

Washing Procedures

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In 2017, on-farm best management practices were audited on a total of 24 farms throughout Canada as part of a national project titled From Innovation to Adoption: On-farm Demonstration of Swine Research. This article is part of an eight-part series reporting on these audits.

Animal drinking and cleaning are the top uses of water in swine barns. Using water conservation strategies to reduce water use will ultimately lower cost of production and contribute towards a more sustainable environment as less manure is produced.¹ Re-assessing your washing protocol may provide an opportunity to effectively improve your bottom line.

Results from the audits indicate a majority of producers pre-soak rooms prior to washing. However, research indicates that there are situations in which this may not be necessary, as water sprinkling (or soaking) results in significantly higher water consumption. Specifically, research reinforces that high pressure washing in fully slatted flooring can be done without prior water sprinkling (soaking).



On the other hand, significantly more time was needed when washing partially-slatted concrete flooring without sprinkling. Therefore, it is important to remember that soaking is still beneficial if your farm has partially slatted floors in grower-finisher rooms. Information presented in Figure 1 shows that approximately 80% of the farms audited pre-soak rooms. However, this figure does not differentiate between flooring (partially or fully-slatted) types.

Nozzle Selection

Figure 2 shows slightly more than 50% of participating producers currently use conventional nozzles in the washing process. Research reinforces that this is the best choice when it comes to water conservation. Use of conventional nozzles led to the lowest water volume consumed and time spent in washing rooms with partially and fully slatted concrete flooring among all tested nozzles.

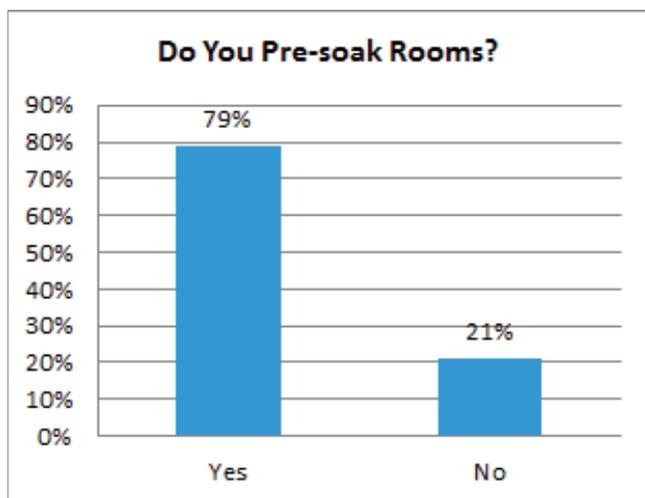


Figure 1. Number of farms that pre-soak rooms prior to the washing process

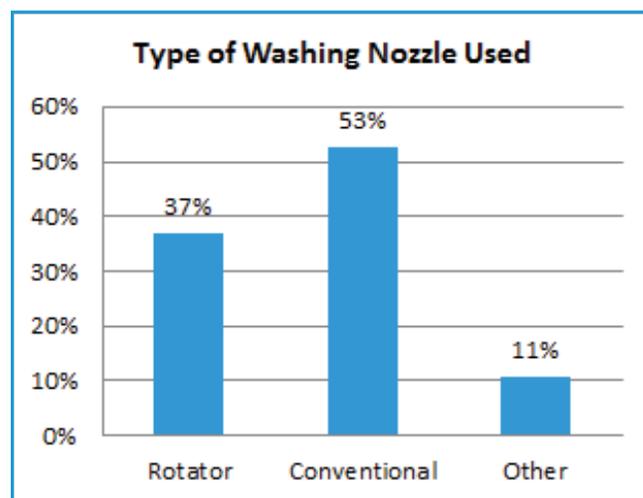


Figure 2. Types of pressure washer nozzles used in the washing process.

Conclusion

Research has shown that barn evaluation of selected water conservation measures indicated high pressure washing in fully slatted flooring can be done without prior water sprinkling (soaking). In addition the use of conventional nozzle for pressure washing led to reduced time and water consumption during cleaning.

For Further Reading

¹Developing Strategies for Water Conservation for Producers

(English) <http://www.prairieswine.com/developing-strategies-for-water-conservation-for-producers/>

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