





PROVEN & DEPENDABLE™

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Accurate, representative samples begin with the right equipment. With individual design and component construction,

InterSystems' Automatic Samplers adapt readily to your particular application, regardless of capacity, layout or material - all backed by decades of industry success.

### TYPICAL CONFIGURATION

#### 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** 

### Material Outlet

#### 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 -

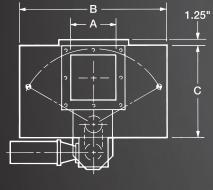
Collection cabinets come in a totally enclosed, sealed bagging unit, an enclosed hopper cabinet or a sealed automatic indexing jar sample collection system.

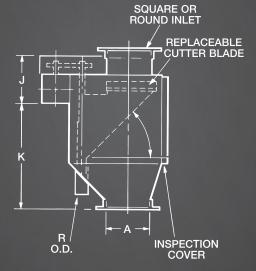
### **GRE ROTARY CROSS-CUT GRAVITY SAMPLER**

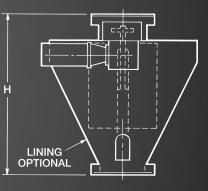
### VERTICAL (90°) GRAVITY FLOW SPOUTS/CHUTES

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, 5/16" EMBU lining and replaceable cutter blades on the pelican. Pelicans can be either  $45^{\circ}$  or  $60^{\circ}$  styles depending upon the flow characteristics of the material. Electric drive is standard.

GRE Rotary Cross-Cut Samplers are FGIS and CGC approved.







45/60<sup>°</sup>

### SPECIFICATIONS

SAMPER SIZE	A (MAX)	в	с	H @ 45°	H @ 60°	L	K @ 45°	K @ 60°	R	SIZE	WEIGHT @ 45°	WEIGHT @ 60°	МАХ ВРН
GRE - 6	6.0"	22.62"	14.50"	28.0"	39.75"	9.8"	16.7"	28.4"	3.0"	1/3 HP	200 lb.	300 lb.	2,500
GRE - 10	10.0"	32.12"	20.00"	34.5"	51.06"	9.8"	23.3"	39.9"	3.0"	1/2 HP	275 lb.	425 lb.	7,000
GRE - 14	14.0"	41.75"	25.56"	42.0"	63.50"	11.0"	29.6"	51.1"	3.0"	3/4 HP	450 lb.	675 lb.	14,000
GRE - 18	18.0"	51.25"	31.06"	48.5"	74.87"	11.0"	36.3"	62.6"	3.0"	3/4 HP	625 lb.	975 lb.	23,000
GRE - 22	22.0"	60.75"	36.65"	56.0"	87.19"	11.0"	42.9"	74.1"	3.0"	1 HP	825 lb.	1300 lb.	34,000
GRE - 26	26.0"	70.62"	42.12"	63.0"	99.12"	11.0"	49.6"	85.8"	3.0"	1 HP	1350 lb.	2100 lb.	47,500
GRE - 30	30.0"	80.12"	47.62"	70.0"	111.00"	11.0"	56.3"	97.3"	3.0"	1 HP	1650 lb.	2600 lb.	63,000
GRE - 34	34.0"	93.75"	56.25"	84.0"	133.00"	13.0"	66.0"	74.1"	4.0"	1.5 HP	2200 lb.	3500 lb.	81,000
GRE - 38	38.0"	103.88"	61.81"	91.0"	145.00"	13.0"	72.8"	85.8"	4.0"	1.5 HP	2600 lb.	4200 lb.	101,000
GRE - 42	42.0"	112.88"	67.31"	98.0"	156.50"	13.0"	79.4"	97.3"	4.0"	1.5 HP	3100 lb.	5000 lb.	123,500

45 and 60 degree reference the hopper and pelican slide angles. GRE samplers are for vertical chutes only. Use GCE in angled applications. Additional engineering detail is available from the factory. Remember to take the divider into consideration in your design dimensions.

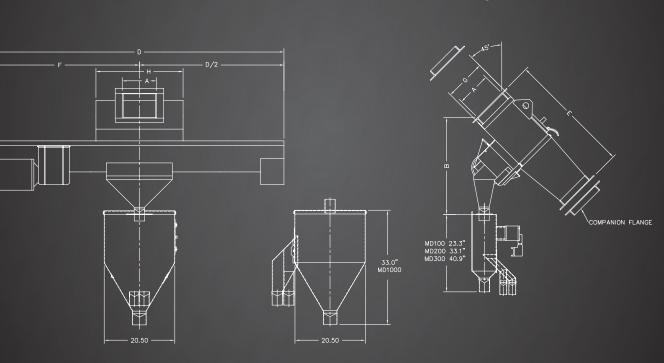


### **GCE CROSS-CUT GRAVITY SAMPLER**

### HIGH VOLUME, HEAVY DUTY OPERATION IN 45°, 60° OR 90° SPOUTS/CHUTES

The Sampler is constructed of carbon steel with 5/16" EMBU lining. Standard features include steel slide plate, slide plate cam followers, fabricated box slide plate, bolt-in pelican, heavy duty drive, large inspection door and flip out dust seals. Electric drive is standard.

