Project		
AIA #	SIS #	
Item #	Ouantity	C.S.I. Section 114000



Flight-Type Dishwashing Machine



Advansys model shown









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 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, 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
- + Electric blower dryer

# **OPTIONS & ACCESSORIES** (Available at extra cost)

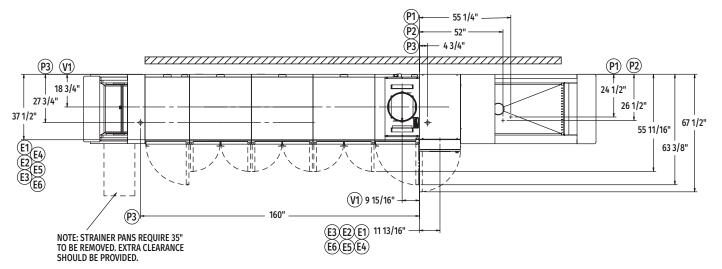
- ☐ Insulated split, vertical slide-up doors
  ☐ Multiple conveyor options
  ☐ Factory mounted circuit breakers
- ☐ Factory mounted circuit breakers
- □ Correctional packages available contact Hobart for more information
- Casino packages
- ☐ 6" higher than standard chamber
- ☐ Flanged feet
- ☐ Water hammer arrestor/PRV (installed by others)
- ☐ Drain water tempering kit (installed by others)
- ☐ WS-80 water softener

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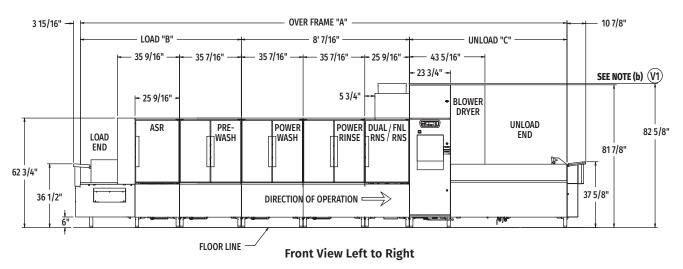


Flight-Type Dishwashing Machine

(Left to Right)



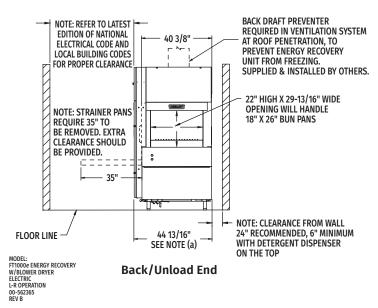
**Top View Left to Right** 



Note: Control box electrical connections - see page 5.

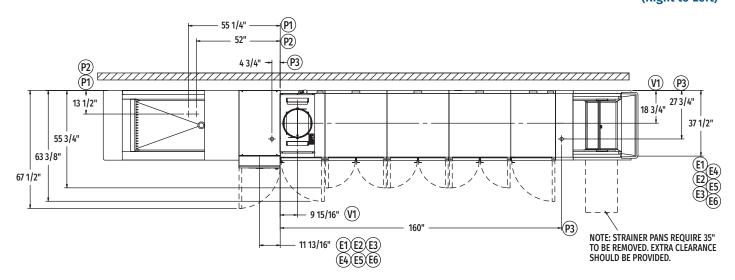
MODEL NO.	"A"	"B"	"C"
FT1023e (7.5'-8'-7.5')	23' 3-1/2"	7' 8-1/2"	7' 6-1/2"
FT1024e (8.5'-8'-7.5')	24' 3-1/4"	8' 8-1/4"	7' 6-1/2"
FT1025e (9.5'-8'-7.5')	25' 3-3/32"	9' 8-3/32"	7' 6-1/2"
FT1025e (7.5'-8'-9')	24' 11-1/4"	7' 8-1/2"	9' 2-1/4"
FT1026e (8.5'-8'-9')	25' 11"	8' 8-1/4"	9' 2-1/4"
FT1027e (9.5'-8'-9')	26' 10-27/32"	9' 8-3/32"	9' 2-1/4"
FT1027e (7.5'-8'-11')	26' 10-7/8"	7' 8-1/2"	11' 1-7/8"
FT1028e (8.5'-8'-11')	27' 10-5/8"	8' 8-1/4"	11' 1-7/8"
FT1029e (9.5'-8'-11')	28' 10-15/32"	9' 8-3/32"	11' 1-7/8"
FT1030e (7.5'-8'-15')	30' 6-3/16"	7' 8-1/2"	14' 9-3/16"
FT1031e (8.5'-8'-15')	31' 5-15/16"	8' 8-1/4"	14' 9-3/16"
FT1032e (9.5'-8'-15')	32' 5-25/32"	9' 8-3/32"	14' 9-3/16"
FT1032e (7.5'-8'-17')	32' 5-3/4"	7' 8-1/2"	16' 8-3/4"
FT1033e (8.5'-8'-17')	33' 5-1/2"	8' 8-1/4"	16' 8-3/4"
FT1034e (9.5'-8'-17')	34' 5-11/32"	9' 8-3/32"	16' 8-3/4"

