

# Industry



# Optimize performance with pure-water cooling from SwedeWater

**The aim of our business is the same, no matter who the customer is or what the pure-water cooling is for – to ensure safe power and reliable performance. We design, build, deliver and support solutions with guaranteed operational performance for industrial, infra-structural and research purposes.**



Overheating is not always a simple problem. Pure-water cooling keeps vital electrical and machinery components at the right temperature and prevents scaling. The know-how and experience we have gained through working with many different customers and assignments helps us to develop new solutions or to adjust standard versions to fit a specific project.



## **Pure-water cooling for rectifiers and converters.**

Large consumers of direct current, e.g aluminum smelteries and chemical processing industries, use high power rectifiers with pure-water cooling. Converters for different industrial areas, mining, railway systems and offshore constructions need pure-water cooling for temperature control.

The reliability of the cooling plant is crucial to minimizing unplanned production stops. Cooling plants from SwedeWater are built on long experience of design, testing, commissioning and service. It all adds up to reliability.

The modular design concept is another way of successfully utilizing experience and achieving a reliable system design. Knowing the requirements and knowing how to meet them also enables us to maintain high accuracy in confirmed delivery time.

## **Pure-water cooling for metallurgic processing**

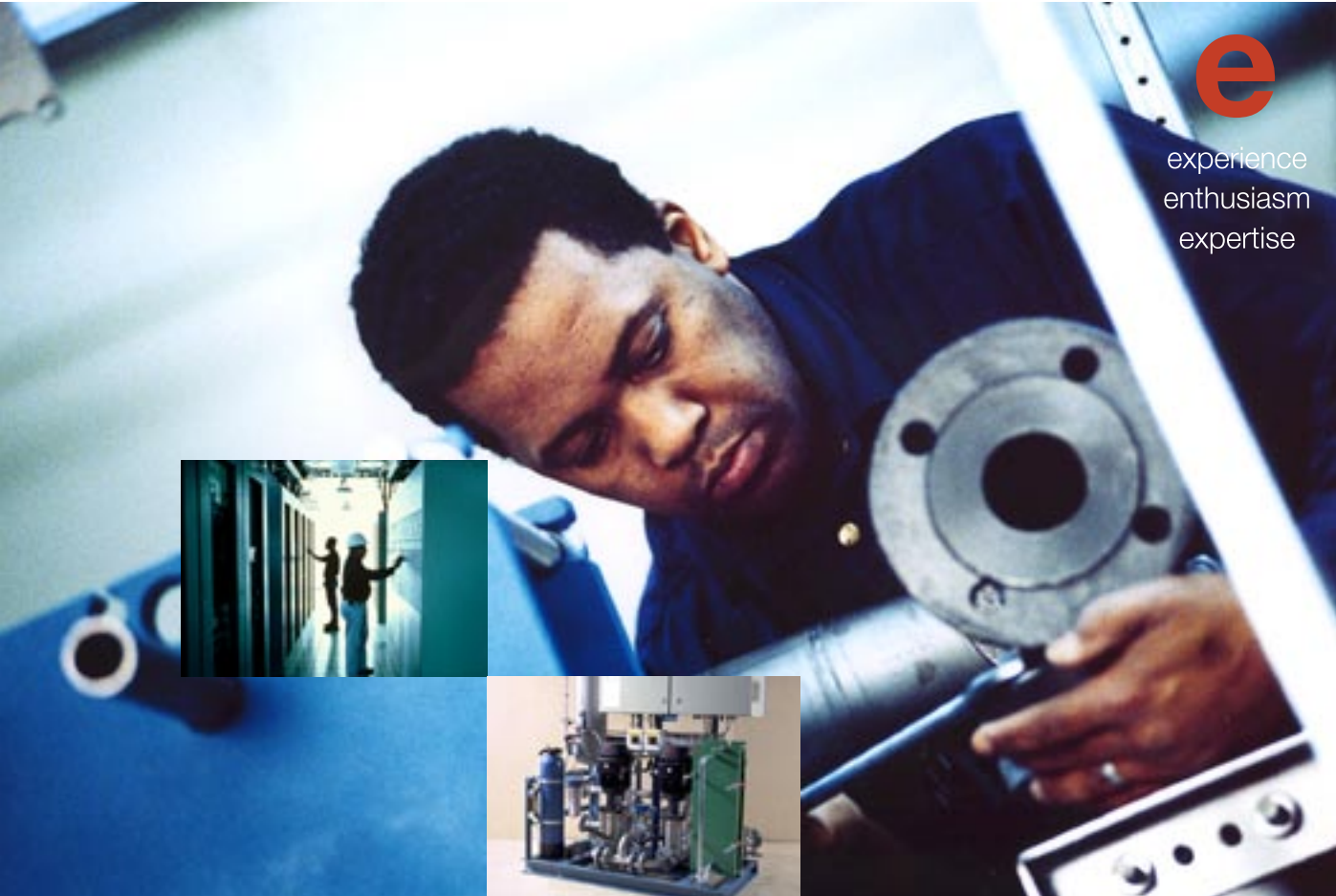
SwedeWater has developed several pure-water cooling systems for furnace and stirrers, as well as for electromagnetic brakes for moulds. Our cooling systems are specially designed for high performance, year after year, in very demanding environments. Components are selected not only for precise function and reliability, but to withstand rough handling, dust and high ambient temperature.

## **Pure-water cooling for research and medical applications**

Electromagnets in accelerator rings and cyclotrons for research or medical use are often cooled with low conductivity water. Such projects can be extremely customer-specific, when a research facility is to be equipped with a custom made cooling system. Here we get to really demonstrate our system design capability. We also make customized standard units which are produced in small series over a number of years. Well-proven design and short lead times are key success factors.



experience  
enthusiasm  
expertise



### **Pure-water cooling for non-electrical environments**

Pure-water cooling can also be used for exact temperature control and to minimize contamination or scaling on heat transferring surfaces. With very pure water, the growth of microorganisms is inhibited – without using chemicals.

SwedeWater has developed standardized cooling units for food packaging machines, some of which are now in serial production for major food packaging companies. With relatively large series, cost-effective production can be maintained, and with all material and components in stock, delivery time per unit can be cut to one week.

### **Built-in container solutions.**

A time-saving and cost-effective way to get a pure-water cooling system into operation is to build the cooling plant directly into a container. SwedeWater customizes the plant according to your requirements. If needed, the container can be equipped with for example insulation, ventilation, lighting, heating and air conditioning.





**Deutsche Bahn, Germany**

*A number of cooling systems using a strict design concept have been supplied over several years for converters for railway power supply. The pump unit and controls are built into a small housing, which is placed on a common frame with a liquid air cooler. All cabling and connecting piping is ready made and tested. The cooling system is turn-key in every sense.*



**PETtrace, worldwide**

*A standardized cooling unit developed for the clean hospital environment, completely enclosed and insulated to reduce noise. Precise cooling is needed for the isotope production equipment supplied by General Electric Medical Systems.*



**Handan, China**

*One of many similar cooling units for electromagnetic stirrers, used in the steel manufacturing industry. This particular unit is relatively small. The stirrer, which is cooled, is placed near to the melted steel, i.e. at high temperature. Important design requirements are reliability and capability to withstand the environmental conditions.*



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