

# Boston Green Tourism

*...advancing the green hotel movement*



# Water Saving Solutions For All Dishwasher Types



## Existing Warewashers



### FT800/900

- Uses more than 320 gallons of rinse water per hour
- Requires a hot water line for final rinse



### C-Line and A Series

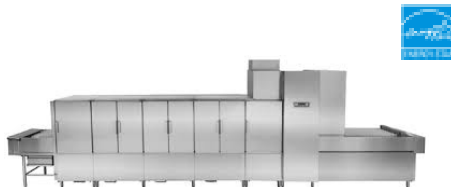
- Uses more than 300 gallons of rinse water per hour
- Requires a hot water line for final rinse



### AM-14

- Uses more than 90 gallons of rinse water per hour
- Requires a hot water line for final rinse

## New Technology



### FT1000

- Cleans with only 58 gallons of rinse water per hour
- Energy Recovery and Ventless options use a cold water line for final rinse



### C-Line and A Series

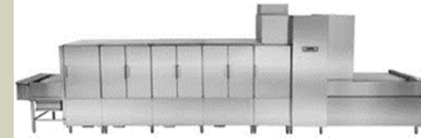
- Cleans with only 126 gallons of rinse water per hour
- Energy recovery option uses a cold water line for final rinse



### AM-15 Ventless

- Cleans with only 44 gallons of final rinse water per hour
- Ventless option requires no vent hood and uses cold water for final rinse

# High Speed "Flight Type" Dishwashers



## HOBART DISHWASHER ENERGY AUDIT

Customer: ACE Summit  
National

Prepared on: Feb 02, 2016

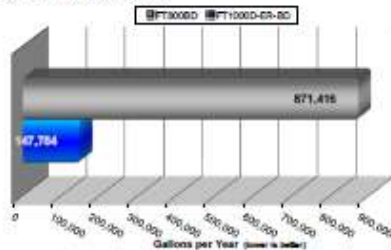
Dishwashers to be compared:

Brand Model	Description	Water Usage per Hour <sup>1</sup>
Hobart FT800BD	Flight Type Continuous Racking Automatic Conveyor Dishwasher, Up to 13,043 Dishes/Hour, 342 Gallons/Hour, Provided with blower dryer	342 Gallons
Hobart FT1000D-ER-BD	Dual Rinse Flight Type Continuous Racking Automatic Conveyor Dishwasher, 58 Gallons/Hour, S/S Pumps and Impellers, Variable Speed Conveyor, Insulated Doors, Controls at Both Ends, Automatic Soil Removal, Auto Clean and Auto Delime Features, Energy Recovery, Blower Dryer	58 Gallons

Operational Data	Hobart FT800BD Data	Hobart FT1000D-ER-BD Data
Building Water Heater: Gas	Tank Heat Type: Electric	Tank Heat Type: Electric
Cost per therm: \$0.814	Cost per kWh: \$0.101	Cost per kWh: \$0.101
Hours per Day: 10.0	Wash Time (Hrs): 10.0	Wash Time (Hrs): 10.0
Days per Week: 7	Sanitization Method: Hot Water	Sanitization Method: Hot Water
Hours per Year: 3,640	Booster Heat Type: Electric	Booster Heat Type: Electric
	Cost per kWh: \$0.101	Cost per kWh: \$0.101



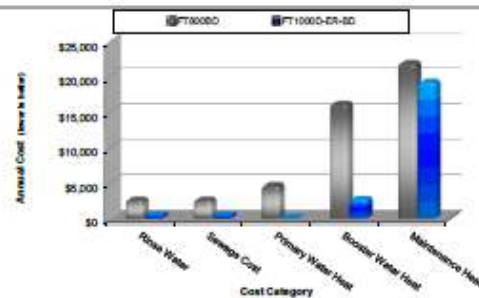
Final Rinse Consumption Comparison:



Model	Final Rinse Gallons per Year <sup>2</sup>
FT800BD	871,416
FT1000D-ER-BD	147,784
Difference	723,632

