

GEA Powder Spool Sampler

Hygienic sampling for food powders



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The new GEA Powder Spool Sampler is a hygienic solution for food and dairy processors to take on-demand samples safely and reliably from the powder stream during production. This device is a simple, clean design that does not require three-phase power or external control. It can be mounted in various plant locations, such as drop tubes and vessels and is easy to install for most food or dairy applications.

The powder spool sampler has been designed in accordance with relevant global food and dairy manufacturing regulations.

Early detection

It is essential to sample powders during production, to monitor key parameters of the material composition and for microbiological analysis. This helps maintain quality control through the early detection of out-of-specification or contaminated product and allows immediate remedial action to be taken. This simple mechanism takes precise samples of free-flowing powder at the press of a button. Samples are automatically deposited into a collection bag, removing the risk of contamination.



Easy fitting

GEA Powder Spool Samplers are simple to fit and are interchangeable with existing GEA auger samplers, allowing manufacturers to locate them throughout the plant to take samples at critical points in the process. They are designed to complement a range of process equipment, ensuring a plant wide powder sampling system can be provided by a single supplier.

Benefits

- Easy cleaning
- Metal detectable components
- Closed loop collection
- Minimal operator involvement
- No electrical installation required
- Optional automatic operation for remote sampling
- Consistent sample size
- Reduced handling ensures sample integrity

GEA Powder Spool Sampler

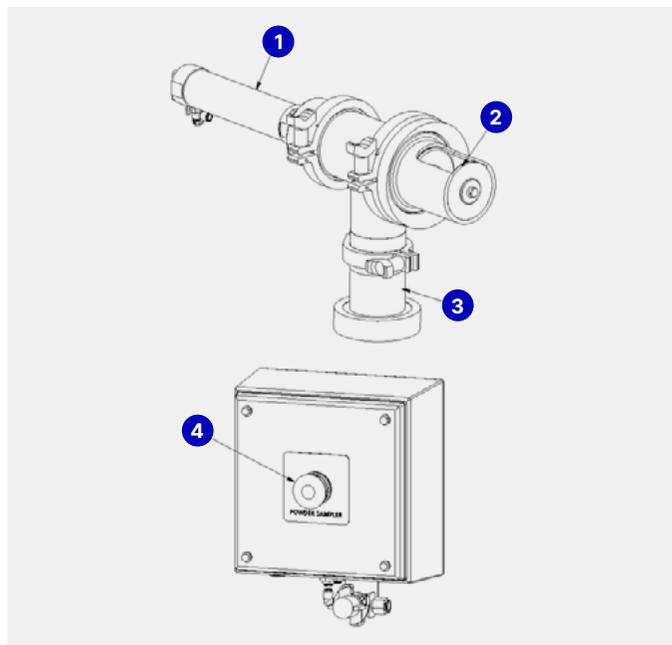
Technical Specs

Powder supply	Connection	4" Tri-Clover (hygienic weld ferrule included)
	Pressure in hopper	> 0.0 - < 1.0 kPa
Compressed Air	Connection - without control cabinet	Ø6 Pneumatic Push Fitting
	Connection - with control cabinet	Ø10 Pneumatic Push Fitting
	Pressure	6 - 7 bar (g) at connection
	Max. particle size	ISO 8573.1 class 1; 0.1 µm
	Pressure dew point	ISO 8573.1 class 4; 3 °C
	Max. oil content (including vapour)	ISO 8573.1 class 1; 0.01 mg/m ³
Environment	Ambient air temperature at sample point	15 - 24 °C
	Relative humidity at sample point	<50% RH
Bag Size	Maximum sample bag size	200mm (w) x 400mm (h) x 2000g
	Minimum sample bag size	135mm (w) x 150mm (h)
Designed to certifications	EU Directives	2006/42/EC Machinery Directive 2014/34/EU ATEX Directive
	Sanitary / Hygiene	EN 1672-2:2005, ISO 14159:2002 EHEDG*, USDA*, 3A Standards*, FDA Codes of Federal Regulations
	Machine Safety	ISO 12100:2010
	Hazardous Area	Rated for Hazardous Zone 22
Warranty	2 Years	

* Followed where applicable and practical



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Taking samples with the cabinet

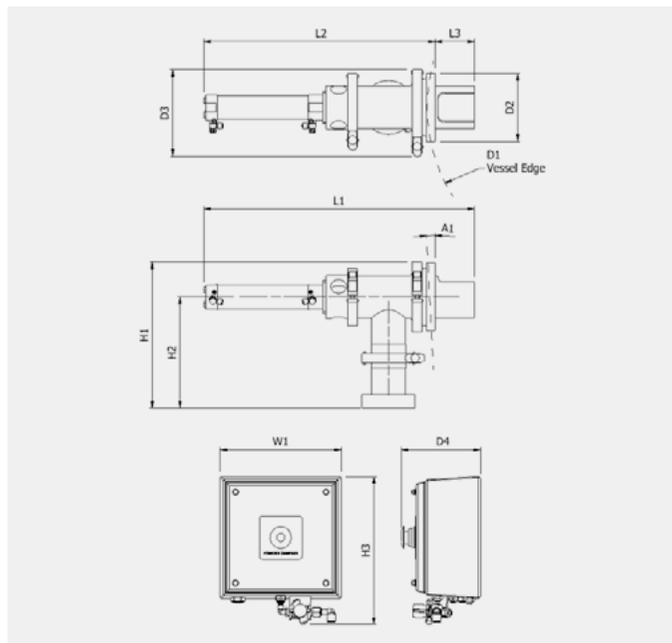
- Operator attaches a sample bag to the drop tube **1**
- Operator pushes and holds button **2**
- Cylinder **3** pushes spool **4** into the product
- Product fills the cavity around the spool
- Operator releases button, spool retracts and moves the powder to the drop tube
- Product falls down the drop tube into the sample bag

Application

Designed to take a hygienic powder sample where access to the required sample point is not restricted and when the sampling regime calls for a low number of samples.

Key Features

- Full pneumatic operation
- No electrical installation required
- Food grade product contact surfaces
- Metal detectable spool
- Easy dismantling for cleaning
- Retrofittable to existing GEA machines



Dimensions

A1	3°
D1	300mm (min)
D2	130mm
D3	160mm
D4	150mm
H1	275mm
H2	210mm
H3	275mm
L1	510mm
L2	425mm
L3	85mm
W1	230mm

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