

PERFORMANCE DATA FOR EPCOVAP-MVR EVAPORATOR

GENERAL INFORMATION

Project: Dutch Pork manure
 Project number: 40103
 Customer: -
 Our ref.: GH
 Date: 25. jul. 2015

EPCOVAP-MVR-8F-700/85-1141-13-IND-E0000-1-S-NC

EPCOVAP-MVR-8	Basic size	
F	Forced circulation evaporation	
700	Evap capacity, kg/h	
85	Evap temp, C	
1	DIN2642 ISO	Product onnections
1	DIN2642 ISO	Utility side connection
4	AISI316L	
1	R	Utility treads
1	AISI316L	Process side material Except blower, ref below
3	NBR	Process side gasket material
	Frame:	Painted construction steel
IND	Industrial design	*1
E	External boiler steam required for start up	
0	Feed pump supplied by customer	
0	Evaporator on open frame	
0	No anti foaming system	
0	Advanced automation	
1	3x400V/50Hz TN	1x230V/50Hz
S	Standard unit	
NC	Blower material: carbon steel	

CONNECTIONS

Feed	DN20	DIN2642 ISO
Product	DN20	DIN2642 ISO
Condensate	DN20	DIN2642 ISO
Sealing water	R1/2"	Female threads
Air, 6 bar G	8	mm hose
Electric power connection	150	A
Steam, secured at 0.5 barG	DN32	DIN2642 ISO
Cooling water in/out	R3/4"	Female threads
Vent to safe place	DN40	DIN2642 ISO

PROCESS LIQUID

The technical data are based on these liquid properties:

Liquid description:	Pork manure
Colour	Brown/black
Particle/fiber content	No particles >2mm
Properties at solid content, DS:	25 %
Density:	1126 kg/m ³
Specific heat capacity, Cp:	3.385 kJ/kgK
Viscosity	100 cP
Boiling point elevation, BPE:	2 C

If the actual liquid properties defer from the data above, the technical performance data described may no more be achieved.

*1 Industrial design, internal finish Ra<4µm.

DIMENSIONS



L:	3700 mm
W:	1800 mm
H:	3800 mm
Weight empty:	5200 kg
Operating load:	62 kN

TECHNICAL DATA

Feed flow	875 kg/h
Evaporated mass	700 kg/h
Product flow	175 kg/h
Feed concentration	5.0 %
Product concentration	25 %
Feed temperature	30 C
Product temperature	87 C
Condensate temperature	35 C
Liquid hold up volume	602 l
Installed electric power	82 kW
Electric power consumption	38.6 kW
Steam consumption	0 kW
Specific power consumption	55 kWh/t
Voltage	3x400V/50Hz
Fresh water consumption	<500 l/h
Cooling water required	0.9 m ³ /h
Cooling water temp in/out	20/40 C
Noise level (Lp - 1m from unit)	97 dB

* Evaporation capacity can be adjusted from 30-100%

* All technical data are within a tolerance of +/- 10%

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