FT1000D-ER-BD will use 83% less water per year

Annual Cost	FT800BD	FT1000D-ER-BD	Savings
	without Energy Recovery	with Energy Recovery	
Rinse Water	\$2,614	\$443	\$2,171
Sewage Cost	\$2,614	\$443	\$2,171
Primary Water Heat	\$4,646 (85-110 °F)	\$0 (85-110 °F)	\$4,646
Booster Water Heat	\$16,129 (110-185 °F)	\$2,735 (110-185 °F)	\$13,394
Maintenance Heat	\$21,838	\$19,191	\$2,647
<b>Total Annual Cost Savings</b>			<b>\$25,029</b>

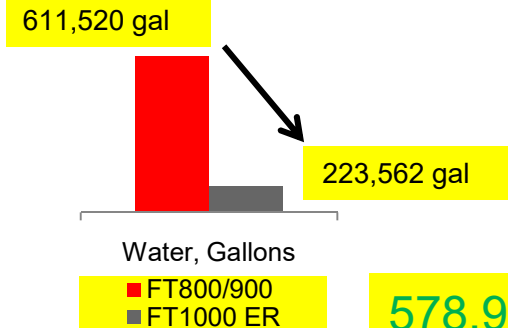


Payback Analysis:

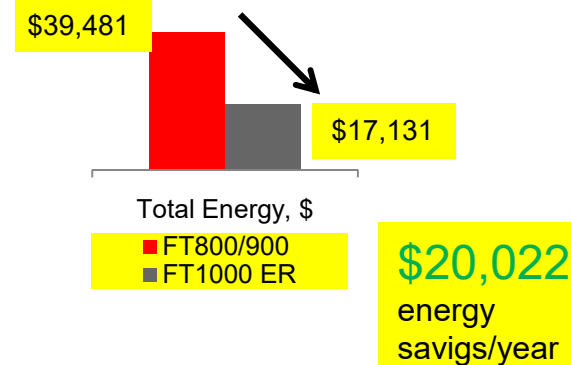
Manufacturer & Model	Price
Hobart FT800BD	Not Entered

<sup>1</sup> Water usage taken from current U.S.F. Listing Book  
<sup>2</sup> Assumes final rinse in use 70% of the time

## Water Savings/Each Unit/Year



## Energy Savings/Each Unit/Year



# Conveyor Type Dishwasher

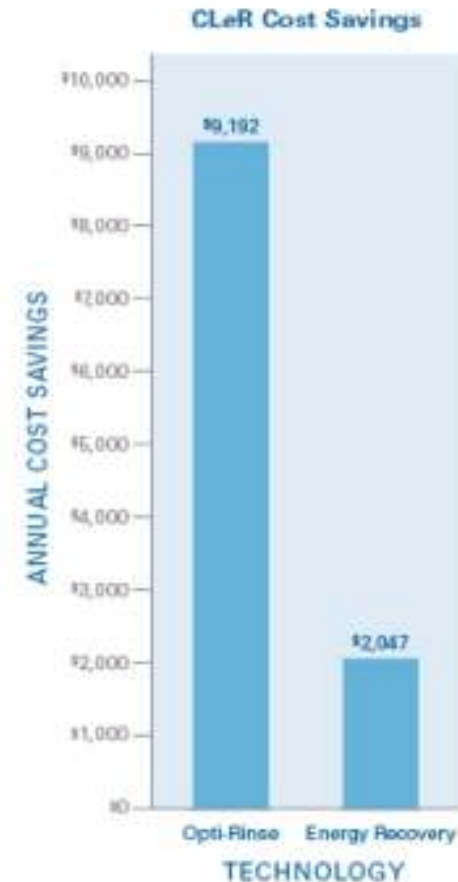
# Energy Recovery



Runs on Cold Water  
(uses captured steam to heat cold  
Water. 180 degree rinse



- Combined energy and water savings of more than \$11,000 a year:
  - \$2,047 from Energy Recovery
  - \$9,192 due to Hobart's exclusive Opti-Rinse™ technology



> Hobart's exclusive Opti-Rinse and Advansys technologies combine to deliver industry-leading cost savings. The Opti-Rinse water and energy savings of \$9,192 is based on a comparison to Hobart's previous conveyor-type warewasher without Opti-Rinse. The Advansys energy savings of \$2,047 is based on the CLe conveyor-type without Energy Recovery technology.

