Indispensable Solutions & Education As A Service

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As any on-site manager can tell you, proper cleaning is vital to the safe and successful operational performance of any industrial or institutional facility. However, in order to continue functioning at the highest possible levels, while also maintaining the all-important bottom line, end-users of industrial cleaning equipment and cleansers need to seek out solutions that are not only extremely effective, but efficient.

When dispensing concentrated, caustic and costly chemicals with peristaltic pumps used in industrial cleaning applications, it is imperative to utilize high-performance pump tubing solutions that minimize waste, downtime, maintenance and replacement costs — all potentially significant drains on precious financial resources. The challenge facing the end-user is how to navigate the complex sea of factors involved in weighing cost versus performance. In addition to providing high-performance tubing solutions, OEMs can assume another important role — that of trusted guide. By providing valuable expertise on proper care and maintenance, they can help customers enhance the performance and increase the lifecycle of ware washers.

The first step towards specifying any long-lasting and effective chemical dispensing system is understanding which performance properties to look for in industrial cleaning peristaltic pump and transfer tubing. However, equally important is knowing how to properly maintain chemical dispensing systems, allowing end-users to improve overall operating efficiency and get the most from their ware washers. Imparting this knowledge will not only boost customer savings — minimizing costly part replacements and increasing the overall value and performance of ware washer units — but it will also serve to strengthen the supplier-customer relationship.

Performance Is Key

Educating end-users on matching the right performance properties with the right application is a good start. An effective chemical dispensing system must be able to withstand caustic chemicals and a harsh industrial cleaning environment. Tubing made from the right material can stand up to the inherent challenges associated with peristaltic pumps for chemical dispensing, resulting in a durable, high-performance tubing solution with a longer product lifecycle, and reduced maintenance and replacement costs.

While it might sound difficult to find pump tubing or transfer tubing that can meet so many requirements, advances in materials science have yielded cutting-edge polymers with unique combinations of performance properties. For example, in industrial cleaning applications, high chemical resistance is vital, enabling tubing to

last longer despite contact with harsh chemicals. For use in chemical dispensers for industrial and commercial washing machines, an ideal tubing solution, such as one using Norprene® Chemical Tubing for peristaltic pump, should be virtually unaffected by contact with acids, bases, ketones, salts and alcohols. This durability will allow for extended performance without constant and costly part maintenance or replacement.

Pressure rating for chemical transfer in such applications is another key durability property to focus on when educating the end-user. Tubing with improved pressure ratings will not embrittle or crack prematurely, ensuring that the costly chemicals are dispensed properly and can do their work effectively. Along with the ability to stand up to increased pressure, the end-user must also understand the importance of superior flexibility. The ability to withstand repeated stress from fluids being transported without performance degradation can eliminate fluid contamination resulting from breakage and leaking plasticizers. High-performance polymers, such as Tygon® 2375, can provide enhanced durability properties vital to challenging chemical transfer lines in industrial cleaning applications.

While most end-users understand that chemicals utilized in industrial cleansers are not only caustic, but costly, they might not know how the right high-performance tubing solution can help maintain chemical purity. The purity of the chemicals used in dispensing applications is vital, helping to eliminate waste and improve overall operations. Reduced particulate build-up and ensuring the integrity of the chemical are key. For example, tubing materials with smooth inner surfaces will inhibit build-up and reduce the potential for costly and time-consuming chemical contamination. In addition, materials with lower sorption rates allow for consistent concentration levels without dilution. Less chemical alteration and loss ensures that chemical dosages are dispensed consistently each and every time, resulting in effective and efficient industrial cleaning operations, saving the end-user both time and money.

Finally, in today’s environmentally-conscious world, at the end of its useful lifecycle, tubing must be disposed of properly. In the past, typical disposal methods included incineration, which has far-reaching negative effects on the environment, releasing hazardous and corrosive hydrochloride gas — a producer of acid rain. End-users need to know that with the various enhanced tubing materials available, there are other, more environmentally friendly options on the market. It is important for the environment, as well as ones’ corporate reputation, to use tubing made from environmentally sound bio-based materials that can be safely disposed of without releasing unsafe by-products.

Making the Educated Choice

An educated customer is a happy one. Providing the customer with the knowledge needed to specify the right performance properties for demanding applications, such as peristaltic pumps tubing for chemical dispensing or chemical transfer for industrial and institutional cleaning, can help them choose the best tubing solution possible. However, end-users must be able to rely on their suppliers for more than just quality ware washers. A strong supply partner will go to the next level, providing long-term guidance for customers on how to properly maintain the

equipment they have just purchased. Sharing know-how and teaching end-users how to effectively extend the overall lifetime and performance of their investment can enhance the loyalty and longevity of the business relationship.

The old adage “a stitch in time saves nine” goes far beyond the sewing circle. Demonstrating the importance of maintaining the small but critical parts — such as tubing — can help customers extend the overall life of their purchase. When looking for a quality ware washer it is often the critical smaller parts that make the whole. No part lasts forever, so if these parts are collapsed due to over-use, the entire chemical dispensing unit can and will fail. Knowing when to replace the high-performance peristaltic pump tubing towards the end of it useful lifecycle can cost-effectively extend the performance of the entire dispensing system. By educating end-users on regular maintenance of tubing solutions, OEMs can help their customers prevent potential disruptions to their manufacturing operation, and reduce the costs associated with this downtime and replacement washers.

Recent innovations in material science have yielded well-rounded tubing solutions that provide exceptional performance, reduced replacement and maintenance costs, and are environmentally sound. Too often, entire ware washer units are replaced due to the failure of inadequate or worn tubing. By manufacturing ware washers with durable, low-maintenance tubing solutions, OEMs are already helping to minimize customer downtime and additional costs associated with part replacement. However, OEMs can do more to differentiate their offerings than just provide a quality product. By taking the extra effort to educate end-users on regular maintenance of tubing solutions, OEMs can empower their customers to prevent potential disruptions to their manufacturing operation and reduce the costs associated with any potential downtime and replacement parts.

By making a quality product, and sharing valuable expertise on how to better utilize their ware washers, OEMs stand to gain more than the numbers on a price-tag, but better customer relationships and long-lasting loyalty.

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