GCE Cross-Cut Samplers are FGIS and CGC approved.



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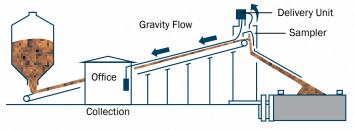
SPECIFIC	ATIONS	70 BU/SQ IN.	65 BU/SQ IN.						
А	В	С	D	E	F	G	н	MAX BPH VERTICAL	MAX BPH 45°
8-10	28"	2"	56"	36"	33"	12"	26"	7,000	6,500
12-14	28"	2"	56"	36"	33"	12"	26"	10,000	9,400
16-18	32"	2"	84"	40"	46"	20"	38"	22,750	21,000
20-22	36"	4"	96"	42"	48"	24"	42"	34,000	31,500
24-26	40.4"	6"	108"	46"	50.3"	28"	46"	47,500	44,000
28-30	44"	8"	120"	48"	52.3"	32"	50"	63,000	58,500
32-34	46"	8"	132"	48"	62.3"	36"	53.5"	81,000	75,250
36-38	49"	9"	144"	50"	68"	40"	58"	101,000	94,000
40-42	53"	10"	156"	52"	74"	44"	62"	123,500	114,750

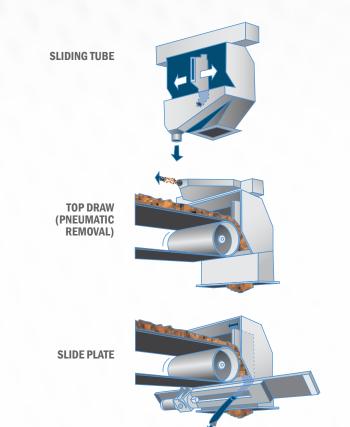
### **BELT END CROSS CUT SAMPLERS**

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. Electric drive is standard.

Belt End Cross Cut Samplers are FGIS and CGC approved.

### **Operational Example**





### **GRAVITY CHUTE SPOT 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. Not legal for trade.

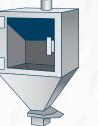




### **COLLECTION SYSTEMS**

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

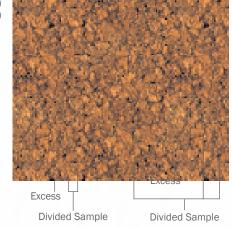
Automated Rotating Indexing Cabinet and Jar Collection

### **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.

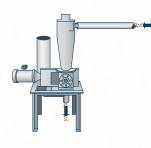
MODEL	CAPACITY RANGE
MD 100	Up to 10,000 BPH
MD 200	11,000 - 30,000 BPH
MD 300	30,000 - 40,000 BPH
MD 1000	Over 40,000 BPH

#### MD 100 MD 200 MD 300



### **PNEUMATIC SAMPLE DELIVERY UNITS**

Sample delivery units are used to transport bulk samples from one point to another, 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**

- Adjustable digital timers
- · Manual and automatic sampling modes
- NEMA 12 enclosure



### **COMPLETE YOUR GSI SYSTEM**

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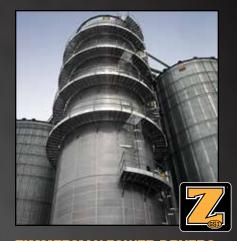
### 40-SERIES<sup>™</sup> GRAIN BIN

When determining the best system for your operation, we know that what's protected inside the bin is what counts most. Each GSI bin is efficiently designed to handle maximum loads for unmatched strength. All GSI bins are constructed using the higheststrength steel available.



**TOWERS AND CATWALKS** 

GSI offers a full line of structures to support material handling equipment. Built to perform for the long haul, GSI's all new QuickBolt™ Towers and Catwalks are engineered to your facility's layout, taking wind, seismic and snow loading into consideration. GSI structures feature bolt-up assembly and hot-dipped galvanized finish.



**ZIMMERMAN TOWER DRYERS** Not all tower dryers are created equal. What sets Zimmerman dryers apart is over 50 years of innovative design expertise and industry proven drying principles. The result is an easy-tooperate, easy-to-maintain, durable, fuel-efficient grain dryer, supported by an expert dealer network.



#### **PREMIUM TRAINING, SERVICE AND SUPPORT**

InterSystems reaches a worldwide market and numerous industries with expertise in the manufacturing of material handling products and industrial sampling systems. Purchased by GSI in 2014, InterSystems is based in Omaha, Nebraska and operates out of a 200,000 square foot state-of-the-art manufacturing facility. InterSystems is ISO 9001 and 14001 certified.







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