# Door Type Dish Machine

# Energy Recovery Vent-less



Uses only .74 gallons per rack

Runs on Cold Water  
(uses steam to heat cold water)  
( 180 degree rinse)

Advansys Ventless Door Type Savings	
Purchase and install hood unit for vent	\$3,500
Reduced HVAC use (to vent steam)	\$776 per year
Energy recovery <sup>1</sup>	\$792 per year
<b>Total saving</b>	<b>\$5,068 the first year; \$1,568 every year after</b>

<sup>1</sup>Based on 200 cycles/day, 360 days/year at an energy cost of \$.011 cent per cycle.



# Energy Recovery Glass Washer



Hobart Perfect Glass

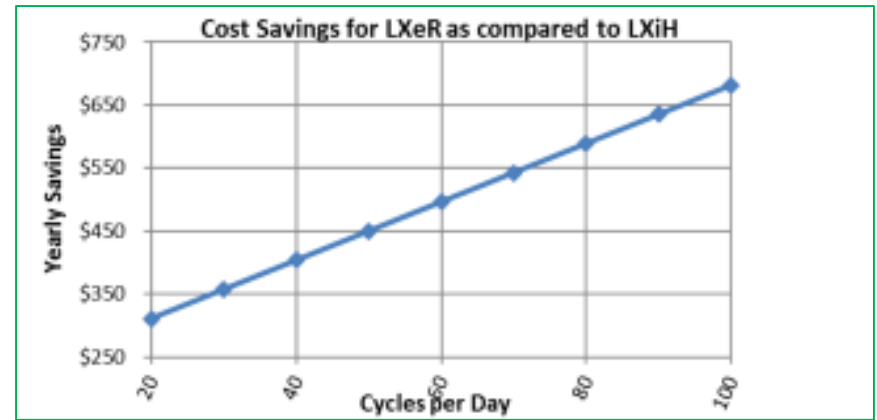
**ITW Food Equipment Group**  
NORTH AMERICA



Short (34")  
LXGeR-S  
LXGePR-S



Tall (42")  
LXGeR-T  
LXGePR-T



Legs can be removed and standard feet added

Uses only .64 gallons of water per cycle.  
Runs on cold water only  
(uses captured steam to heat cold water)

Energy Savings up to \$1000 per year

# Advansys PW10eR & PW20eR



## **\*Energy Recovery:**

Heat is recovered from the condensation of vapors at the end of each cycle. This pre-heats the water for the next rinse cycle translating into energy savings & improved room environment for workers.

***\*Eliminating the need for a vent hood***

## **Auto-Delime:**

Notifies operator when to delime the machine based on specific site water hardness.

Auto Cycle then pulls delimer and delimes machine (including booster).

The result is less Labor, less chemical usage & prevents one of the most costly maintenance occurrences.

## **Additional Features:**

- Wash-water Change Notification –Adds consistency to cleaning
- Additional Energy Savings (**\$1,925**) vs Base Model
- Hot & cold water connection
- Steam reduction leads to more comfortable work environment
- Start Up from Hobart Service

Same features as Base plus Auto-Delime & Energy Recovery

*Average savings of \$1,925 vs Base machine  
(estimated 100 cycles per day)*

**HOBART**

**VULCAN**

**Avery Berkel**

**Traulsen**

**Berkel**

**BAXTER**



# Replacement Program



## Equipment Package Pricing:

- Machines
- Turnkey Installation/ Includes Old Machine removal and disposal.
- Extended Warranty and Service Contract and PM Programs
- Leasing Opportunities

## Payback Analysis for the Project:

- Most projects payback within 2-4 years
- Custom Energy Audits
- Metering



Thank you!



## Contact Information

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We are proud to be Energy Star's Partner of the Year for 8 consecutive years.