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

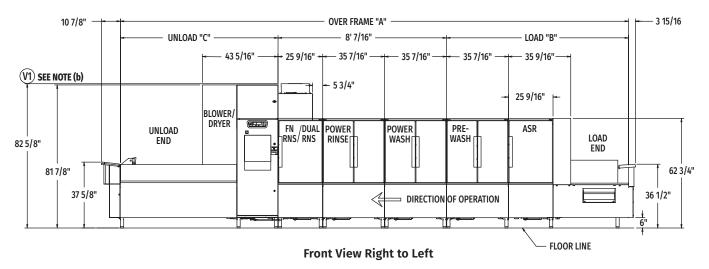




Flight-Type Dishwashing Machine
(Right to Left)



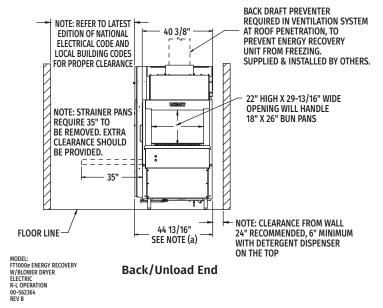
**Top View Right to Left** 



Note: Control box electrical connections - see page 5.

MODEL NO.	"A"	"B"	"C"
FT1023e (7.5'-8'-7.5')	23' 3-1/2"	7' 8-1/2"	7' 6-1/2"
FT1024e (8.5'-8'-7.5')	24' 3-1/4"	8' 8-1/4"	7' 6-1/2"
FT1025e (9.5'-8'-7.5')	25' 3-3/32"	9' 8-3/32"	7' 6-1/2"
FT1025e (7.5'-8'-9')	24' 11-1/4"	7' 8-1/2"	9' 2-1/4"
FT1026e (8.5'-8'-9')	25' 11"	8' 8-1/4"	9' 2-1/4"
FT1027e (9.5'-8'-9')	26' 10-27/32"	9' 8-3/32"	9' 2-1/4"
FT1027e (7.5'-8'-11')	26' 10-7/8"	7' 8-1/2"	11' 1-7/8"
FT1028e (8.5'-8'-11')	27' 10-5/8"	8' 8-1/4"	11' 1-7/8"
FT1029e (9.5'-8'-11')	28' 10-15/32"	9' 8-3/32"	11' 1-7/8"
FT1030e (7.5'-8'-15')	30' 6-3/16"	7' 8-1/2"	14' 9-3/16"
FT1031e (8.5'-8'-15')	31' 5-15/16"	8' 8-1/4"	14' 9-3/16"
FT1032e (9.5'-8'-15')	32' 5-25/32"	9' 8-3/32"	14' 9-3/16"
FT1032e (7.5'-8'-17')	32' 5-3/4"	7' 8-1/2"	16' 8-3/4"
FT1033e (8.5'-8'-17')	33' 5-1/2"	8' 8-1/4"	16' 8-3/4"
FT1034e (9.5'-8'-17')	34' 5-11/32"	9' 8-3/32"	16' 8-3/4"

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





Flight-Type Dishwashing Machine (Left to Right)

# **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.				
<b>E</b> 5	Electric connection for 5TB without circuit breakers. 79-1/8" AFF.				
<b>E6</b>	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.				
P2	Common cold water connection, 55°F minimum, 1" FPT, 5-1/2" AFF.				
Р3	Drain connection: Default location is drain to unload. May be drained to load end with field installed kit. 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" water column (standard air conditions). Back draft damper is REQUIRED ON ALL EGR models. Supplied and installed by others. 82-5/8" AFF.				

