



## Raised temperature reliability

When ScottishPower was faced with an unreliable industrial sump pump at its 715MW Rye House combined cycle gas turbine power near Hoddesdon, Hertfordshire, it turned to Hayward Tyler, specialists in extreme application pumps and electric motors.

The station produces enough power to meet the daily power needs of nearly a million people and the existing industrial sump pumps that were installed in 1992 to manage hot well water were failing. Since commissioning, the process temperature of the well water had increased to 90°C making the pumps less reliable, prone to wearing out more quickly and causing an increase in power consumption.

New pumps were needed, but they had to fit in the same physical space as the existing ones and require no costly modifications to pipework. The original pumps were no longer produced and so Hayward Tyler were faced with the double issue of finding a manufacturer that could deliver a pump to cope with the temperature demands and which would fit within the space constraints and connect to the existing pipework.

## A reputation for excellence

The original pump supplier had used a uniquely small mounting plate footprint for this application and Hayward Tyler soon realised that it wasn't going to find an off-the-shelf pump, but the cost of a completely bespoke design could not be justified. Hayward Tyler approached a number of manufacturers, but found that Amarinth were the only company willing to take on this difficult project and adapt an existing standard design to fit into the confines of the plant and their budget.

Hayward Tyler has built a reputation for excellence and providing innovative solutions. Any partner had to therefore

provide products of the same quality as Hayward Tyler that it could badge as its own. This also dictated that any supplier had to be ISO9001-2000 accredited. Amarinth were able to meet all of these criteria ensuring that Hayward Tyler could deliver a solution in absolute confidence.

## Fully interchangeable solution

Amarinth developed a solution based on one of its T-series industrial sump pumps. This delivered a higher performance than the existing pumps but was completely interchangeable, which meant that no modification had to be made to the sump or any pipework in order for it to fit the space constraints. In addition, the Amarinth pump had PTFE bearing as standard, which are much better able to handle extremes of temperature.

## Delivering to expectations

The new pump was delivered on-time with a full package of all documentation, manuals and software. Commissioning went smoothly with minimum disruption to the plant, and Health and Safety issues, which are particularly stringent within a power generating plant, were well managed. ScottishPower was delighted with the quality and performance of the new pumps and brought forward the replacement of a second pump by 12 months.

Hayward Tyler is now continuing to work closely with Amarinth on other demanding client applications worldwide.



## ScottishPower

As an integrated energy provider, ScottishPower generates, transmits and distributes energy – right from the power station to the plug. Today, it is the UK's leading supplier of green energy products to domestic and business customers.

## Hayward Tyler

With over sixty years expertise working with many of the world's leading operators, Hayward Tyler is one of the world's foremost suppliers of large custom engineered Electro-Submersible Pumps and Motors.

Hayward Tyler has a focus on providing pumps for extreme application duties where factors such as temperature, pressure and aggressive mediums make selection of standard units inappropriate.

The company employs 250 staff worldwide and has an annual turnover of £20M and is a wholly owned subsidiary of the Niche Engineering Group, Southbank UK PLC.



*"We are delighted with the quality and performance of the solution provided by Amarinth. The partnership between Hayward Tyler and Amarinth helped to convince ScottishPower to order the pump from ourselves and the combination of quality and service convinced them that they had made a sound choice."*

**Mr Peter Gilman**  
Project Engineer