



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
- Energy
- Capital Investment
- Maintenance
- Critical 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

#### **BLACKMER GEAR PUMP SOLUTION**

Quality

**CHALLENGE** 

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**

#### E Series:

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



a wide range of viscosities **BLACKMER GEAR PUMP SOLUTION** Utilizing unique positive displacement

Satisfy the demanding quality

control guidelines required for

blending operations while meeting

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**

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

 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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