

Grain Bin Assessment Chart

Preventing grain entrapment and engulfment includes assessing grain and grain bin conditions. This chart is a basic tool to help keep you safe if your grain is out of condition, however, every grain operation, bin location, bin has different hazards. It is up to each grain operation to assess and use the best and safest methods to remove out-of-condition grain

Important:

**All of these questions cannot be answered or the condition satisfied,
DO NOT continue and DO NOT enter the bin.**

		YES	NO
1	Is your grain in good condition?	Good, regularly monitor temperature and humidity <i>Go to question 2</i>	<i>Go to question 2</i>
2	Is the grain flowing easily through your auger and chute?	Good, regularly monitor temperature and humidity <i>Go to question 3</i>	<i>Go to question 3</i>
3	Is your auger currently running?	Power it down and lock it out <i>Go to question 4</i>	<i>Go to question 4</i>
4	Is the chute open?	Close the chute and lock it out <i>Go to question 5</i>	<i>Go to question 5</i>
5	Are you working alone?	Get another worker to be an attendant <i>Go to question 6</i>	<i>Go to question 6</i>
6	Will you be able to safely enter and exit the bin through an opening?	<i>Go to question 7</i>	You will need to find an alternate and safe way to fix the out of condition grain from the outside of the bin <i>Go to question 7</i>
7	Do you have a procedure or plan for entering the bin?	Review the procedure or plan with your attendant <i>Go to question 8</i>	Create an entry procedure or plan and review it with your attendant <i>Go to question 8</i>

		YES	NO
8	Does your attendant know what to do in case of an emergency situation?	Review the Emergency Response Plan with your attendant <i>Go to question 9</i>	Create an Emergency Response Plan and review it with your attendant <i>Go to question 9</i>
9	Are you wearing fall protection equipment? (Required if entering from a height – if you are not entering from the top hatch, skip to question 11.)	<i>Go to question 10</i>	Put on a properly fitted and adjusted harness and attach it to an appropriate fall protection system for your situation. Make sure the fall protection equipment is in good condition. <i>Go to question 10</i>
10	Is your fall protection equipment attached to a secure anchor point?	<i>Go to question 11</i>	Install and attach your fall protection equipment to a secure anchor point <i>Go to question 11</i>
11	Are you wearing appropriate respiratory and personal protective equipment?	<i>Go to question 12</i>	Put on the following as needed: <ul style="list-style-type: none"> • Safety eyewear (to protect from eye hazards) • Safety footwear (to protect from foot and toe hazards) • Protective clothing (coveralls or other appropriate clothing that will prevent dust, grain, and other contaminants from making skin contact) • Hearing protection (to protect from loud environments that are over 85db) • Gloves (to protect from pinch points and sharp objects) • Respiratory equipment like an N95 dust mask or half-face respirator with P100 filter (to protect from dust inhalation and other lung irritants.) <i>Go to question 12</i>

		YES	NO
12	Is the air quality inside the bin safe for entry (oxygen levels above 19.5%)?	<i>Go to question 13</i>	Open the hatch, purge the space by adding airflow (may turn on aeration), re-test air quality after 15 minutes. Continue until oxygen levels are above 19.5%. <i>Go to question 13</i>
13	Is there potential for a dust explosion?	Let dust settle, remove any potential for an ignition source, and monitor until levels are acceptable (can see clearly across the bin) <i>Go to question 14</i>	You may now carefully enter the bin <i>Go to question 14</i>
14	Is your fall protection equipment free of slack?	<i>Go to question 15</i>	Take the slack out of your lifeline <i>Go to question 15</i>
15	Is the grain crusted up or bridged over?	Assess and use the best and safest method to loosen the bridged grain. Avoid standing in the middle of the bridged over section as there may be a void underneath. <i>Go to question 16</i>	<i>Go to question 16</i>
16	Is the grain scaled up on the side wall?	Assess and use the best and safest method to loosen the scale on the side wall. Stay away from the side wall in case the grain lets go. <i>Go to question 17</i>	<i>Go to question 17</i>
17	Is the grain loosened up?	Remove all tools and equipment from the bin, safely exit the bin, remove lockout devices from augers and chutes, and test the flow of grain <i>Go to question 18</i>	Continue with this step until crust or scale is removed. <i>Go to question 18</i>
18	Is the grain flowing easily?	Good, remove your personal protective equipment, regularly monitor temperature and humidity	Start over with this flowchart

*Every grain operation has different needs and hazards. Developing, training and executing emergency plans and grain bin entry procedures should be standard operating business for any grain operation.