Expert Solutions for Upstream Oil & Gas Applications

Where Innovation Flows

SLIDING VANE PUMPS
RECIPROCATING GAS COMPRESSORS
SCREW PUMPS
Operators within the oil & gas industry, from the drilling site all the way through to the tank battery at a bulk plant, have some pretty simple requirements for their pumps:

- Maintain consistent flow rates
- Handle liquids of varying viscosities
- Product containment with no leakage
- Minimal maintenance

Ultimately, it’s about uptime, meaning that the equipment must be rugged enough to perform under extremely adverse conditions 24/7/365.

**Consistent Performance is Key**

Finding the pump or compressor that can meet those requirements is oftentimes easier said than done. Volumetric consistency is paramount for the operator because the pumps frequently run continuously, so a consistent, reliable flow rate is necessary to ensure that production rates and quotas are met.

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**Why Blackmer® Reciprocating Gas Compressors?**

**FEATURES & BENEFITS**

- High-efficiency PEEK valves
  - Improved seating to increase gas volume
- Ductile-iron construction
  - Greater resistance to thermal and mechanical shock
- Single- or double-distance piece
  - Prevents condensate from contaminating crankcase oil
- Pressure-lubricated crankcase
  - Ensures positive oil distribution for long life and minimal wear
- Self-lubricating piston rings
  - PTFE rings provide more wear surface for maximum sealing and extended life

**Why Blackmer® Sliding Vane Pumps?**

**FEATURES & BENEFITS**

- Superior mechanical performance
  - Reduced maintenance, improved uptime
- Energy-efficient design
  - Lower operational costs
- Superior suction and pressure capabilities
  - Excellent fluid lift and line stripping
- Sliding vane design
  - Eliminates slippage for consistent volumetric performance. Excellent with viscous liquids at slow speeds.

**Why Blackmer® Screw Pumps?**

**FEATURES & BENEFITS**

- Fluid-transfer versatility
  - Can handle varying flows, pressures, liquid types and viscosities
- High volumetric consistency
  - Improves operational efficiencies and reduces costs
- Constant flow rates
  - Even with backpressure variances caused by viscosity changes
- Low mechanical vibration
  - Lengthens service life and operational reliability
- Extremely low pulsation
  - Reduces stress and prolongs life of associated pumping-system components

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Whether your oil and gas production operation is straight drilling, hydraulic fracturing, Enhanced Oil Recovery (EOR), vapor recovery or the simple transfer of motor fuels or fuel oil from a transport truck, Blackmer sliding and screw pump and reciprocating gas compressor technologies deliver the operational advantages that will maximize and optimize upstream oil and gas production.
UPSTREAM

By nature, oil and gas production is a complicated process with a number of entry points, most of which can make use of Blackmer pump and compressor technology. The illustration above shows typical applications within the upstream oil and gas production process.

The oilfield is an area that is ripe for equipment improvements and optimization due to the quickly growing and changing nature of production and recovery technologies, which have combined to revive and enhance domestic and global oil and natural gas production.

Within the Upstream sector, there exist multiple entry points that require high-quality pump and compressor equipment and systems in order to maximize uptime performance, efficiency and product recovery. PSG® pump and compressor technologies fill this need.

### SLIDING VANES PUMPS

- **NP/SNP** Designed for clean, non-corrosive liquids at varying temperatures, pressures and viscosities. Offers maximum versatility for a range of applications from offshore platforms to Central Tank Batteries and Well Treatments.

- **XL/XLW** Used in many processing, filling and transfer applications. Features replaceable casing liners and end discs for easy maintenance. Used throughout the upstream process from Oil and Gas Wells to Tank Batteries and Gathering Systems.

- **GX/X** For use in transfer/loading/unloading of feedstocks and end products in all types of terminal applications. It’s high suction capabilities make this pump well-suited for Pipelines, Field Terminals, Oil Transport and other transfer points in the Gathering System.

- **MLX** Ideal for non-lubricating solvents to highly viscous liquids or abrasive slurries. Modular bearing hub assemblies allow easy reconfiguration in the field. Can be used at the well, or for transfer throughout the Gathering System and field terminals.

- **HXL** For high-capacity top or bottom loading, unloading or blending. Ideally suited for barge, ship and terminal transfers where high-suction capabilities enable them to strip tanks and lines. Also used in Gathering System pipelines to and from field terminals.

- **XLWHP3** Specially designed for high-pressure, abrasive liquid applications such as Chemical Treater Trucks. Constructed of hardened and replaceable wear surfaces (liners and end discs).

### RECIPROCATING GAS COMPRESSORS

- **HD/HDS** Provides efficient and quiet delivery of oil-free gas or air. Single and two-stage compressors combine advanced design technology and state-of-the-art materials to deliver maximum performance with minimum maintenance.

### SCREW PUMPS

- **S SERIES TWIN SCREW WTG** Pumps “with timing gear” (WTG) transmission creates the highest flow rates of any rotary PD pump. Ideal for applications such as field gathering, Free Water Knockout (FWKO), pipeline start-up and re-injection, and general crude transfer.

- **S SERIES TRIPLE SCREW** Encased male and female drive spindles allow fluids to move smoothly and continuously from suction to discharge, a design that is ideal for boosting pressure in pipeline laterals and special transfer applications for clean, pipeline grade crude.