



COMPANY INFORMATION

Date: 09/26/2017

Company:	Martin Energy Group Services, LLC		
Phone:	(501) 868-6400	Web Site:	http://www.martinenergygroup.com/
Address:	39415 Excelsior Dr.	City:	Latham
State:	Missouri	Zip Code:	65050

BUSINESS CONTACT

TECHNICAL CONTACT

Name:	Kevin Rohrer	Name:	Kevin Rohrer
Phone:	(660) 458-7000	Phone:	(660) 458-7000
Email:	krohrer@martinenergygroup.com	Email:	krohrer@martinenergygroup.com
Address:	39415 Excelsior Dr.	Address:	39415 Excelsior Dr.
City:	Latham	City:	Latham
State:	Missouri	State:	Missouri
Zip Code:	65050	Zip Code:	65050

BUSINESS HISTORY

How long have you been in business? 20 years (Formerly: Martin Machinery)

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?*

Martin Machinery

Number of employees?

What is your business structure? Limited Liability Company

What types of insurance and or surety do you provide?

Liability

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

OEM packager for electric generators in North America. Digester Project Development through Martin Construction Resource, including pre-project studies, feasibility, design, build, financing and O&M services

Describe your area or region of operation.

North America and worldwide

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

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.

Packaged generator sets are integrated with anaerobic digester systems at dairies, wastewater treatment plants, landfill biogas projects, etc.

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

Customer references

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

Packaged engine/generator installation with operations and maintenance services available

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

Design and manufacturing of complete power plant packages

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

Negotiable depending on lender

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

Martin Energy Group offers design, construction, O&M, and financing

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

Martin Energy Group offers packaged generator sets using engine brands such as Cummins, Detroit, Dresser-Rand Guascor, Caterpillar, GE Jenbacher, MTU, MAN, and Waukesha.

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

If so, please describe.

Third-party verification results are available.

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.

Performance guarantees on generator sets

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

MCR (Martin Construction Resource, LLC) is a wholly owned subsidiary of MEGS (Martin Energy Group Services, LLC) and MEGS owns an exclusive right to use all of RCM's intellectual property and has enabled MCR to benefit from this information; making MCR a highly efficient, full turn key provider of AD systems and other power generation systems. Please refer to the **Martin Construction Resource** page in the catalog for more information on digester systems.

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?

Martin Energy Group, formerly *Martin Machine*, is an established source of engine/generator systems and related equipment.

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.

Martin Energy Group is an OEM packager for generators in North America. Martin Energy Group has packaged and installed over four hundred gaseous-fueled engines in the United States on anaerobic digester systems.

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

Martin Energy Group has packaged and installed over four hundred gaseous-fueled engines in the United States on anaerobic digester systems on livestock operations, food processing plants, wastewater treatment plants and landfills.

Size of farm(s)?

Typically, 200 to 10,000 wet cow equivalents

Location of farm(s)?

United States

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

Packaged biogas engine-generators are installed on anaerobic digesters at dairies with a range of 200 to 10,000+ wet cow equivalents

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

The input to the packaged engine-generator is biogas from the full manure stream for a dairy including flush water from the milking parlor, often with community food waste added to the manure stream.

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

The digester can be designed to treat the full manure stream for a dairy including flush water from the milking parlor. Please refer to Martin Construction Resource page in the Newtrient catalog.

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

Packaged engine-generator technology is mature with over 400 systems operating for over a decade.

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.*

The digester system can be sized for the herd size with no upper limit because the system is modular.

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

Sizing and scaling factors are not a matter of technology but of economics.

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

A mass balance can be prepared, as needed for a project. The information is client confidential

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

Martin Construction Resource provides turnkey general contracting services to carry out all construction and subcontracting for digester projects with 30 years of experience in project management, including engineering, design, and construction.

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:	Pennwood Dairy Case Study – Packaged Biogas Engine
Company Location:	
Contact Name:	
Contact Information:	

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.*

Martin Construction Resource (MCR) is a wholly owned subsidiary of Martin Energy Group Services, LLC (MEGS) and MEGS owns an exclusive right to use all of RCM's intellectual property and has enabled MCR to benefit from this information; making MCR a highly efficient, full turn key provider of AD systems and other power generation systems.