Bin Sweeps and Bin Entry

GEAPS Opening Workshop

Presented by
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Brock Model ABC Commercial Bin Sweep
Goals & Objectives

- Eliminate potential for bin entry
- Automate via technology
- Provide safety enhancing features
Bin Sweeping Considerations

- Single vs. Double Pass Sweep Operation
- Electrical Power Routing
- Sweep Automation
Double Pass Bin Sweep

- Gravity unloading complete
- Inner pass complete
- Sweeping complete
- Single pass sweep operation available up through 156’ diameter bins.
- Eliminates need for entry
### Capacities/Specifications

**Model ABC™ System Specifications**

<table>
<thead>
<tr>
<th>Model (Auger Diameter)</th>
<th>Capacity Range</th>
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<tbody>
<tr>
<td><strong>INCHES</strong></td>
<td><strong>BUShELS PER HOUR</strong></td>
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<tr>
<td><strong>MM</strong></td>
<td><strong>M³ PER HOUR</strong></td>
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<tr>
<td><em><em>METRIC TONS</em> PER HOUR</em>*</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>2300</td>
</tr>
<tr>
<td>16</td>
<td>5300, 8000 or 10,000</td>
</tr>
<tr>
<td>24</td>
<td>14,000 or 20,000</td>
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- 10- 24 inch diameter
- 3,000 – 20,000 bushels BPH
Safety Feature

Conveyor tube encases auger flight to regulate grain flow into the sweep

Agitator system helps provide consistent product flow, by powering through challenging conditions or commodities
Safety Feature

Hydraulically powered track drive system ensures advancement in the toughest conditions
V-scraper
Replaceable urethane treads
C188 Steel chain
Weights
Drive
Safety Feature

- Sidewall Material Agitator (SMA)
  - hydraulic powered auger
  - agitates compacted material along sidewall
Control Panel Safely Located Outside Bin
Electrical Routing and Safety

[Diagram of electrical routing and safety]
Power Routing – Center Sump

- Rotates with Sweep
- Remains Stationary
- Power in from Control Panel
Zero-Bin Entry Sweep Controller
Automatic Operation

- Monitors motor amperage.
- High and low amperage set points are established.
- As amperage increases, forward motion is paused.
- As amperage decreases, forward motion resumes.
- Prevents stalling the sweep with grain avalanche.
- Display indicates the position of the sweep.
- Manual controls and Emergency Stop on panel.
Displays current motor amperage

Displays sweep position (percentage)
Thank You