



Benefits of Propylene Glycol over Brine Systems

The decision between propylene glycol & brine systems is critical for curling clubs aiming to maximize equipment longevity, reduce maintenance, & ensure operational stability. Though brine systems are often seen as more cost-effective, a deeper look reveals that glycol systems offer significant advantages in terms of long-term performance & overall cost savings.

MAINTENANCE & LONGEVITY

Propylene glycol systems stand out for their ease of maintenance and system longevity compared to brine. Brine, typically made of salts like calcium chloride, is prone to scaling, mineral buildup, and corrosion, which degrade heat transfer and damage equipment. Corrosion from brine accelerates wear on metal pipes and components, leading to frequent and costly maintenance or replacement.

In contrast, glycol with inhibitors is non-corrosive, less reactive, and has lubricating properties that extend the life of equipment and piping. While filtering is still required, glycol systems do not require the same rigorous filtration that brine demands, reducing labor and servicing costs. The primary maintenance task is replenishing inhibitors every five years to maintain pH balance, significantly cutting down on intervention and system downtime.


SYSTEM COST

While brine systems have a lower initial chemical cost, their long-term expenses and the need for more robust, corrosion-resistant equipment inflate overall costs. They require stainless-steel components, high-grade rust inhibitors and a stringent maintenance program with thorough pH analysis to monitor degradation. Corrosion in brine systems leads to frequent

repairs, replacements, and expensive disposal due to its hazardous nature.

Glycol is a more sustainable and cost-effective option. It is non-corrosive, non-toxic, reusable, and easier to dispose of. Since glycol doesn't require costly, corrosion-resistant materials, the initial cost difference is reduced. With a longer system lifespan and lower maintenance needs, glycol systems offer fewer disruptions and superior value, especially for smaller clubs with tight budgets.

CONSISTENT PERFORMANCE

Though brine can have marginally better pumping efficiency and heat transfer, glycol systems and the advanced technology of the OLPP  close the gap. Designed to operate at a reduced capacity (20-40%), these systems compensate for any efficiency loss, providing superior performance, equipment longevity, and overall life cycle cost savings.

For curling clubs aiming for long-term success, propylene glycol systems provide a more reliable, sustainable, and cost-effective alternative to brine. With easier maintenance, lower overall costs, and dependable performance, glycol systems are an ideal choice for clubs focused on balancing efficiency with reliability.

