

# Water Use Comparison

## Grease Grabber H<sub>2</sub>O vs. Self-Cleaning Hood vs. Standard Waterwash

Environmental impact and energy efficiency is becoming increasingly important. Commercial kitchens typically use a significant amount of hot water which expends considerable energy to heat. Thus, it is important to utilize equipment that decreases overall water consumption.

Below outlines water use from three different industry exhaust hoods with integrated cleaning systems. The Grease Grabber H<sub>2</sub>O uses the least amount of water and has the highest grease extraction efficiency generating additional operational cost savings.

WATER USE SUMMARY		
Hood Type	Average Water Use per Cleaning Cycle	End Result
Grease Grabber H <sub>2</sub> O	30 gal	Most Efficient
Self-Cleaning Hood	57 gal	90% more water used than the Grease Grabber H <sub>2</sub> O
Standard Waterwash	62.5 gal	110% more water used than the Grease Grabber H <sub>2</sub> O

### GREASE GRABBER H<sub>2</sub>O

- Uses a total of 3.0 gal/ft of hood including both the wash and rinse cycles
- Recirculates hot water during each cycle to reduce environmental impact
- **Filters are cleaned during the wash and rinse cycle and do not need to be removed and cleaned by hand**

Example: 10 ft Grease Grabber H<sub>2</sub>O exhaust hood:

$$3.0 \frac{\text{gal}}{\text{ft}} (10 \text{ ft}) = 30 \text{ gal}$$



## SELF-CLEANING HOOD

### 1. Plenum and backside filter wash:

- Uses 0.7 gpm/ft of hood for the wash cycle
- Adjustable wash cycle time preset to 3 minutes
- Utilizes a “one-way” steady flow of hot water
- Requires 30 to 70 psi of constant water pressure
- **Filters must be removed by hand and cleaned after the wash cycle is complete**

Example: 10 ft Self-Cleaning hood:

$$\frac{0.7 \frac{\text{gal}}{\text{min}}}{\text{ft}} (3 \text{ min}) (10 \text{ ft}) = 21 \text{ gal}$$

### 2. Filter cleaning:

- Average commercial dishwasher uses 0.75 gallons per wash cycle
- Recommended only one filter per wash cycle
- To attempt similar grease extraction efficiencies as the Grease Grabber H<sub>2</sub>O, dual stage filters must be used
- For heavy duty cooking the manufacturer recommends putting each filter through 4 wash cycles on a daily basis

Example: 10 ft hood utilizing 12 filters (1st and 2nd stage):

$$\text{1st Stage Filtration: } 0.75 \frac{\text{gal}}{\text{wash}} (6 \text{ filters}) (4 \text{ cycles}) = 18 \text{ gal}$$

$$\text{2nd Stage Filtration: } 0.75 \frac{\text{gal}}{\text{wash}} (6 \text{ filters}) (4 \text{ cycles}) = 18 \text{ gal}$$

### Total Water Use:

- 21 gal + 18 gal + 18 gal = 57 gallons

## STANDARD WATERWASH HOOD

- A standard waterwash hood uses on average 1.25 gal/min per foot of hood
- Average wash cycle time is 5 minutes
- Requires 40 to 60 psi of constant water pressure
- Utilizes a “one-way” steady flow of water

Example with a 10 ft Standard Waterwash hood:

$$\frac{1.25 \frac{\text{gal}}{\text{min}}}{\text{ft}} (5 \text{ min}) (10 \text{ ft}) = 62.5 \text{ gal}$$

