EFFICIENCY THROUGH INNOVATION

Spheretec

MAINTAINING
Optimal Pipeline Efficiency

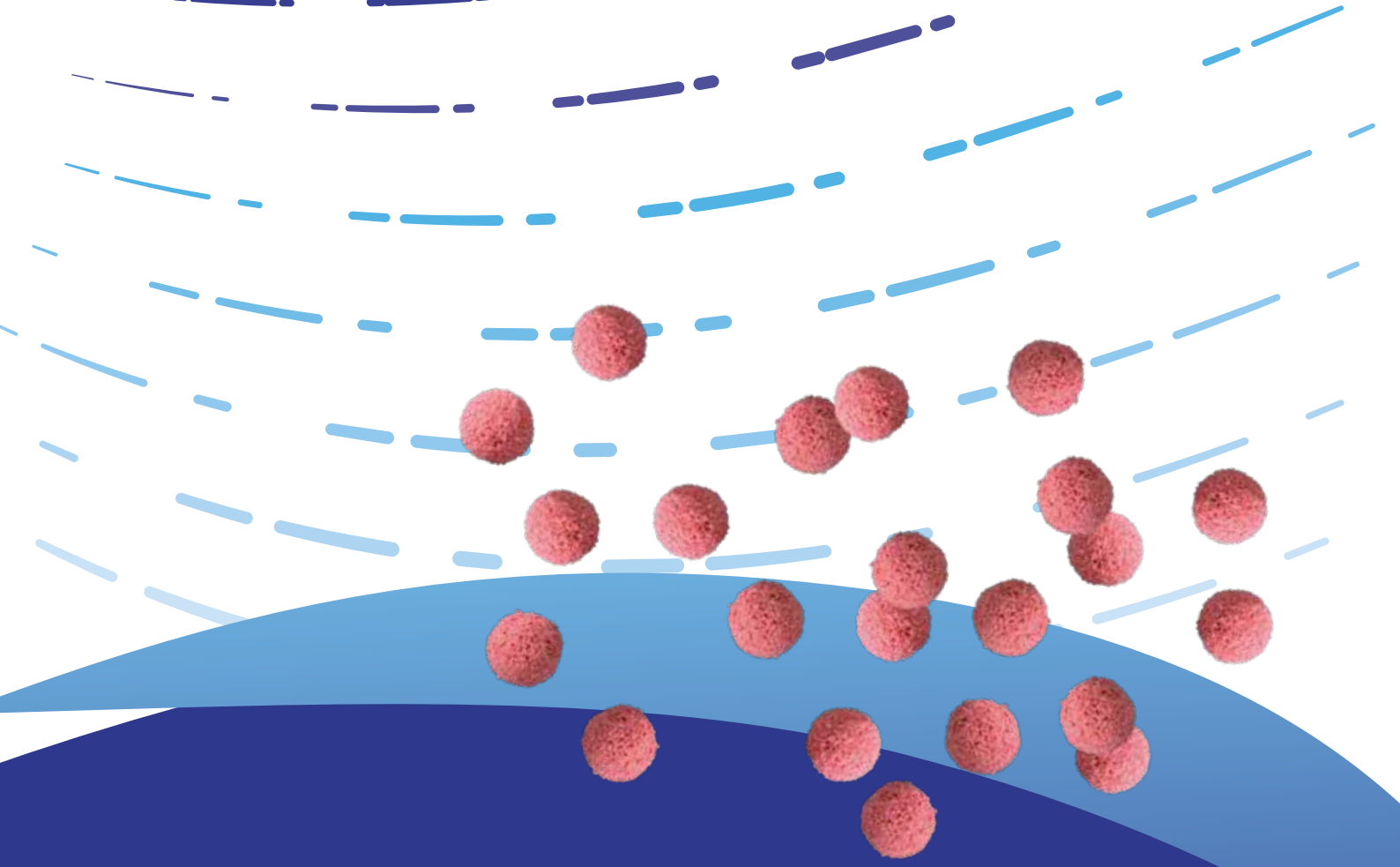
The integrity of a chiller system is crucial for reliable and cost-effective operation. However, various factors can compromise performance over time:

Scaling and Fouling build-up

Accumulation of scaling & fouling can lead to diminishing chiller efficiency. Energy consumed by air-conditioning typically comprises up to 55% of total energy consumption in a building. As scaling and fouling builds up, heat exchange deteriorates and the chiller is forced to work harder to maintain the desired cooling capacity, leading to increased energy consumption.