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

E1	Motors, Controls, Power Rinse & Booster Heat (1TB) (1) Service Connection as Shown Below					
V	oltage	Rated Amps	Minimum Supply Circuit Ampacity	Maximum Protective Device		
20	08/60/3	139.0	175	175		
24	0/60/3	125.6	175	175		
48	30/60/3	66.9	90	90		
60	00/60/3	52.9	70	70		
		Was	h Dual Binco Hoat			

<b>E6</b>	wasn, Dual Rinse Heat, Blower Dryer Heat & Blower (2TB) (1) Service Connection as Shown Below				
V	oltage	Rated Amps	Minimum Supply Circuit Ampacity	Maximum Protective Device	
20	08/60/3	95.6	125	125	
24	40/60/3	83.2	125	125	
48	30/60/3	42.0	60	60	
60	00/60/3	33.6	45	45	

**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 Notes:**

Service wire temperature rating: 90°C minimum.

Detergent and rinse aid feeder service connections standard on all FT1000e models at machine line voltage.

Dishmachine not provided with internal GFCI protection.

### **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.

Vent fan control standard on all FT1000e models.

# **Water Quality Required:**

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

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

E1	Power Rinse, Wash & Blower Dryer Heat, Blower & Booster Heat (1TB) (1) Single Point Connection as Shown Below					
\	/oltage	Rated Amps	Minimum Supply Circuit Ampacity	Maximum Protective Device		
4	80/60/3	108.9	150	150		
6	00/60/3	86.5	125	125		

Motors, Controls, Dual Rinse Heat



Flight-Type Dishwashing Machine (Right to Left)

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

E1	Motors & Controls (1TB) (1) Service Connection as Shown Below				
V	/oltage	Rated Amps	Minimum Supply Circuit Ampacity	Maximum Protective Device	
20	08/60/3	38.0	50	50	
24	40/60/3	38.0	50	50	
48	80/60/3	23.1	30	30	
60	00/60/3	17.9	25	25	

E2	Electric Tank Heat, Power Rinse (2TB) (1) 21.4 kW Connection as Shown Below				
\	/oltage	Rated Amps	Minimum Supply Circuit Ampacity	Maximum Protective Device	
2	08/60/3	59.4	80	80	
2	40/60/3	51.5	70	70	
4	80/60/3	25.7	35	35	
6	00/60/3	20.6	30	30	
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60	00/60/3	20.6	30	30		
<b>E</b> 3	Electric Tank Heat, Wash (3TB) (1) 18 kW Connection as Shown Below					
V	/oltage	Rated Amps	Minimum Supply Circuit Ampacity	Maximum Protective Device		
20	08/60/3	50.0	70	70		
24	40/60/3	43.3	60	60		
48	80/60/3	21.7	30	30		
6	00/60/3	17.3	25	25		

E4	Blower Dryer Heat 4.5 kW & Blowers (4TB) (1) Service Connection as Shown Below				
\	/oltage	Rated Amps	Minimum Supply Circuit Ampacity	Maximum Protective Device	
2	08/60/3	45.6	60	60	
2	40/60/3	39.9	50	50	
4	80/60/3	20.4	30	30	
6	00/60/3	16.3	25	25	

<b>E</b> 5	(1)		ric Booster (5TB) nection as Shown	Below
\	oltage/	Rated Amps	Minimum Supply Circuit Ampacity	Maximum Protective Device
20	08/60/3	41.6	60	60
24	40/60/3	36.1	50	50
48	80/60/3	18.0	25	25
6	00/60/3	14.4	20	20

Heat Gain to S	pace (BTU/Hr.)
Latent	Sensible
78,400	33,600

# **SPECIFICATIONS**

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Conveyor Speed (feet per minute) 4.0 - 8.5
Dishes per Hour
ASR Tank (U.S. gallons)
Pre-Wash Tank (U.S. gallons) 40
Wash Tank (U.S. gallons)
Rinse Tank (U.S. gallons)40
Dual Rinse Tank (U.S. gallons)
Motor Horsepower
Auto Soil Removal
ASR Wash <sup>1</sup> / <sub>3</sub>
Pre-Wash Tank
Wash Tank3½
Rinse Tank3½
Dual Rinse Tank
Final Rinse½
Conveyor <sup>1</sup> / <sub>3</sub>
Blower Dryer
Water Consumption
U.S. Gallons per Hour (maximum use)
U.S. Gallons per Minute0.97
Heating
Tank Heat, ElectricTotal tank heat - 50.1 kW (kW regulated) (Wash, Rinse, Dual Rinse)
Blower Dryer (kW)4.5
Electric Booster (kW)
<b>Shipping Weight (approximate)</b> Varies by individual model (Consult your Hobart representative)

