Grain Storage Alternatives

It seems like more Iowa farmers are turning to alternative storage, such as bags, as grain supplies grow and margins are tight. What is your perspective on this?

Seems like I'm seeing more grain bags the last few years, not sure if it because I'm looking for them after seeing so many in Ukraine or if the market is growing quickly. Maybe both?
They were everywhere in Ukraine; farming at such a large scale meant getting creative in grain management. With tens or hundreds of thousands of acres in some of those operations and little to no commercial grain handling infrastructure like ours, each company has to figure it out and just do it. So many of them build their own grain elevators, run fleets of trucks and some even put in rail and port facilities. With their slightly different climate, their crops tend to holdup and dry in the field pretty well, so they can often put grain right in the bags and keep all the machinery moving.

Talking to the grain managers of these large farms, they felt like they were on the cutting edge of technology with their grain handling systems and were pretty proud of their setups. Interestingly enough, a lot of their grain handling equipment came from the US, and Iowa was well represented. Anyway, of all the things they wanted to show off, grain bags were invariably towards the top of their list. Their points were that having bags limited their trucks and drivers waiting in lines, allowed for storage of above average yields, and for operations that grow beans, corn, sorghum, wheat, sunflower, millet, oats, barley and probably a crop or two I am forgetting- bags allow flexibility. For example some farms had been raising soybeans, wheat, sunflowers and barley in some sort of rotation for several years and had built their grain handling infrastructure around those crops and their typical yields. When the corn market was more favorable (a few years ago), they ditched almost all the other crops and planted mostly corn. Corn= more grain, so whatever the current infrastructure couldn't handle, easy answer= bags. Corn market tanks in short order, so back to the other crops they go, and instead of having a bunch of excess grain handling/storage capacity when they planted no corn a couple years later, they just had bags to throw away.

In Iowa we are more committed to corn and soybeans so our volumes tend to be more predictable than someplace like Ukraine. But we still run into full elevators, trucking hiccups and rail backlogs, which is why more of our operations are putting up on farm grain storage. And it seems like part of that growth means an increasing number of grain bags in use. A few of them also used the bags to store fertilizer.

What do farmers need to do to make sure the grain in these structures does not spoil?

It looks like site selection is a huge priority for access, keeping the bag intact and maintaining grain quality. After spending a lot of time on chainsaws after storms (like yesterday's storms, which mean a lovely warm weekend of clearing downed trees and limbs for a lot of us in the storm's path), I sure wouldn't want bags anywhere near trees. Planning around any ponding and managing water flow looks like it would be part of the plan as well.

Anyone who has ever lived on a farm will recognize the potential for animals to find a way to wreak havoc in new and creative ways. Deer, raccoons, squirrels, mice, rats… managing them is probably a big step in keeping the bags intact. Trapping, repellents, keeping sites located away from wildlife habitat, keeping any spills cleaned up and checking bags on a regular basis and patching any holes would help mitigate animal issues. In my experience, trapping and repellant tactics need to be rotated or changed periodically since some pests adapt or become used to current strategies over time. Fighting off wildlife

might seem like a pretty daunting task, but I think about it this way- a fair number of these bags are used successfully in areas where they deal with beasts like bears, elk and wild hogs. If those folks can figure out how to keep them out of the bags, we can probably cherry pick some good ideas from them to use on our wildlife.

Snow removal is something to plan for as well, since a lot of bagged grain heads to market in winter months. Just bumping into one of those drawstring tight bags with snow removal equipment on a cold day… makes me cringe thinking about how far that cold plastic could split open.

There's quite a bit of debate about how wet or dry the corn needs to be to put it into a bag system. I'm not jumping into that mess, so would defer to the manufacturers and grain storage experts. Of course they probably won't agree, but they will lay out good arguments for you to consider.

Have storage bags changed over the years and are they still a reliable source for storage needs?

I hadn't seen a lot of grain storage bags until a few years ago, but recalling the few I ran into and talking with growers and dealers, as important as any improvements in the bags and equipment over the years were experience and improvements in how they were used. Sure, the bags are tougher and more UV resistant now, and the loading and unloading equipment has been fine-tuned as well. But the biggest thing was getting more experience with these systems at the dealer level so they could help growers with the entire process. We have a lot more bags being used in the corn belt now than we did several years ago, yet we hear fewer horror stories about ruptured bags or spoiled grain.
If they are managed correctly- good site selection, monitored closely, repaired quickly, filled with grain that is dry enough just to name a few key points- then they should be reliable short term storage in a lot of cases.