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Flight-Type Dishwashing Machine











LA Research Report M660004

Complies with EPA Reduction of Lead in Drinking Water Act 2014

Meets requirements of ASSE Standard No. 1004

SPECIFIER STATEMENT

The specified machine shall be a Hobart Energy Recovery with blower dryer flight type dish machine, 58 gallons of final rinse consumption per hour, with dual rinse, hinged & insulated doors, 30" wide conveyor belt, sliding wash arms without caps, & microprocessor controls with ventless technology, auto clean, auto delime, energy recovery, automatic soil removal system (ASR), and blower dryer.

STANDARD FEATURES

- + Pumped rinse system (pressure gauge not required)
- + Water usage 58 gph
- + Digital controls with machine diagnostics
- + Low temperature alert
- + Hinged insulated cabinet-style doors
- + 31" access on prewash, power wash and power rinse chambers; 20" access on dual rinse and ASR chambers
- + Start and stop switches at both ends
- + Doors open indicator
- + Drains open indicator
- + Door interlocks
- + 3½ H.P. prewash, 4 H.P. power wash and power rinse pump motors, all TEFC
- + Capless auto clean wash arms
- + Easy to remove stainless steel scrap pans and baskets
- + 30" wide conveyor belt
- + Dual rinse
- + Automatic soil removal system (ASR)
- + Auto clean
- + Auto delime
- + Energy recovery
- + Front and rear panels
- + Variable speed conveyor
- + Electric booster heater
- + Configurable drain to load or unload
- + Blower dryer

OPTIONS & ACCESSORIES (Available at extra cost)

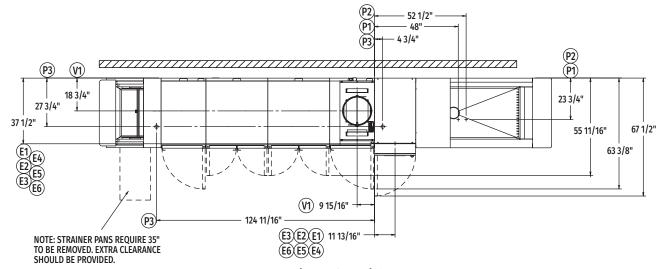
□ Insulated split, vertical slide-up doors
 □ Multiple conveyor options
 □ Factory mounted circuit breakers
 □ Correctional packages – standard, medium and maximum options (Contact Hobart for details)
 □ Casino packages
 □ 6" higher than standard chamber
 □ Flanged feet
 □ Water hammer arrestor/PRV (field installed)
 □ Drain water tempering kit (installed by others)
 □ Water treatment system

Approved by	Date	Approved by	Date

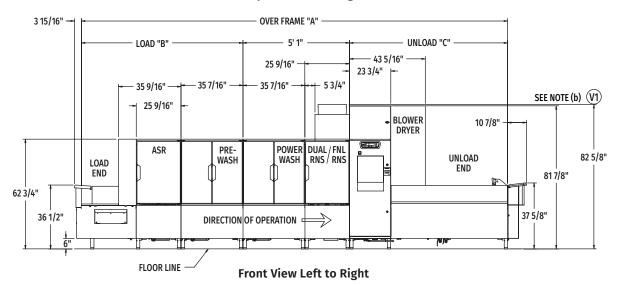


Flight-Type Dishwashing Machine

(Left to Right)



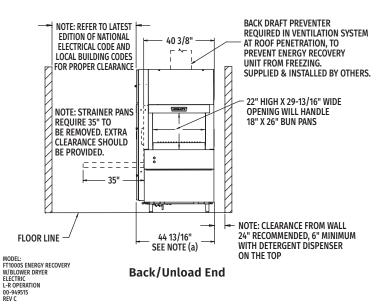
Top View Left to Right



Note: Control box electrical connections - see page 5.

