Automatic Samplers

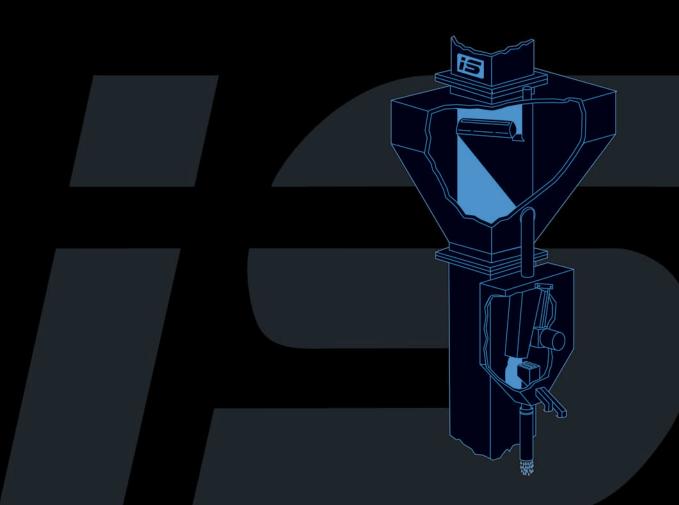










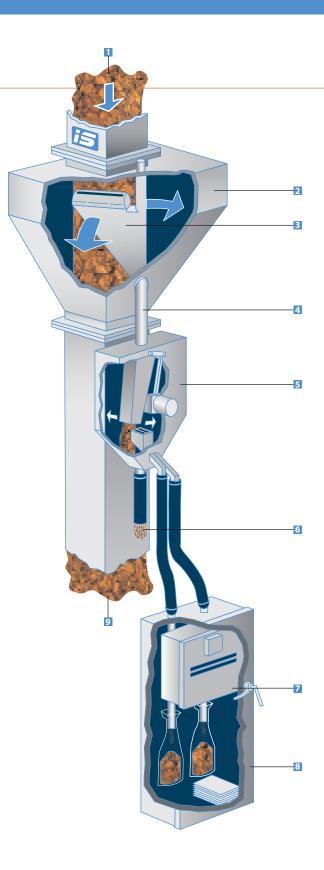


intersystems Automatic Samplers

Automatic Samplers

Material Inlet

- In-Line Automatic Sampler A primary cross-cut sampler is most often installed in place of a section of spouting and can be either a 45° or 90° model. As material flows through the sampler, a "pelican" type diverter, with an opening in the leading edge, traverses the stream and extracts a representative sample. (GRE sampler shown is for vertical applications only).
- Pelican remains in the rest position, under a seal and out of the material stream, until an automatic or manual signal is given to collect another sample.
- Sample Outlet
- Sample Divider A mechanical divider receives the sample by gravity from the primary sampler. It then passes through a continuously oscillating swing valve that reduces the sample and distributes it into a one, two or three sample adapter. Use is determined by the flow rate, installation and frequency of the samples.
- **Excess Sample Return**
- Automatic Controls A control panel controls the operation of the primary sampler and mechanical divider. A digital integral timer is used to control the frequency of travel of the pelican. Panels can be built for individual control or for control of multiple sampling systems.
- Collection Systems Collection cabinets come in a totally enclosed, sealed bagging unit, an enclosed hopper cabinet or a sealed automatic indexing jar sample collection system.
- Material Outlet



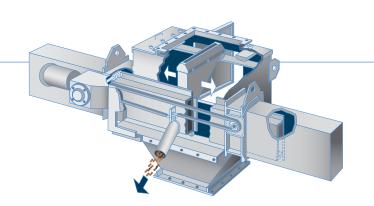
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Expor-Ter Cross-Cut Sampler

HIGH VOLUME, HEAVY DUTY OPERATION IN 45° OR 90° SPOUTS/CHUTES

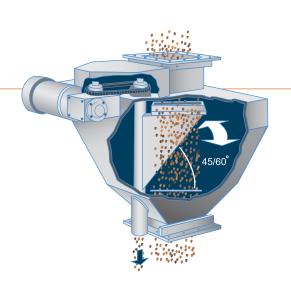
The Sampler is constructed of 7 gauge steel with 5/16" abrasive resistant lining. Standard features include A.R. steel slide plate, slide plate cam followers, 1/4" fabricated box slide plate, bolt-in pelican, heavy duty drive, large inspection door and flip out dust seals. Drives can be electric, pneumatic or hydraulic.



Rotary Cross-Cut Sampler

VERTICAL (90°) GRAVITY FLOW SPOUTS/CHUTES

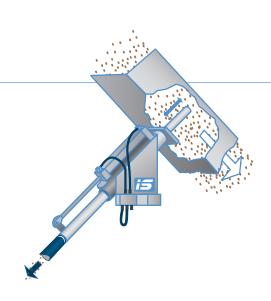
The internal pelican traverses through the material stream to obtain an accurate sample and moves out of the stream when not taking a sample. The unit features dust tight design with heavy gauge steel, wear resistant liners and replaceable cutter blades on the pelican. Pelicans can be either 45° or 60° styles depending upon the flow characteristics of the material. Drives can be electric, pneumatic or hydraulic.



