

Internal Gear Pumps for Liquid Terminals



EnviroGear® Pumps for Liquid Terminals Applications

EnviroGear® Internal Gear Pumps – which are available in E Series and G Series models – have been developed to be reliable and affordable solutions that meet or exceed the strict operational and safety demands of a modern Liquid Terminal facility.

The common liquid-terminal commodities, and the large volumes in which they are stored and transferred, require pump technologies that are able to deliver reliability, volumetric consistency, efficiency and energy savings when moving liquids in and out of tank farms, whether the mode of transportation is barge, tanker ship, pipeline, railcar or transport truck.

Challenges of Liquid Terminals Applications

EnviroGear pumps overcome a liquid terminal's unique operational challenges in the safest, most efficient and profitable way possible.

Cost Control

CHALLENGE

- Raw Materials
- Energy
- Capital Investment
- Maintenance
- Critical blending specifications

ENVIROGEAR SOLUTION

E Series:

- Leak-free design protects against loss of high-value fluids
- Seven-part design allows for ease of maintenance

G Series:

- Interchangeable with up to 95% of competitive models, with no need to modify piping, driver, baseplate or coupling
- Designed for ease of maintenance



Productivity

CHALLENGE

- Optimize speed and uptime to maximize plant production

ENVIROGEAR SOLUTION

E Series: Robust, patented between-the-bearings support system eliminates the damaging effects of cantilevered loads, resulting in optimized uptime and unmatched reliability

G Series:

- Built to the highest standards of quality and reliability for long life and minimal maintenance
- Quick-ship parts programs available for minimal downtime during maintenance periods



Plant Safety

CHALLENGE

- Protect the welfare of site personnel, surrounding communities and the environment

ENVIROGEAR SOLUTION

E Series: Leak-free design contains hard-to-seal crystallizing, thermosetting or viscous fluids in 24/7 continuous-process applications, helping eliminate exposure of site personnel to harmful chemicals



Quality

CHALLENGE

- Satisfy the demanding quality control guidelines required for blending operations while meeting a wide range of viscosities

ENVIROGEAR SOLUTION

Utilizing unique positive displacement internal gear pumping principles, EnviroGear products ensure the highest level of volumetric output consistency regardless of viscosity



Emissions Control

CHALLENGE-

- Government regulation and compliance with standards regarding control of Volatile Organic Compounds (VOCs)

ENVIROGEAR SOLUTION

E Series: One fluid chamber seal-less design eliminates leak points, ensuring containment of harmful VOCs

G Series: Universal bracket design accommodates a wide range of sealing options for improved seal integrity



Process Map

EnviroGear® E Series and G Series Internal Gear Pumps can be used across a wide range of Liquid Terminal applications. Traditional manufacturing processes are ideal for G Series pumps, while E Series pumps are the perfect choice for use in applications where optimized safety, cost control and regulatory compliance are significant factors.



Location	Process	Recommended Pump*	Alternative Pump
Bulk Transfer	Loading/Unloading	G Series	
In Plant	In-Line Blending (General)	G Series	E Series
	In-Line Blending (Hazardous, Hard-to-Seal)	E Series	G Series
	Blending/Mixing (General)	G Series	E Series
	Blending (Hazardous, Hard-to-Seal)	E Series	G Series
	Packaging	G Series	E Series
	Loading/Unloading	G Series	
	Heat Transfer Fill and Drain	G Series	

Liquids handled include:

Crude Oil

Refined Fuels

- Ethanol
- Fuel Oils
- Lube Oils
- Biodiesel

Processed Chemicals

Bitumen

Potassium Hydroxide (KOH)

Anti-Gel Agents

Soy, Palm and other Virgin Vegetable Oils

Molasses

Animal Fats

Aromatic diisocyanates (MDI/TDI)



E Series



G Series



PSG

22069 Van Buren Street, Grand Terrace, CA 92313-5651 USA

P: +1 (909) 422-1731 • F: +1 (909) 783-3440

envirogearpump.com

Authorized PSG® Partner: