

# Sprayer Advances Benefit All

There was a time when there was little hygiene in our hospitals. Surgeons were even bloodstained! It was also not so long ago that, after use, a sprayer would be parked up, with obvious encrusted deposits inside and out. Time has taught us that good hospital hygiene is critical. But does it really matter about sprayers? Yes. Which is why they have undergone a design revolution aimed at minimising internal and external spray deposits. But why?

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to learn*

As in any activity - whether on the golf course or at home - we're now all under great pressure to keep the workplace cleaner. Spraying is no exception to this rule and, in the last few years, huge advances have been made. So that greenkeepers now have few excuses not to improve their practices; practices that are directed to ensure we should better clean our sprayers inside out.



**1. Today the focus is on your machine's hygiene and meeting this important need immediately after you've finished spraying on the course.**

## INTERNAL CLEANING

Once spraying is finished, and even though no more spray can be seen coming out of the nozzles, some spray solution is still likely to remain in your sprayer. Just how much liquid is held back will depend on the amount of thought given to minimising the quantity by engineers who built your machine. But the next time you mix up you can be reasonably sure retained liquid will be mixed with new solution. It will, of course, then be contaminated.

If you are using the same mix as before this may pose little risk to, say, your greens. But if it's not you have a problem in the making. A problem that's not just expensive for your club, but one that could put your greens out of action for months.

To avoid such a catastrophe, advances in sprayer design now minimise amounts of spray solution retained in the tank. For example, tanks are now made of free draining material, such as polyethylene, and there's now an obvious sump that's effective even on slopes.

**2. Engineers have made enormous advances to both minimise spray 'carry over' and remove it from areas where spraying has just been carried out.**

Dead end appendices, like pressure relief pipes, are now designed to bleed to keep spray liquids moving so they are not held back until operators accidentally or otherwise open the relief valve. But despite such advances there will still be some traces of liquid within. But at least what remains is now minimised - an advance critical to the next stage of engineering development!

Now it is possible to remove small residual volumes without even having to leave the green or fairway you have been spraying. This is because sprayers can now be fitted with dedicated, clean water tanks that direct water to tank sprinklers that flush the inner wall surfaces. Credit dishwasher technology for this! Dishwashers do not require large water volumes nor are they filled with water.

Today it's the same with sprayers. Time was when operators had to return to where the sprayer was being loaded, fill it up three times with water and safely dispose of the rinsings. This need for responsible disposal has become an ever more serious problem.

For where today can you safely dispose of large volumes of contaminated water? But - at a stroke - spray tank sprinklers have made it possible for greenkeepers to clean their sprayers right in the area they have been working.



Bill Taylor, of Hardi, charts recent advances that will ensure sprayers are cleaner, bringing important benefits to all



**3. Small volumes of clean water are enough to sprinkle inner surfaces of the main tank to effectively remove harmful residues.**

Because only small volumes of water are needed for the purpose, it makes it possible to transport it on the sprayer and, in turn, to spray out products exactly in the area being worked, leaving a clean sprayer ready for its next job. We can also take a tip from arable operators here.

They calculate very precisely just how much spray solution is needed for the job and then, cunningly, reduce the volume so that a small area is left unsprayed. Then they use this area for both their internal and external cleaning routines. But, you ask, do I really need to bother with this routine if I'm always using the same types of products?

Remember. Any spray liquid remaining in the sprayer may also harm the materials of which it is made. It's not unknown, when sprayers are parked up in the sun, for solvents used to dissolve pesticides to re-condense as a concentrate onto internal surfaces. Such undiluted solvents can and do cause structural damage. So even where there may be little threat from spray liquid carry over, there still remains a risk to the fabric of the sprayer.

**EXTERNAL CLEANING**

This technology is much more recent and, as I write, firm guidelines for its use are still emerging. But there are already some ground rules!

Every time a car is taken on the road it gets some dirt on it. Each occasion a sprayer is used it too inevitably gets some external deposits on it. If those deposits are left on the outside and it rains or anyone leans on it or touches it, then there is a risk of contamination.

Indeed, arable sprayers can get so contaminated with herbicides that, if it rains when they are parked up, it kills off the vegetation below. But the overall picture is much worse than that. Environment agencies, water supply companies and regulators are telling our industry that 'inappropriate cleaning' may be the single greatest source of ground water pollution. The area underneath a dirty, parked sprayer may be exposed to dose levels that far exceed that for which the product is approved.

Imagine then if a sprayer is parked on concrete close to a ditch. Very easily, some pesticide will get washed off it onto the concrete and into the ditch. Clearly we all have to do better than allow that and ensure external,

as well as internal, deposits are also removed; and removed in the field of use, just as should be the case with internal cleaning activity.

**4. External deposits need to be removed after your internal cleaning routine. Remember - regular cleaning brings benefits to all.**

Greenkeepers can use the same clean water supply for both internal and external cleaning routines. Clean internal surfaces first but leave about a third of the water for outside. Pressure hoses and lances can be fitted to the sprayer ready for use on greens and fairways.

Keep your booms open, pull out the hose and then pressure wash the booms and rear ends of the tanks first. This is where most deposits are found, so it's best to start there. Doing this small, quick job regularly

minimises deposits and leaves the sprayer so much safer for you, as well as looking its best to your playing clientele.

Can you reduce build-up levels on the outside? Yes, by using the coarsest spray advised on the label. If the product you use offers the choice of medium/coarse sprays, then choose coarse and, as with drift control, try and avoid the use of fine sprays.

So do remember that just a few minutes spent on these important routines at the end of spraying will not only help your sprayer last longer, it will minimise environmental risks and ensure you make best use of all the spray you've bought. It makes sense for us all to keep our sprayers clean.

*More information on sprayer cleaning and all the latest spraying news is on the Hardi International A/S website, [www.hardi-international.com](http://www.hardi-international.com).*

