

freeglide®



The only in-line
Powder Sampler
guaranteed not to jam



2010

freeglide®

...the smarter way to sample....

The Challenge

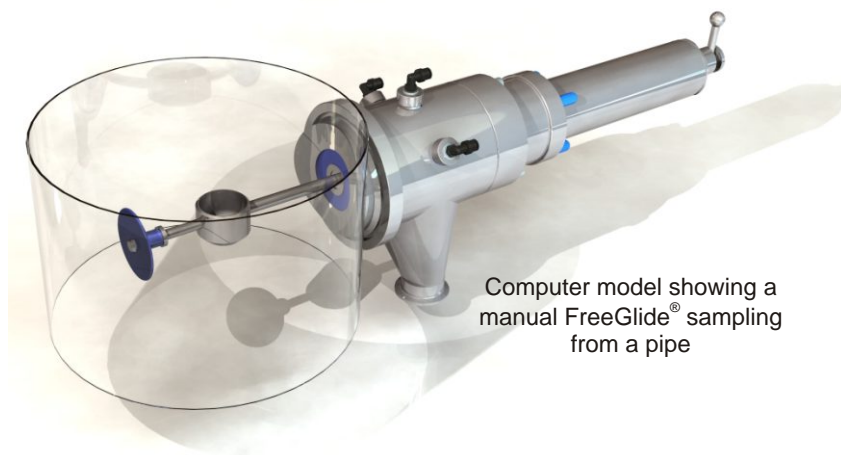
Sampling Systems have spent many years developing the FreeGlide®. This highly innovative device overcomes the problems inherent in other in-line powder samplers:

- It does not jam during use
- It does not alter the physical characteristics of the powder being sampled

Our Solution

The FreeGlide® is the solution:

- The FreeGlide® is specially designed and engineered so that powder is kept out of the bearings by a special flexible membrane - this means the sampler will not jam
- The sample is collected in a cup and so is not physically altered by the sampling process



Computer model showing a manual FreeGlide® sampling from a pipe



Manually Operated

Left: FG-3000M
Middle: FG-1500M



Pneumatic Actuation
FG-3000A

Hygienic Applications

The FreeGlide® has been made to the latest Pharmaceutical GMP standards and so is ideal for hygienic applications. The product contact parts of the standard model are: 316 stainless steel, PTFE and silicone rubber (other materials are available on request).

Robust Construction

The FreeGlide® is exceptionally robust and is suitable for use in a wide range of industries including: pharmaceutical, food, chemical, general industrial and cosmetic.

....the new generation in
In-line Powder Sampling

Sample Collection

When the Sampling Cup is inverted the product falls down the discharge chute to the collection point.

The Powder Samples can be collected in a number of ways:

- Into a bottle attached using a screw thread adapter
- Into a bag
- Collected using a cassette of continuous tubing which can be sealed and cut between sample collections. (n.b. heat sealers are not available in ex rated format hence clips will need to be used).

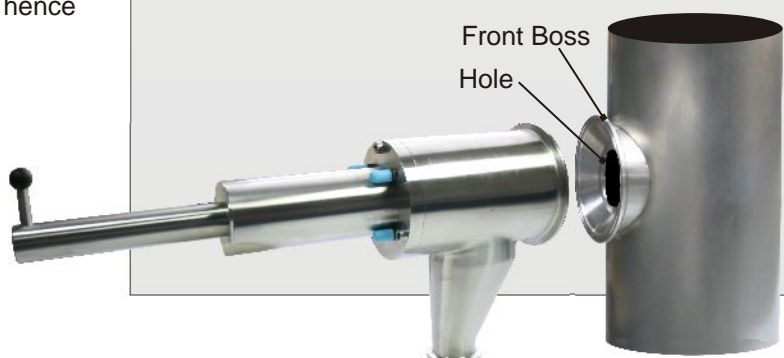


PTFE Bottle Adapter - the sample collecting bottle screws into bottle adapter

Easy to Install

1. Cut a hole in your downpipe
2. Weld the Front Boss to your downpipe.
3. The main body of the FreeGlide® then clamps to the front flange

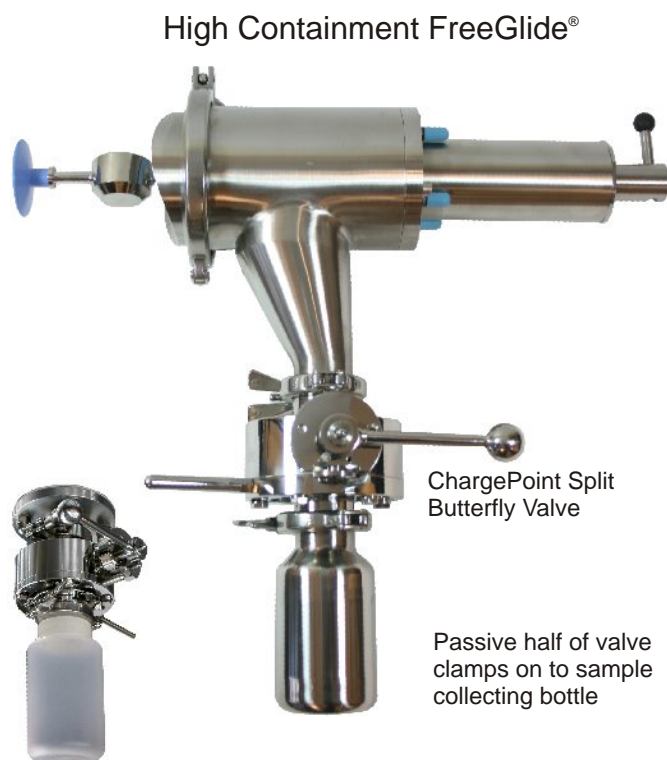
Note: The FreeGlide® can be easily removed for cleaning



