

Why Are They Still Entering Grain Bins?



Carol Jones

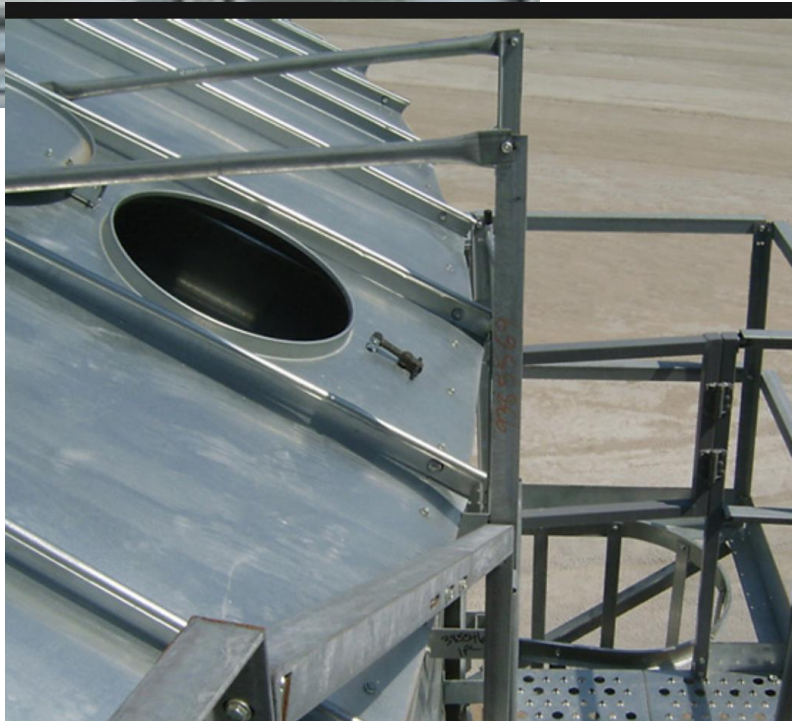
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News Flash: Employee “fell into a grain bin”..?????? Really????



- Approximately 30 deaths each year and twice that number in non-death entrapments.
- Entanglements and near misses....not counted.
- Grain carts/gravity wagons
- Trucks
- Anywhere grain is or might be moving

News Flash: Employee “fell into a grain bin”..... Really?????!!!!

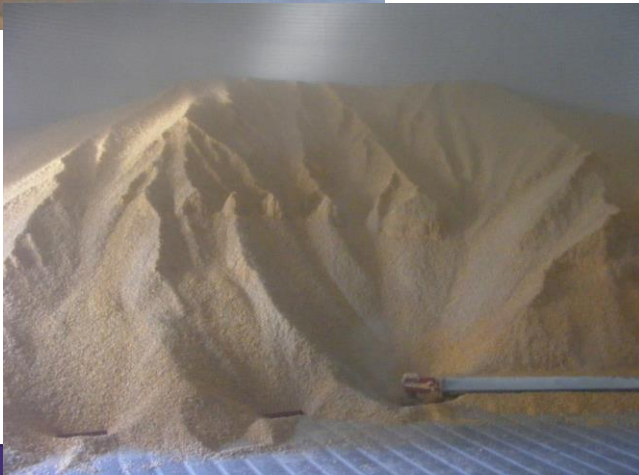


- What really happens
- Grain won't flow....
 - Material stuck on walls
 - Walking down grain, auger running
 - Bridge breakthrough



News Flash: Employee “fell into a grain bin”..?????? Really????

- What really happens
 - Cleaning out a bin
 - Breaking up chunks for reclaim system
 - Dislodging bridges or walls of grain
 - Moving a stuck sweep auger
 - Fumigation, top dressing
 - Equipment/structural repairs



Prevention: “good” grain

Good Grain Condition Management

- Condition going in the bin
 - Aeration management
 - Monitoring
 - Temperature Cables
 - Air Quality Monitors
 - Recordkeeping
 - Marketing poor quality quickly
- Condition never improves in storage
 - When should you run aeration systems?
 - Why do I need to monitor?
 - Why do I need so many stinking records?

“New” Equipment/Techniques

Fixing Problems from Outside

- Break up chunks
- Dislodge stuck grain
- Zero Entry Sweeps with clod breakers
- Aeration control/monitoring systems
- Insect monitoring

Other Equipment

- Whips and drills
- Grain Vacs
- CO₂ Blasters
- Bin “Bots”
- Moving Floors
- Vibrators
- Air Blasters
- Inflatable bladders

Prevention

Training...are we doing it right?

- Do football teams watch a 15 min performance video once a year and never practice? **NOOOOO!!!**
- Hands-on training, drills...for everyone
 - Bin Entry Procedures/Permits
 - “What-if” scenarios
 - Grain Handling Basics



“New” Equipment/Techniques/Attitudes

Quote....

- *“Anybody down there that can help me?.....S*#@ it...I’ll do it myself”*
- Remedy: Always have a partner at the door and in communication at all times

Process Changes

- Lock outno exceptions!
- Air quality monitoring
- Written housekeeping procedures
- Written bin entry and cleaning procedures
- Discipline policy

Complete Organization Participation

Management

- Welfare of workers must be #1
- Equipment...much cheaper than an incident!
- Support/require training
- Understand the tie between every action and safety/welfare

Employees

- Seek/suggest training
- See/Say mentality
- Be responsible for yourself and your partners
- Be prepared...it's your life!!
- If you don't know...ask.
- Don't take shortcuts...ever!

Commercial Facilities: Keep Good Records (more than 10 employees)

Management

- OSHA 1910.272 Grain Handling Safety Standards
- Know what they are
- Be diligent in following rules
- Create an atmosphere that allows employees to report
- Train and re-train employees

Employees

- Be familiar with the standards
- Follow the rules
- Report violations: See/Say
- Ask questions if you don't understand
- Always be alert

Non-Commercial Facilities (under 10 employees) ... look familiar?

Management

- OSHA 1910.272 Grain Handling Safety Standards
- Know what they are
- Be diligent in following
- Create an atmosphere allowing employees to report
- Train employees & family

Employees

- Be familiar with the standards
- Follow the rules
- Report problems: See/Say
- Ask questions if you don't understand
- Always be alert
- **IMPORTANT: Let someone know you are going in the bin...never work alone!**

Training? What do we cover?

Equipment

- How to operate all equipment
- Lock out/tag out
- Guards
- Electrical precautions
- Fall protection
- PPE
- Air quality monitoring

Operations

- Procedures for bin entry
- Procedures for clean out
- Chemical applications
- Who to call/what to do in an emergency
- Equipment available for rescue
(Do you have a coffer dam?)

Training? Work with local emergency groups

- Local fire departments need to know about your facility
- Help them obtain equipment they need so they can help you
- Create a friendship with the people who can help you
- They need to know:
 - Materials you handle
 - Chemicals
 - Electrical service
 - Standards that you must meet

Training? Where do we get information?

- GEAPS chapters
- Websites
- Land Grant Universities
- Commercial vendors/consultants
- Fire Departments

GEAPS EXCHANGE

Grain Engulfment Demonstrations

- Exhibit Hall at Exchange
- Demonstrations
 - Sunday 1:45 pm and 4:00 pm
 - Monday 10:30 am and 1:45 pm
 - Tuesday 10:30 am



**Questions,
Suggestions???**

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