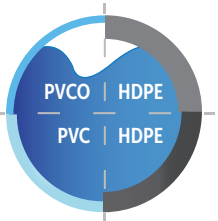


TECHNICAL BULLETIN

PVC PIPE HELPS YOU DO MORE WITH LESS – AND THAT’S GOOD FOR THE ENVIRONMENT

Harnessing the inherent material properties of rigid PVC, you can maximize water flow efficiency while minimizing costs, labor, and energy expenditure. Westlake Pipe & Fittings’ AquaMax® C909 IB PVCO Pipe is a modern, innovative answer for aging municipal water, wastewater, and reclaimed water systems. It is stronger, tougher, and more flexible than traditional PVC, facilitating ease of assembly while maintaining high performance in buried applications.

AquaMax® C909 PVCO Pipe



- The inside diameter for PVCO is greater than HDPE and even PVC, allowing for more waterflow through the same nominal size pipe.
 - PVCO pipe contains 40% less material and 13% more water flow than PVC pipe, and is 42% lighter than PVC.
- PVCO pipe and PVC pipe both have a short term pressure rating of 1.6 times the pressure class of the pipe. The short-term pressure capacity must be higher than the pressure class of the pipe since surge pressures caused by emergency operations, such as malfunctions, are expected to occur. (1)
 - The integrity of the pipe properties remains intact with the utilization of less material for PVCO pipe, so short term pressure surges will not have a negative impact on the pipe.
- PVCO pipe is more durable than PVC pipe as it has 3 times greater impact resistance, making it more crush resistant with no crack propagation.
- Read more about [C909 PVCO Pipe](#), [PVC vs. PVCO](#)



Certa-Set® System



- Certa-Set® agricultural irrigation products better distribute water across growing fields and require less labor to operate.
- Certa-Set products use 15-20% less water to yield more crops.
 - Certa-Set products are a completely sealed system, while traditional aluminum products leak until the system reaches operating pressure.
 - Certa-Set allows for the use of less energy when pumping because the system doesn't leak.
- Where other products cause water ponding, Certa-Set evenly distributes across all crops.
 - The sprinkler heads do not distribute water until all of them reach 55 psi allowing for even water distribution.
- Read more about [Certa-Set](#)



A Side-by-Side Comparison Study Between Certa-Set and Aluminum

A comparison study between Certa-Set and aluminum irrigation pipes was completed in 2022 by Westlake Pipe & Fittings with the assistance of UC Davis. The study showed that in practice, Certa-Set used 19% less water in field application than the aluminum pipe. The study showed that the pressure loss along the aluminum pipes was 2.25 times greater than in Certa-Set. This would lead to more energy use in the aluminum pipes to get the total water through the system.

Harnessing the inherent material properties of rigid PVC, you can maximize water flow efficiency while minimizing costs, labor, and energy expenditure.

REFERENCES

1. [An Engineering Primer on AWWA C900 PVC Pipe](#). (2019, January 16). Uni-Bell - PVC Pipe Association.