Gravity Chute Sampler (GP)

INCLINED OR VERTICAL 45° OR 90° APPLICATIONS

This Sampler features easy installation and simple operation with one moving main part. Adjustable sampling frequency with automatic or manual operation is standard. When activated, the slotted, stainless steel sample tube enters the product stream and takes a sample. The sample then flows by gravity to a sealed container. When not sampling, the sample tube is retracted and out of the product stream. Drives can be electric, pneumatic or hydraulic.



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Belt End Samplers

All models feature sample delivery by gravity or pneumatics and are custom designed to meet your operation's needs. Features include internal access for serviceability, rugged heavy gauge steel construction, heavy duty drive components, abrasion-resistant liners at all wear points and replaceable cutter blades. These models are designed as "drop-in" models or as complete discharge hoods. The pelican rests behind the dust seal and out of the material stream when not operating. Drives can be electric, pneumatic or hydraulic.

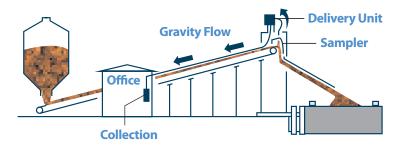
Sliding Tube



Top Draw (Pneumatic Removal)



OPERATIONAL EXAMPLE

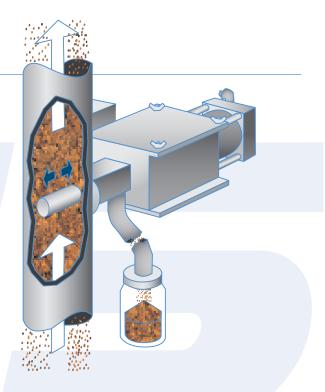


Slide Plate



Pneumatic Line Samplers (PS)

Model PS Samplers are designed for applications with free flowing materials, ranging from flour and microscopic powders to large granules and pellets or heavy viscosity liquids with solid suspensions. The PS collects accurate samples from gravity or pneumatic conveying systems (positive or negative, dense or dilute phase) and may be mounted in vertical or horizontal lines, spouts or chutes. The sample tube enters the product stream, collects a sample, retracts and deposits the sample by means of a stainless steel polished auger to the collection system. The close-tolerance polished auger provides for excellent clean-out. Standard construction includes an aluminum seal housing, stainless steel sample tube and auger and Teflon pressure seals.



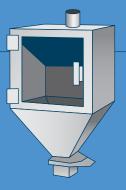
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Collection Systems

Collection systems are available as lockable cabinets or hopper style. With an automated collection system such as the Rotating Indexing Cabinet, you can receive and store samples virtually unattended. An adjustable timer is pre-set to determine the number of samples (or duration) per container. When it is time, the system automatically positions the 8, 16 or 24 sealed containers for the next filling. Other collection systems provide for automated or manual bag filling.



Rectangular Style puts collection bags and controls under lock key



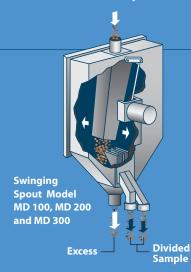
Hopper Style - includes hinged plexiglass door and a sliding manual gate

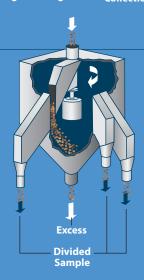


Automated Rotating Indexing Cabinet & Jar Collection

Mechanical Dividers

Mechanical dividers divide the extracted sample from the primary sampler down to a workable size while allowing the excess to return to the main material stream. These dividers are designed to maintain representative sample integrity and accuracy with lower handling costs. Manufactured in four models: MD 100, MD 200, MD 300 and MD 1000, with one, two or three sample discharges. MD 50/50 Sample Splitter also available.

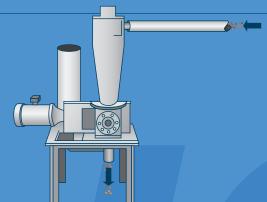




Rotating Spout Model MD 1000 for high volume applications

Pneumatic Sample Delivery Units

Sample delivery units are used to transport bulk samples from one point to another, reducing labor costs with efficient motor operation of blower and air lock. Units are available in 2" and 3" diameter sizes. Use is dependent upon volume of sample and distance to be transported.



Automatic Controls

- Digital timers
- Automatic and/or manual operation
- Wide range of adjustable plug-in timers
- Accommodates individual or multiple systems, including interlocks and dust-tight, water-tight, Class II-G classifications or other electrical codes
- Pneumatic, electric or hydraulic operation









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Intersystems reaches a worldwide market and numerous industries with expertise in the engineer and manufacture of bulk material handling products, industrial sampling systems and automatic filling and conveying systems. Intersystems is based in Omaha, Nebraska and in 2009 moved into a new state-of-the-art 140,000 square foot manufacturing facility.

Intersystems is ISO 9001 and 14001 certified.

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