses	Usage factor of 0.50	Water consumption per use in (L)	Total consumption in (L)	Water savings per use in (L)	Total water savings in (L)	
Hand wash	4,00	8,00	8,00	25,00	10,00	55,00	27,50	3,00	82,50	2,01	55,28	
Face wash	4,00		4,00			8,00	4,00	4,00	16,00	2,60	10,40	
Tooth washing	4,00		4,00			8,00	4,00	9,00	36,00	6,75	27,00	
Saving	1,00					1,00	1,00	9,00	9,00	6,93	6,93	
Waiting for hot water	13,00	8,00	16,00	25,00	10,00	36,00	18,00	1,00	18,00	0,95	17,10	
TOTAL									161,50	TOTAL	116,71	
Total water savings 75%									WE ACCEPT	150,00	WE ACCEPT	110,00

Usage factor	It is estimated that the uses that will be made are about 50% of the uses that would normally have to be made
Waiting for hot water / Total uses	Half of the sum is calculated, because the usage is only for the winter months
Waiting for hot water	The most favorable case is calculated with the least amount of water waste

Inspector (Name & Signature)

: Iviriotis Vasilis

