Expert Tips for Accu-Flo™ Helicopter Nozzles

Maintenance keeps all equipment functioning properly. For example, suppose nozzles are worn out with altered orifices. In that case, metering could be off, and patterns could be distorted.

Proper storage, timely maintenance, and replacement of nozzles when necessary are critical to nozzle performance.

Dripping Nozzles

Every effort should be made to minimize and control dripping from nozzles. The primary cause of nozzle drip is contamination that got past the strainers or pre-existed in the boom and subsequently lodged under the check valve seal. This contamination may be sand, rust, crystallized chemical, or particles from a deteriorated hose.

- Start clean and stay clean. Pre-season examination and cleaning of all tanks, flow channels, and reconditioning of nozzles is a must. Customers reported a decreased need for nozzle cleaning as the spray season progressed. This demonstrates efficient straining and prompt attention when unexpected problems arise.
- Check Valve Springs. The tension is preset and should not be tampered with. Dripping is caused by debris under the seal, not by a weak spring.
- Commercial "Suck Back" systems are available through Transland spray valves and are popular with some applicators. They are not the solution to a contaminated system but will temporarily relieve head pressure at each shut-off cycle and minimize drip.

QUICK TIPS

It's always good to keep a few extra nozzles or large strainers on hand. It is easier to have a few on hand than to be grounded because of damaged nozzles or clogged filters.

Regular Maintenance of Accu-Flo Nozzles

1. After every job, flush the boom and nozzles generously with fresh water at maximum pump pressure (not to exceed 70 PSI).
2. If your helicopter is grounded for extended maintenance or other lengthy reasons, flush out your system and nozzles. This will avoid chemicals drying inside and clogging needles. (Flushing is extremely important if using powders.) Powders that dry in low spots or corners in your system will dislodge later and could cause problems in clogging the nozzles.
3. Keeping your whole system clean helps prevent contamination of needles or check valve seals. This includes periodically flushing of mix tanks and helicopter tanks, etc. New fiberglass tanks should be flushed well, as they will give off bits of fiberglass when first used that can clog the needles. Pre-season flushing of the entire system is recommended.
4. Proper straining on board the helicopter, with 100 mesh minimum, 200 for smaller needles of .020 and .016, and a strainer that does not allow bypass around the screen is imperative. It is also vital to properly strain from your water source, out of the tanker, and out of the mix tank. Remember, municipality water can have as much grit as a local pond. (You will see a rise in boom pressure when the nozzle tubes or the small 7/8" disc screens in the adaptors begin to clog, and when the large in-line filters begin to clog.)

Pattern Testing

Another important part of maintenance is pattern testing. Operation S.A.F.E. clinics offer Pattern Deposition Analysis to help guide and calibrate equipment to optimum performance. These clinics help you find optimal swath and droplet size. Also, the clinics help solve equipment problems before starting a new season.

BEFORE SPRAYING WITH NOZZLES, TRANSLAND RECOMMENDS PATTERN TESTING WHENEVER CHANGES ARE MADE TO EQUIPMENT.