HOW DEPOSIT THICKNESS IMPACTS CHILLER EFFICIENCY

Chiller deposits may consist of a single substance, such as mineral scale, or form due to the accumulation of several different materials, such as suspended solids, corrosion by-products, and microbiological matter (slime). Deposits can cause many problems, including loss of heat transfer capability, reduced flow capacity, and under-deposit corrosion.

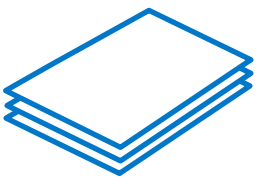
COMMON TYPES OF DEPOSITS

- Calcium Carbonate
- Calcium Phosphate
- Microbiological
- Corrosion Byproducts

WHAT ARE CHILLER DEPOSITS COSTING YOU?

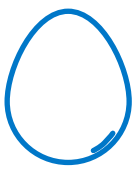
The thicker the deposit, the more electricity a chiller will use. The various deposit thicknesses shown below illustrate the annual impact upon a typical 500-ton chiller system.*

$3,400



COPIER PAPER
(0.10 mm Thickness)

$11,000



EGG SHELL
(0.30 mm Thickness)

$36,700

CREDIT CARD
(0.75 mm Thickness)

$51,000

PAPER CLIP
(1.00 mm Thickness)

*Assumptions: 500-ton chiller running at 30% load 24 hours per day, 365 days per year. Electrical Costs = $0.10/KHW, chiller efficiency of 0.7. Scale assumed to be standard mixed composition. Actual increased energy use depends on compressor type, actual operating head pressure, percent operating load, etc.

**Actual increased energy use depends on compressor type, actual operating head pressure, and percent operating load.

CHEM-AQUA, EXPERTS IN COMBATTING CHILLER DEPOSITS

Recognizing the various types of deposits and knowing how to manage them takes specialized knowledge. Chem-Aqua has both the knowledge and expertise to help safeguard important water systems. Chem-Aqua treatment strategies include a comprehensive roster of products, equipment, and services to protect systems from deposits.

Contact **Chem-Aqua** today to learn how we can help you manage your water treatment challenges.

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