Unlike traditional manual cleaning methods that require system shutdown and labor-intensive tube cleaning, SphereTec works continuously during normal operation.

With SphereTec, you can maintain chiller efficiency with no worries of increment to your electrical bill.



Benefits of **SPHERETEC**

Energy Savings
Ensures optimal performance and efficiency of the chiller system.

Eco Friendly
Chemical-Free and Hassle-Free Cleaning

Extended Equipment Life
Promotes a longer lifespan for your valuable capital equipment by eliminating scaling and fouling.

Seamless Integration
Smooth and effortless integration into new and existing setup.

Optimal Efficiency
Integrated with high efficiency Grundfos pump to deliver cleaning balls.

THE ATCS
Cleaning Process

01 **Ball Storage and Monitoring**
The cleaning balls reside in a ball station equipped with a window for easy inspection of both their quantity and condition.

02 **Ball Movement**
Kinetic movement by the main condenser pump into the main pipe at a predetermined interval.

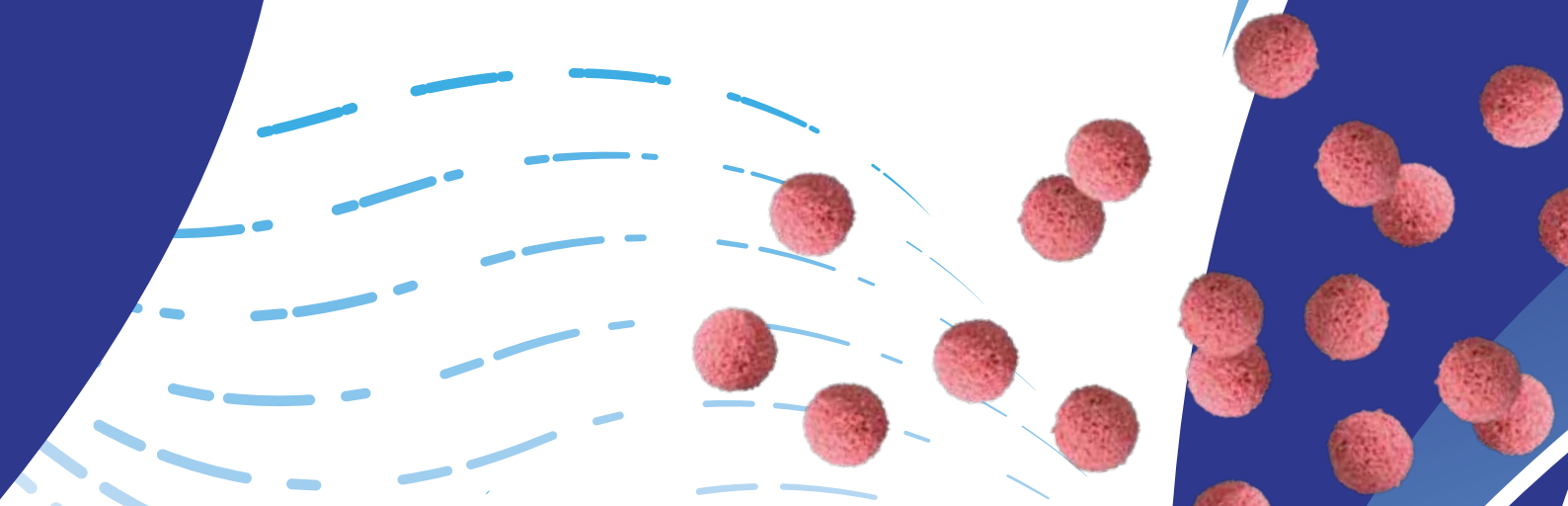
03 **Cleaning Throughout Condenser Tubes**
Water flow carries the balls through the main pipe and into the condenser tubes, where they distribute themselves randomly.

04 **Cleaning Action**
As the balls travel through the tubes, they effectively remove residue, deposits, and built-up of scaling and fouling.

05 **Ball Collection**
Upon exiting the condenser, the balls are collected in a ball catch with no moving parts, ensuring the balls remain secure and prevent any possibility of escape.

06 **Ball Return and Rinse**
The control system activates a motorized valve, triggering the return of the balls to the ball station via a PLC-controlled pump.

07 **Ready For The Next Cycle**
Following the cleaning cycle, the refreshed balls remain within the ball station until they are needed for the next cleaning process.



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