High Containment Sampling

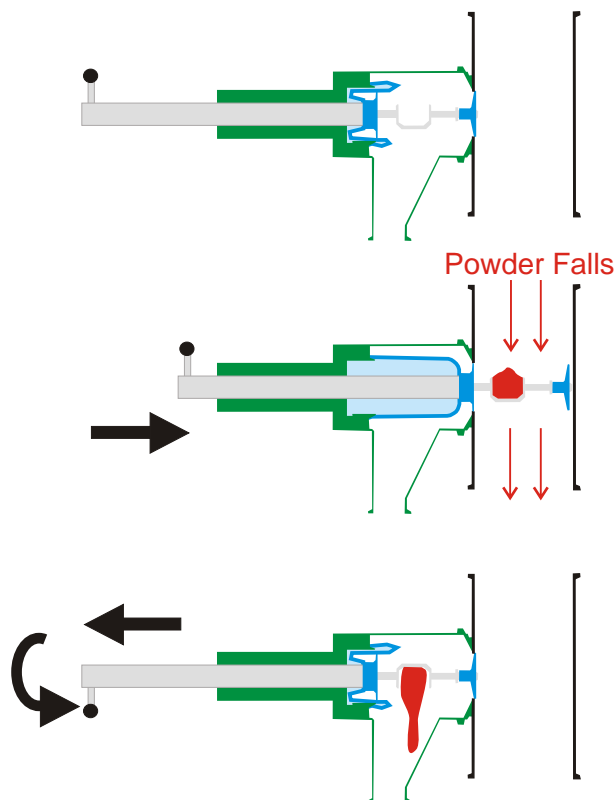
Sampling Systems can offer high containment sampling through a 50mm high containment Split Butterfly Valve.

- Containment levels of $< 10 \mu\text{g}/\text{m}^3$ (lower levels can be achieved depending on the product)
- Available in both 316 stainless steel and hastelloy with a range of seals including EPDM and Kalrez®
- Suitable for use with either stainless steel or plastic containers



Transit cover for passive half of containment valve. Ideal protection when moving the container

Easy to Use



Resting -

When the FreeGlide is not in use the full bore of the downpipe is available for powder flow.

Sampling -

The sampling cup is extended into the downpipe to catch the product as it falls.

Discharging -

The sampling cup is then retracted and is then inverted. The powder sample falls down the discharge chute to where it is collected



The Flexible Diaphragm

At the heart of the FreeGlide® is an ingenious flexible diaphragm. The purpose of the diaphragm is to keep powder away from the working mechanisms of the sampler. By keeping the mechanisms clean the sampler will not jam in operation.

The diaphragm is available in the following FDA acceptable polymers:

- Silicone (blue)
- Silicone (white)
- EPDM
- Viton

Only the FreeGlide® has the unique flexible diaphragm
Only the FreeGlide® is guaranteed not to jam

Materials of Construction

Contact parts:

- 316 stainless steel
- PTFE
- Silicone rubber, Viton or EPDM

Non contact parts:

- 304 grade stainless steel
- Other materials as required.

Finishes:

All welds ground and polished to surrounding metal standard.

All product contact surfaces are finished to Ra 0.5µm or finer.

Actuation:

Manual or Pneumatic actuated

Actuated FreeGlides are supplied with reed and limit switches so they can be connected directly to your PLC. Please contact us for more info.

Dimensions: Please contact us for planning in drawings

Sizes:	Part No.	Minimum Downpipe Diameter
	FG-1000	100mm
	FG-1500	150mm
	FG-2000	200mm
	FG-3000	230mm



Suitability:

Location:	The Free-Glide is designed for the collection of powder samples from a vertical downpipe. The product needs to be dispersed in air and in free fall
Pipe Pressure:	The internal pressure differential across the device (inside/outside of the downpipe) needs to be within 0.1 barg of surrounding atmospheric pressure. Ask for advice if greater pressure differentials are required.
Flexible Parts:	Polymer components are available in the following FDA acceptable materials: Silicone, Viton or EPDM
ATEX:	Ex II 2GD T4 (contact us for details)

Further Information

If you are planning a new facility or looking to replace an old sampler please contact Sampling Systems. We will be able to supply full planning in drawings and quotes by return.

With installations in a wide range of industries around the world we are sure we can help.

Worldwide Enquires

Sampling Systems have trained and experienced agents around the world who will be pleased to help with your enquiry.

Please contact us for details on your local dealer.