




# Closed Vent Sampling Systems for Liquids, Gases and Liquefied Gases

**SulfurUnit.com**  
September 13-16, 2010    Calgary AB, Canada

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The Worldwide Standard in Sampling




**Products**  
DOPAK CLOSED VENT SAMPLING SYSTEMS FOR LIQUIDS, GASES AND LIQUIFIED GASES






Dopak Inc  
Bergschenhoek  
Netherlands

Dopak Inc  
Houston TX  
USA

WWW.DOPAK.COM

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## OPEN VENT SAMPLING



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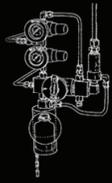
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**Objectives of sampling system**

- ✓ **Provide safety for the operator**  
No contact with the product to be sampled  
Easy (one handle) operation
- ✓ **Provide safety for the environment**  
No spillage, no fumes
- ✓ **Provide a 100% representative sample**




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**Sample containers - Bottles**



- ✓ Bottle closed with cap and septum
- ✓ Needle assembly/sleeve arrangement
- ✓ Closed vent
- ✓ Product at atmospheric pressure




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**Sample containers - Cylinders**



- ✓ Cylinder with valves and QC couplings
- ✓ Outage for liquids (external/internal)
- ✓ Closed vent / DESO QC
- ✓ Product at process pressure




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**DPM series**

**Applications**

Liquids at lower pressure  
Sampling with lower vapour pressures  
Corrosive, hazardous liquids  
Viscous fluids, slurries  
Sampling from pipelines and tanks

**Available Configurations**

- [On/off](#)
- [System purge](#)
- [Back purge](#)
- [Needle purge](#)
- [Back/needle purge](#)
- [System purge and continuous needle purge](#)
- [In line, needle purge](#)



Liquids

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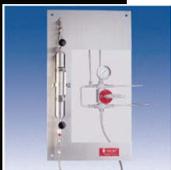
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**S32-G series**

**Applications**

Gas sampling

**Available Configurations**

- [System purge](#)
- [Bypass purge cylinder](#)
- [Process to flare](#)



Gas

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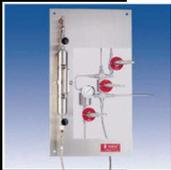
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**S32-LG series**

**Applications**

Liquefied gas sampling  
Fixed external outage  
High vapour pressure liquids  
Zero quick connect vapour release

**Available Configurations**

- [System purge](#)
- [Vent to flare](#)
- [Outage tube](#)
- [Purge expansion](#)
- [Bypass purge cylinder](#)



Liquefied gas

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## ENGINEERED PRODUCT

### Design requirements

- ✓ Specification  
Pipe or instrumentation specification
- ✓ Criteria  
Design/operating pressure temperature, viscosity, phase, particles. Product properties

- ✓ Representativity  
Dead volume  
System purge  
External purge  
Contamination



- ✓ Safety

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## SAFETY IMPROVEMENTS



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