

## Preventing Spray System Corrosion

At the end of the spray season most ag operators flush their spray system but I recommend taking one more step. Mix equal parts of antifreeze and water and pump this solution into the hopper through the loading valve. Operate the aircraft product pump till antifreeze comes out all the nozzles without draining the system completely.

Why?

Flushing your system is definitely better than just draining the chemical. Unless you have a complete stainless steel spray system though, it will still corrode due to the presence of oxygen - the key element needed to promote corrosion.

Spray pumps do wear out but it is not only because of abrasives in the products you apply. Off season corrosion slowly dissolves both the impeller and impeller housing creating greater clearance between the two. The result - your product re-circulates rather than being delivered to the spray valve.

Corrosion affects loading and spray valves too. The nylon seals become rough and lose their seal as the ball's chrome layer corrodes. Also the inner aluminum surfaces of the valve's casting corrode where the nylon seals are held. The seals misalign and lose sealing pressure.

Have you ever removed a spray boom in the spring and noticed a lot of granular growths attached to the inner walls? Or had plugged nozzles in the spring and found granular material the culprit? These growths are formed from corrosion feeding on the aluminum alloys in the spray boom material. Slowly your boom's outside walls are eroding and becoming thinner. You may even notice small pin prick holes starting to appear.

Before the start of the next season you can drain this 50/50 solution and use it again at season end.

By "pickling the airplane" in this manner you prevent spray valves from seizing and loading valves from cracking.

Suck back problems and little or no boom pressure are also caused by corrosion gone crazy.

At the end of the season everyone is glad to be parking the airplane but this one more step can save you many dollars in lowering down time risk and increasing the life of your spray system components.

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