Recognizing the need for full containment of expensive and hard-to-seal high-value and/or dangerous chemicals, Blackmer®, a product brand of PSG®, a Dover company, has combined its proven sliding vane pump technology with a seal-less magnetic coupling to create the SMVP Series Seal-Less Mag-Drive Sliding Vane Pump.

The safe, reliable and efficient handing of acids, caustics and solvents is a key concern for a wide range of industrial-manufacturing applications and the seal-less SMVP pump helps ease those concerns by offering completely leak-free operation. The absence of shaft leakage increases both personal and environmental safety as it not only means no loss of liquids, but also no release of volatile organic compounds (VOCs) and hazardous air pollutants (HAPs).

Features & Benefits:
- 316 stainless-steel construction/metallized carbon graphite sleeve bearings/non-metallic vanes
- Self-lubricating sleeve bearings eliminate metal-to-metal contact
- Pumpage cools containment can and bearing surfaces for increased bearing life
- Samarium-cobalt magnets prevent magnet degradation
- Replaceable end discs for easy pump rebuild without removal from piping
- Sliding vane design self-adjusts for wear
- Self-priming, low-shear operation
- Adjustable relief valve protects against excessive pressures
**Product Recovery**

**Equals Big Savings**

Now is the time to install Blackmer Seal-Less SMVP Sliding Vane Pumps to minimize product waste and dramatically improve production yield.

### Calculate the Value of Your Fluid

**Estimated Product Cost** per gallon or liter = ________

*Ideally to include sale value and disposal cost

### Inlet / Suction Line

<table>
<thead>
<tr>
<th>Length of Inlet Tube</th>
<th>Volume (Multiply from Table 1)</th>
<th>% Nominal Recovery* 95%</th>
<th>Cost (Volume x % x Cost/Unit)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Discharge Line

<table>
<thead>
<tr>
<th>Length of Outlet Tube</th>
<th>Volume (Multiply from Table 1)</th>
<th>% Nominal Recovery* 80%</th>
<th>Cost (Volume x % x Cost/Unit)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Typical recovery on suction is 90-98% +

*Typical recovery on discharge 50%-90% +

_____ / time x _____ times/year = $_______ / year

### Additional Savings

- **Seal Replacement Costs:**
  - Blackmer seal-less design will assist with difficult to seal applications.

  _____ times per year x _____/seal set = ________

  (typical $1,000-$2000+ per set)

- **Seal Water Flush Costs:**
  - Blackmer seal-less design does not require/use water or other flush.

  _____ volume/hour x $_____/volume x ____ hours/year = ________

  (volume is liters or gallons)

  (typical US$10K-20K/year in USA per pump)

- **Pump Rebuild Cost:**
  - For Blackmer, the self-compensating, sliding vanes are auto adjusting for wear.

  _____ times per year x ______ cost = ________

  Blackmer replaces some pumps that have to be rebuilt as much as twice per year at 70% the cost of new.

- **Power Consumed:**
  - Because of essentially no slip, Blackmer power is not wasted.

  _____ extra kW x $______/kW/hr ____ hours/year = ________

  (For typical low viscosity applications, Blackmer uses 0.2kW to 1.5kW+ less power for applications that produce slip with lobe or ECP pumps) (1 hp = 0.75 kW)

- **Compliance and Clean Up Costs:**
  - Seal-less pumps prevent leaks. What is the cost to clean a spill or pay a fine to a government agency for dangerous spill events?

  _____ times per year x ____ labor costs = ________

**Subtotal Reduction in Cost of Ownership = ________**