FT1000 Adva	nsys Water Treatment System
Model	Description
WS-80	Water Softener
Available t	hrough Hobart Service only
PF-10-EHT	Hi-Temp Filter Housing
SD-510HT	Sediment Filter Cartridge

Crated Dimensions . . . . . . . Varies by individual model

(Consult your Hobart representative)

$\bigcirc$	$\bigcirc$						$\bigcirc$
$\bigcirc$	(E6)	(E5)	(E4)	(E3)	(E2)	(E1)	$\bigcirc$

required to coincide with conduit requirements for machines with circuit breakers.

Detail "A-A" (not to scale)

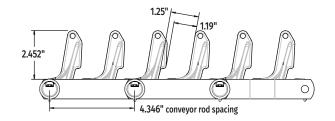


**Flight-Type Dishwashing Machine** 

# **CONVEYOR TYPE OPTIONS**

All conveyors provided with standard polypropylene material. Optional stainless steel conveyors available by request.

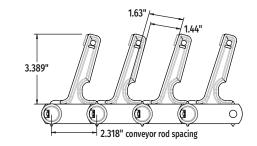
Please contact your sales representative for stainless steel conveyor options.



### **STANDARD**

Standard Conveyor designed for General Ware including tableware (Plates/Bowls), most serving trays (lip height less than 1½") as well as prep-ware (Hotel & Sheet Pans).

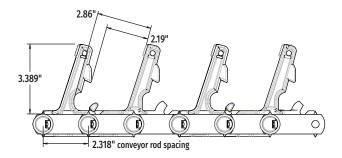
Optional cross-rods every 4th row available for additional support
of heavier ware (oversized ware/mixing bowls) as well as to promote
warewashing drainage at optimal angle (hotel pans).



# **TYPE A**

Optional Conveyor designed exclusively with our Healthcare segments in mind. In addition to accommodating General Ware, the Type A conveyor has a tighter conveyor rod spacing which provides increased conveyor density for added strength, as well as additional finger height and spacing to support most insulated dome bases and lids.

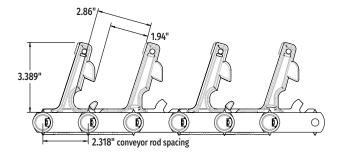
Optional cross-rods every 4th row available for additional support
of heavier ware (oversized ware/mixing bowls) as well as to promote
warewashing drainage at optimal angle (hotel pans).



# **POSITION 1**

Optional Conveyor designed for customers using insulated compartmentalized trays, as well as thicker insulated dome bases and lids. In addition to accommodating General Ware, the Position 1 conveyor provides even greater spacing between fingers, as well as a pronounced 3%" "nose" to secure compartmentalized trays in place.

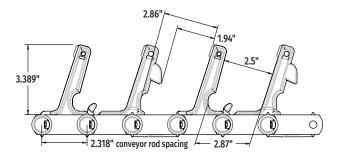
Optional cross-rods every 4th row available for additional support
of heavier ware (oversized ware/mixing bowls) as well as to promote
warewashing drainage at optimal angle (hotel pans). Cross-rods can
also be used to create stable support for some compartmentalized
trays to orient upright through dishmachine.



### **POSITION 2**

Optional Conveyor designed for customers using insulated compartmentalized trays, as well as thicker insulated dome bases and lids. In addition to accommodating General Ware, the Position 2 conveyor provides additional spacing between fingers, as well as a pronounced %" "nose" to secure compartment trays in place.

Optional cross-rods every 4th row available for additional support
of heavier ware (oversized ware/mixing bowls) as well as to promote
warewashing drainage at optimal angle (hotel pans). Cross-rods also
create stable support for compartmentalized trays to orient upright
through dishmachine.



### **TIVOLI**

Optional Conveyor designed exclusively with our Correctional segments in mind. In addition to accommodating General Ware, the Tivoli conveyor provides our widest spacing between fingers as well as a ¾" "nose" to support the largest insulated compartmentalized trays, commonly used in correctional settings. The Tivoli conveyor comes standard with crossrods every 3rd row for additional support of heavier ware (oversized ware/mixing bowls) as well as to promote warewashing drainage at optimal angle (hotel pans). Cross-rods also create stable support for compartmentalized trays to orient upright through dishmachine.

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