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 sampler (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 a fully automated or manual bag filling.

Collection Systems

- 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 and Jar Collection

Automatic Sampling Systems

- Sampling Made Simple
  - The 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 90 or 45 degree 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. The “pelican” remains in the rest position, under a seal and OUT OF THE MATERIAL STREAM, until an automatic/manual signal is given to collect another sample. Frequency of travel is controlled by a timer in the control panel.
  - Sample Divider - A Mechanical Divider receives the “sample” by gravity from the primary sampler. Then it passes through a continuously oscillating swing valve that reduces the “sample” and distributes it into a 1, 2, or 3 sample adapter. Dividers are manufactured in four models—MD 100, MD 200, MD 300 and MD 1000, with one, two or three sample discharges.
  - Automatic Controls - Sealed and Locked - 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.

Pneumatic Sample Delivery Units

- Used to transport bulk samples from one point to another, reducing labor costs. Efficient, one-motor operation of cyclone rotary valve and blower. Units are available in 2” and 3” diameter sizes. Use is dependent on volume of sample and distance it has to be transported.

Mechanical Dividers

- Divides the extracted sample from the primary sampler down to a workable size; the excess is allowed 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.

Automatic Controls

- Digital or analog 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

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.

OPERATIONAL EXAMPLE

For Bulk Material Handling & Processing Industries

© Copyright 2009 Intersystems All Rights Reserved
Expor-Ter Cross-Cut Samplers
Designed for high volume, heavy duty operation with electric, pneumatic, or hydraulic drives. Seven gauge steel construction with 5/16" abrasive resistant lining helps withstand use and abuse. AR 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 are standard. Rugged, durable, and dependable!

Rotary Cross-Cut Samplers
Designed for vertical gravity flow sprouts and chutes. The internal “pelican” traverses through material stream (similar to swinging door) to obtain an accurate sample and moves out of the stream when not taking a sample. Drives can be electric, pneumatic, or hydraulic. Unit features dust tight design with heavy gauge steel, wear resistant liners, and replaceable cutter blades on pelican. Pelicans can be either 45 degree or 60 degree styles depending upon flow characteristics of material.

Gravity Chute (GP) Samplers
Designed for inclined or vertical applications to give accurate, reliable, and repeatable samples. Easy installation and simple operation with one moving main part. Adjustable sampling frequency with automatic or manual operation is standard. When activated, the slotted 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. Suited for 45 or 90 degree applications.

Belt End Samplers
All models feature sample delivery by gravity or pneumatics and are custom designed to meet your operation's special needs. Internal access is convenient for serviceability. Rugged heavy gauge steel construction, heavy duty drive components, abrasion-resistant liners at all wear points and replaceable cutter blades. 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 either electric, pneumatic, or hydraulic to match your needs.

Pneumatic Line Samplers (PS)
The "PS" pneumatic line samplers are designed for industrial 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. 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. Custom materials and construction are also available.
Belt End Samplers
All models feature sample delivery by gravity or pneumatics and are custom designed to meet your operation's special needs. Internal access is convenient for serviceability. Rugged heavy gauge steel construction, heavy duty drive components, abrasion-resistant liners at all wear points and replaceable cutter blades. 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 either electric, pneumatic, or hydraulic to match your needs.

Pneumatic Line Samplers (PS)
The "PS" pneumatic line samplers are designed for industrial 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. 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. Custom materials and construction are also available.
Collection Systems
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 sampler (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.

Automatic Controls
- Digital or analog 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

Pneumatic Sample Delivery Units
Used to transport bulk samples from one point to another, reducing labor costs. Efficient, one-motor operation of cyclone rotary valve and blower. Units are available in 2" and 3" diameter sizes. Use is dependent on volume of sample and distance it has to be transported.

Mechanical Dividers
Divides the extracted sample from the primary sampler down to a workable size; the excess is allowed 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.

Sample Divider - A Mechanical Divider receives the “sample” by gravity from the primary sampler. Then it passes through a continuously oscillating swing valve that reduces the “sample” and distributes it into a 1, 2, or 3 sample adapter. Dividers are manufactured in four models—MD100, MD 200, MD 300, and the MD 1000, and use is determined by the flow rate, installation, and frequency of the samples. Excess sample is returned to the material stream.

Automatic Controls - Sealed and Locked - 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.

The 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 90 or 45 degree 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. The “pelican” remains in the rest position, under a seal and OUT OF THE MATERIAL STREAM, until an automatic/manual signal is given to collect another sample. Frequency of travel is controlled by a timer in the control panel.

Sample Splitter is available (not shown)