



**Challenge efficiency**

At SWEP, we believe our future rests on giving more energy than we take – from our planet and our people. That's why we pour our energy into leading the conversion to sustainable energy usage in heat transfer. Over three decades, the SWEP brand has become synonymous with challenging efficiency.

SWEP is a world-leading supplier of brazed plate heat exchangers for HVAC and industrial applications. With over 1,000 dedicated employees, carefully selected business partners, global presence with production, sales and heartfelt service, we bring a level of expertise and customer intimacy that's redefining competitive edge for a more sustainable future. SWEP is part of Dover Corporation, a multi-billion-dollar, diversified manufacturer of a wide range of proprietary products and components for industrial and commercial use.

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Keeps water running

# SWEP Sealix® - Extra protection for water applications

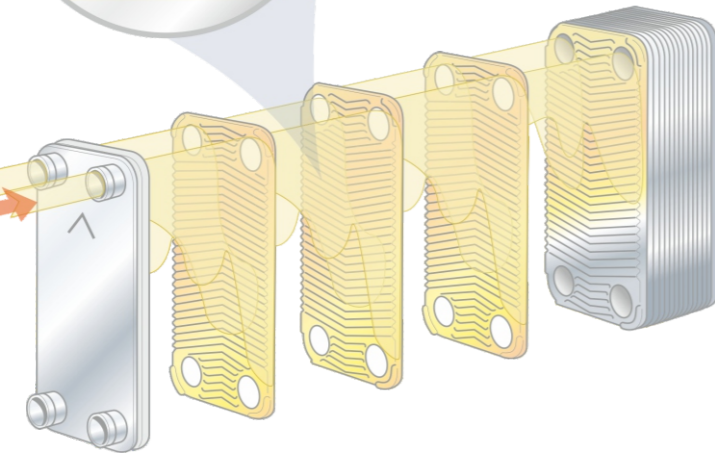
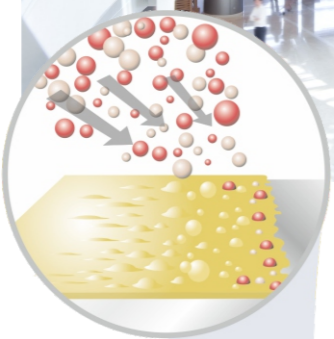
SWEP Sealix® brazed plate heat exchanger (BPHE) technology improves durability, reduces metal leaching and increases resistance to corrosion, fouling and scaling in water to water applications. A protective layer is applied to all surfaces that come into contact with water to increase the lifetime and operational safety of the entire system, reducing maintenance costs and unplanned downtime.

## The challenges of water systems

All water systems vary in the type and concentration of minerals present. This can depend on the geographic area and treatment of the water itself. Water types with aggressive mineral profiles have a significant effect on current water technologies such as the BPHE. This brings challenges like metal leaching, fouling, scaling and corrosion that can reduce the integrity of the water system and increase the risk of contaminants. Sealix® adds a powerful layer of protection in the BPHE against these challenges.

## How Sealix® works

The ceramic nature of the Sealix® surface protection improves corrosion resistance. Customized organic functionalities in the protective layer, improves the surface behavior in relation to scaling and fouling while enhancing the mechanical and thermal stability of the Sealix® layer. The innovative self-cleaning nature of the sealant also reduces deposit



formation while protecting the surface. Sealix® units installed in tap water systems in Europe for example, are continually outperforming and outlasting their standard non-Sealix® counterparts.

## High uptime. Low maintenance

Increase the efficiency and operational lifetime of the entire system while reducing maintenance costs and unplanned downtime with Sealix®. Building owners and construction professionals can have peace of mind on the integrity of their water system. The protective layer is applied to all inner surfaces of the heat exchanger that come into contact with water.



## Extending to other applications

Surface sealing and its protective benefits can also be used in a wide range of applications including: storage tank protection, drinking bottles and cartons, condensing primary heat exchangers and shell & tube heat exchangers, and a wide range of automotive applications.



## Sealix® success stories

The SWEP Sealix® technology has been proven in a variety of long-term tests in Europe. In an installation in Eastern Germany, Sealix®- treated BPHEs have replaced conventional heat exchangers without any failures since March 2016. In another installation in Munich, several hundred Sealix® BPHEs have been operating without failure since March 2016 – whereas a conventional heat exchanger in the same installation failed after just two years.

## Recognized by international organizations

The positive benefits of surface sealing have been independently verified by several renowned test institutes and SiO<sub>2</sub> coatings are internationally recognized by many leading authorities, including the FDA in USA, EFSA in Europe, and JIAFE in Japan.

## The SWEP Sealix® Product Range

The Sealix® BPHE range features the surface sealing on all inner surfaces of the BPHE, resulting in enhanced behavior in terms of scaling, fouling and corrosion while maintaining thermal and hydraulic performance. These products combine Sealix® features with excellent heat transfer offering an increased lifetime solution for water applications. All parts that come into contact with water are covered by the protective surface treatment.

