High value dead air or wasted bin space

Extra bin capacity: risk management tool and it may replace a dryer when crops need more attention

Manitoba farmer Terry Schullman says dead air seems like wasted space to some people, but it's that space that allows Fast Dry to work properly. A full bin holds too much grain to allow air to move freely up toward the top of the pile. Schullman sees dead air as a risk management tool. | TERRY SCHULLMAN PHOTO.

BY RON LYSENG WINNIPEG BUREAU

Using the Wall Grain fast-dry method, Terry Schullman wrings as much moisture as possible out of binned grain before resorting to firing up his 25-year-old MC dryer.

Schullman, who farms 30,000 acres at Swan River, Man., says that the process relies on natural air drying combined with high-capacity burners, which dry grain in seven days or less rather than weeks.

"We combine and bin the wheat at 19 percent. It's monitored by an outfit in Winnipeg. They turn the fans on and off. If humidity is too high, they turn the fans off. When humidity is right, they turn the fans back on," says Schullman, adding that an actual person monitors everything 24 hours a day.

He explains that fans and burners lower the cost and complexity of running grain through a dryer. But implementing such a system to handle all the grain from 30,000 acres required a lot of planning, plus capital.

"Wall Grain built these three full floor bins for us. They each hold 90,000 to 100,000 bushels. We

put two 25 horsepower fans on each bin. We generally fill these bins half to two-thirds. That requires extra bin capacity. You can't do this fastdry method if all your bins are full to capacity. You need some air space."

Dead air may seem like wasted space to some people, but this space allows the fast-dry method to work properly. A full bin is fine for grain stored at the recommended temperature and moisture content. However, a full bin holds too much grain to allow air to move freely up toward the top of the pile. Schullman sees dead air as a riskmanagement tool.

"We harvest tough. The grain is just barely ready to go, so we get top quality, top bushel weight and the best grades. We reduce the risk of having grain sit out in the elements and we have fewer losses. It's like insurance because these big bins help us keep the grain in condition. Grain in a 1,350 (bushel) bin is more vulnerable to problems than grain in my 100,000-bushel bin.

"We've never had a big dryer. We've gotten by just fine for 25 years with a 375 automatic we put up in 1997. We bought a new dryer this spring, but it's not put up yet. We're working on it. They say it takes two years to get those things up and running right."

How he manages the fast-dry system depends on fall weather. The worst-case scenario is when it only maintains grain without bringing down moisture. He says that's only happened once in 50 years of farming. His natural airdrying plan takes cereals down two points. He says most people don't understand that grain is totally safe because the air goes through when it's needed.

"Canola? We'll usually take canola off at 12 percent. When necessary, we'll push it to 13.5 percent, but not very often. We fill these bins half full, run the fans two weeks and the canola comes out dry. If you need additional space, dump more tough canola on top the dry stuff and it's all fine because the lower layers are already conditioned."

Schullman concedes he doesn't understand it. Somehow canola dries in the bin better than wheat, which he says is backward to the way it's supposed to work. Wheat has more air space around the kernels, so it should dry better, but it doesn't.

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TERRY SCHULLMAN FARMER

Harvesting canola at 12 or 13 percent means your combine losses are way less. You put more grain in the bin. He emphasizes that removing moisture when grain is in these bins is better than letting Mother Nature's sunshine dry it in the field. It's also better than spending extra money running it through the dryer and risk damaging cereal kernels and canola seeds.

"I think 24-7 monitoring is essential if you use this kind of system. Monitoring on a million bushels costs me about $8,000 per year. So now we have our eyes on those bins plus we have a management service watching.

"Bin management is critical for us because our rotation includes five crops: wheat, canola, oats, soybeans and peas, but no corn. We tried corn once. We did everything wrong that we possibly could, and it was a disaster, so no more corn. It wasn't the corn's fault. It was our fault.