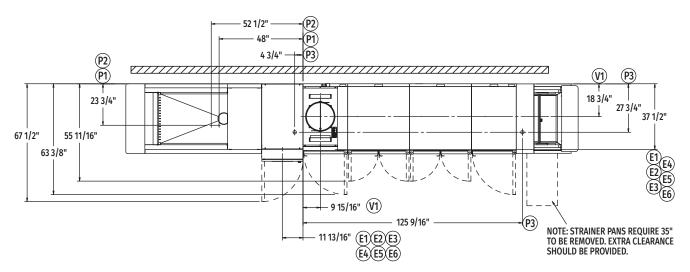
MODEL NO.	"A"	"B"	"C"
FT1020S (7.5'-5'-7.5')	20' 4-1/16"	7' 8-1/2"	7' 6-1/2"
FT1021S (8.5'-5'-7.5')	21' 3-13/16"	8' 8-1/4"	7' 6-1/2"
FT1022S (9.5'-5'-7.5')	22' 3-21/32"	9' 8-3/32"	7' 6-1/2"
FT1022S (7.5'-5'-9')	21' 11-13/16"	7' 8-1/2"	9' 2-1/4"
FT1023S (8.5'-5'-9')	22' 11-9/16"	8' 8-1/4"	9' 2-1/4"
FT1024S (9.5'-5'-9')	23' 11-13/32"	9' 8-3/32"	9' 2-1/4"
FT1024S (7.5'-5'-11')	23' 11-7/16"	7' 8-1/2"	11' 1-7/8"
FT1025S (8.5'-5'-11')	24' 11-3/16"	8' 8-1/4"	11' 1-7/8"
FT1026S (9.5'-5'-11')	25' 11-1/32"	9' 8-3/32"	11' 1-7/8"
FT1027S (7.5'-5'-15')	27' 6-3/4"	7' 8-1/2"	14' 9-3/16"
FT1028S (8.5'-5'-15')	28' 6-1/2"	8' 8-1/4"	14' 9-3/16"
FT1029S (9.5'-5'-15')	29' 6-11/32"	9' 8-3/32"	14' 9-3/16"
FT1029S (7.5'-5'-17')	29' 6-5/16"	7' 8-1/2"	16' 8-3/4"
FT1030S (8.5'-5'-17')	30' 6-1/16"	8' 8-1/4"	16' 8-3/4"
FT1031S (9.5'-5'-17')	31' 5-29/32"	9' 8-3/32"	16' 8-3/4"

Note: Overall length of machine is Dimension "A" + 14-13/16"

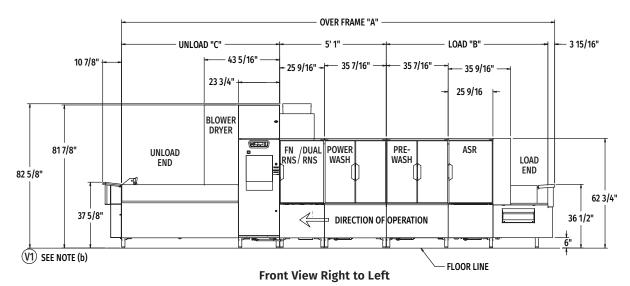




Flight-Type Dishwashing Machine
(Right to Left)



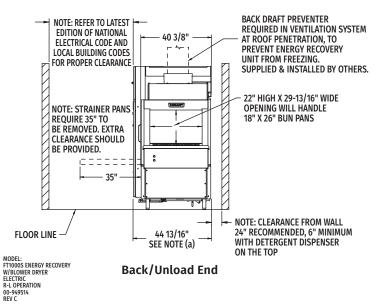
Top View Right to Left



Note: Control box electrical connections - see page 5.

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Flight-Type Dishwashing Machine

LEGEND

	Electrical Connections
E1	Electric connection for 1TB with or without circuit breakers. 79-1/8" AFF.
E2	Electric connection for 2TB without circuit breakers. 79-1/8" AFF.
E3	Electric connection for 3TB without circuit breakers. 79-1/8" AFF.
E4	Electric connection for 4TB without circuit breakers. 79-1/8" AFF.
E5	Electric connection for 5TB without circuit breakers. 79-1/8" AFF.
E6	Electric connection for 2TB with circuit breakers. 79-1/8" AFF.
	Plumbing Connections
P1	Common hot water connection (automatic fill) 110°F water minimum, 1" FPT, 5-1/2" AFF. See notes (b) and (d).
P2	Common cold water connection, 55°F minimum, 1" FPT, 5-1/2" AFF. See notes (c) and (d).
Р3	Drain connection: May be drained to either end of unit. Default location is drain to unload unless otherwise indicated. 2" FPT. 7" AFF.
	Ventilation Connections
V1	Customers' vent connection. Must fit inside 16" diameter vent stack providing 750 CFM exhaust at machine connection @ .75" Ps (standard air conditions). Back draft preventer recommended at roof penetration. Supplied and installed by others. 77-5/8" AFF.

SERVICE CONNECTIONS <u>WITH CIRCUIT BREAKERS</u> (2 CONNECTIONS)

E1	Motors, Controls, Booster Heat (TB1) (1) Service Connection as Shown Below			
V	Voltage Rated Amps Minimum Supply Circuit Ampacity Device			
20	08/60/3	85.5	125	125
24	10/60/3	83.0	125	125
48	30/60/3	43.3	60	60
	Wash, Dual Rinse Heat (2TB) (1) Service Connection as Shown Below			
E 6	(1			
	(1 oltage			
V) Service C Rated	onnection as Show Minimum Supply Circuit	Maximum Protective
V 20	oltage) Service C Rated Amps	onnection as Show Minimum Supply Circuit Ampacity	n Below Maximum Protective Device
V 20 24	oltage 08/60/3	Rated Amps 164.0	onnection as Show Minimum Supply Circuit Ampacity 200	Maximum Protective Device 200

WARNING: Plumbing and electrical connections should be made by qualified personnel who will observe all the applicable plumbing, sanitary, safety codes and National Electrical Code.

General Notes:

(a) The control box is attached to the center section and is rotated 90 degrees for shipping.

