



Blackmer[®] Internal Gear Pumps – which are available in standard duty, heavy duty, and seal-less 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.

Challenges of Liquid Terminals Applications

Blackmer Internal Gear Pumps overcome a liquid terminal's unique operational challenges in the safest, most efficient and profitable way possible.

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.

Cost Control

CHALLENGE

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

BLACKMER GEAR PUMP SOLUTION

E Series:

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

G Series & V 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
- Energy
- · Capital Investment



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 & V 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

BLACKMER GEAR PUMP SOLUTION

F 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

BLACKMER GEAR PUMP SOLUTION

Utilizing unique positive displacement internal gear pumping principles,

Blackmer Gear Pumps 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)

BLACKMER GEAR PUMP 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

Blackmer® E Series, G Series and V Series Internal Gear Pumps can be used across a wide range of Liquid Terminal applications. Traditional manufacturing processes are ideal for G Series and V 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	V Series
In Plant	In-Line Blending (General)	G Series	E Series V Series
	In-Line Blending (Hazardous, Hard-to-Seal)	E Series	G Series V Series
	Blending/Mixing (General)	G Series	E Series V Series
	Blending (Hazardous, Hard-to-Seal)	E Series	G Series V Series
	Packaging	G Series	E Series V Series
	Loading/Unloading	G Series	V Series
	Heat Transfer Fill and Drain	G Series	V 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)









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Where Innovation Flows

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