



COMPANY INFORMATION

Date:

Company:	Ductor Corp		
Phone:	+ 358 10 320 6560	Web Site:	www.ductor.com
Address:	Viikinkaari 4	City:	Helsinki
State:	Finland	Zip Code:	FI-00790

BUSINESS CONTACT

TECHNICAL CONTACT

Name:	Ari Ketola	Name:	Ilkka Virkajärvi
Phone:	+358 10 320 6560	Phone:	+358 50 3655 910
Email:	ari.ketola@ductor.com	Email:	Ilkka.virkajarvi@ductor.com
Address:	Viikinkaari 4	Address:	Viikinkaari 4
City:	Helsinki	City:	Helsinki
State:	Finland	State:	Finland
Zip Code:	FI-00790	Zip Code:	FI-00790

BUSINESS HISTORY

How long have you been in business? 8 years

Are you part of a larger company? Yes No

Did you exist as another company before this company was formed? Yes No *If so, what was that company's name?*

Number of employees? 19

What is your business structure? Private company

What types of insurance and or surety do you provide?

Describe your business service(s). *For example: consulting, development, engineering, equipment sales, finance, other.*

Technology, engineering, EPC company,

Describe your area or region of operation.

Global

Does your company hold any patents or the rights to any patents? Yes No *If yes, please describe.*

Several, and increasing

Do you manufacture equipment? Yes No *If yes, please describe.*

Do you integrate equipment manufactured by others? Yes No

If you integrate, please list the names of the companies you represent.

Sourcing case by case from North America

How do you answer potential customer's questions about financial strength of your company?

we are well funded, solid with strong balance sheet. Using secure financial instruments for sales

Do you offer technical/service support? Yes No *If so, what methods?*

Help desk, site visits for Ductor biogas and AddOn plants and distant monitoring distant aid for local operations

Do you offer design services? Yes No *If yes, please describe.*

For Ductor biogas and AddOn plants

Do you offer financing? Yes No *If so, what terms?*

Negotiable

Are you a full stop shop? *Design to construction to operate?* Yes No *If so, please describe.*

Do you have preferred partners? Yes No *If so, please list and provide contact information/identify partners by name.*

ES Engineering

Do you have any third-party verification/research that has been done on this technology? Yes No

If so, please describe.

Fraunhofer UMSICHT Institute, Germany

Do you provide a performance guarantee? Yes No *If so, what are you guaranteeing?*

For example: up time, methane production, biogas production, parasitic load, throughput, O&M cost, percent recovery, other. Please describe.

Ammonia removal from organic substrates, biogas production

Are there any other aspects of your business that you feel should be included in this document?

INITIAL TECHNOLOGY OVERVIEW

This information is to guide in the development of a more specific and detailed Technology Information Request.

Please answer the following questions for each Technology or Service Provided.

What is the name of the technology or service you provide?

Ductor ammonia removal process, Ductor biogas process, Ductor drying process

What unit process is the technology used in?

For example: initial collection/transfer manure storage, energy recovery, primary/coarse solids recovery, advanced suspended/fine solids recovery, drying, struvite production, nitrification denitrification, ammonia stripping, algae, vermi composting, membrane filtration, evaporation, other.

Substrate storage, substrate feed, Ductor fermentation, ammonia stripping, biogas fermentation, solid/liquid separation, drying

How many systems have you installed on dairy farms or other livestock operations?

one, in Finland

Size of farm(s)?

20 cows+ 20 heifers

Location of farm(s)?

Tuorla, Finland

What's the smallest and largest farm using your system?

Input material description and characteristics: *For example: raw manure, digestate, screened digestate, suitable non-farm feedstocks, other.*

Cow slurry: chicken litter, 50:50 at the moment

Does the technology treat the full manure stream for a farm or a fraction of the stream?

The full manure stream

Do you consider this a mature system or ongoing farm development?

Mature

Any weather constraints? Yes No *If so, please describe.*

Any bedding constraints? Yes No *If so, please describe.*

Is this process scalable and to what extent (top and bottom limits)? Yes No *If so, please describe.*

Upward from 10 000 metric tons, no upper limit

Do you have a known scaling factor? Yes No *If so, please describe.*

Input and output of your unit/system – do you have a mass balance analysis? Yes No *If so, please describe.*

Organic material in, biogas, N-fertilizer, P-fertilizer out (exact figures depend on the substrates)

Do you consider this technology part of a larger system that you provide? Yes No *If so, please describe.*

Has your technology been accepted by the NRCS? Yes No *If so, please describe.*

Would you be willing to provide information for a technical review? Yes No

Would you be willing to respond to a Request for Quotation (RFQ) on a generic project for comparison of your technology against other technologies in the same unit process? Yes No

REFERENCES

Please provide customers or colleagues with whom we can discuss your business and performance.

Please include a list with company name, location, contact name and contact information below.

Reference 1

Company Name: ES Engineering/American Biogas Council

Company Location: Orange, CA

Contact Name:	Bernard Sheff
Contact Information:	1036 W Taft Avenue Orange, CA 92865

Reference 2

Company Name:	
Company Location:	
Contact Name:	
Contact Information:	

Reference 3

Company Name:	
Company Location:	
Contact Name:	
Contact Information:	

Reference 4

Company Name:	
Company Location:	
Contact Name:	
Contact Information:	

Are there any other facts about this technology that you feel should be included in this document? *If so, please describe below.*