AFF = Above Finished Floor

All dimensions taken from the floor line may increase 3-1/4" with leg adjustment.

For convenience when cleaning, customer should install water tap near machine with 30 ft. of heavy duty hose with squeeze valve.

This drawing is supplied as a reference for connection information only. It will not be utilized for manufacturing of unit.

Electrical Warning:

Service wire temperature rating: 90°C minimum.

Plumbing Notes:

Recommended building flowing hot water pressure to the dishwasher is 40-45 PSI.

Recommended building flowing cold water to the dishwasher is 30-35 PSI. If cold water is less than 55°F, contact sales engineering.

Water hammer arrestor (meeting ASSE-1010 standard or equivalent) to be supplied (by others) in hot and cold supply lines at service connection.

Ventilation Notes:

(b) The vent stack and its enclosure can be temporarily removed from the energy recovery unit to yield 81-7/8" clearance for doorways.

Room ventilation is required to handle machine's latent & sensible heat. Majority of latent/sensible heat at unload end of machine.

Water Quality Required:

For best results – Total water hardness < 3 grains per gallon. For best results – Total suspended solids (TSS) < 10 microns.

Heat Gain to Space (BTU/Hr.)		
Latent Sensible		
60,888	26,095	



Flight-Type Dishwashing Machine

SERVICE CONNECTION <u>WITH CIRCUIT BREAKERS</u> (SINGLE POINT ELECTRICAL CONNECTION)

E1	-	Motors, Controls, Dual Rinse (1TB), Wash & Booster Heat (1) Single Point Connection as Shown Below		
	Voltage	Rated Amps	Minimum Supply Circuit Ampacity	Maximum Protective Device
	80/60/3	122.7	175	175

SERVICE CONNECTIONS <u>WITHOUT CIRCUIT</u> <u>BREAKERS</u> (5 CONNECTIONS)

DICE	AKEKS (5 COMME	·		
Motors & Controls (1TB) (1) Service Connection as Shown Below					
Vo	oltage	Rated Amps	Minimum Supply Circuit Ampacity	Maximum Protective Device	
208-2	240/60/3	31.5	45	45	
48	0/60/3	18.5	30	30	
E2	(1		Tank Heat, Wash (2 nnection as Shown		
Vo	oltage	Rated Amps	Minimum Supply Circuit Ampacity	Maximum Protective Device	
20	8/60/3	54.1	70	70	
24	0/60/3	51.6	70	70	
48	0/60/3	25.8	35	35	
E3			Tank Heat, Wash (3		
	(1	L) 18 kW Co	nnection as Shown		
Vo	oltage	Rated Amps	Minimum Supply Circuit Ampacity	Maximum Protective Device	
20	8/60/3	54.1	70	70	
24	0/60/3	51.6	70	70	
48	0/60/3	25.8	35	35	
E4	Dual Rinse (4TB) 10 kW, E4 Blower Dryer Heat 7 kW & Blowers (1) Service Connection as Shown Below				
Vo	oltage	Rated Amps	Minimum Supply Circuit Ampacity	Maximum Protective Device	
	8/60/3	56.1	70	70	
	0/60/3	52.4	70	70	
48	0/60/3	26.8	40	40	
E5	Electric Booster (5TB) (1) 18 kW Connection as Shown Below				
Vo	oltage	Rated Amps	Minimum Supply Circuit Ampacity	Maximum Protective Device	
20	8/60/3	54.0	70	70	
	0/60/3	51.5	70	70	
48	0/60/3	25.8	35	35	

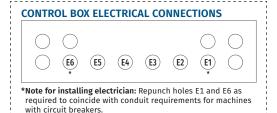
SPECIFICATIONS

Capacities

Conveyor Speed (feet per minute) 4.0 - 8.5 Dishes per Hour 14,316 ASR Tank (U.S. gallons) 7.2 Pre-Wash Tank (U.S. gallons) 40 Wash Tank (U.S. gallons) 40 Dual Rinse Tank (U.S. gallons) 7.2
Motor Horsepower Auto Soil Removal ½ ASR Wash ½ Pre-Wash Tank 3.9 Wash Tank 3.9 Dual Rinse Tank ½ Final Rinse ½ Conveyor ½ Blower Dryer (2 x 2 h.p.) 4 Water Consumption
U.S. Gallons per Hour (maximum use)
Heating
Tank Heat, Electric (kW regulated) Total tank heat - 43 kW (Wash, Rinse, Dual Rinse)
Blower Dryer (kW)
Shipping Weight (approximate) Varies by individual model (Consult your Hobart representative)
Crated Dimensions Varies by individual model

FT1000 Optional Water Treatment System		
Model	Description	
WS-80	Water Softener	
PF-10-EHT	Hi-Temp Filter Housing	
SD-510HT	Sediment Filter Cartridge	

(Consult your Hobart representative)



Detail "A-A" (not to scale)

As continued product improvement is a policy of Hobart, specifications are subject to change without notice.