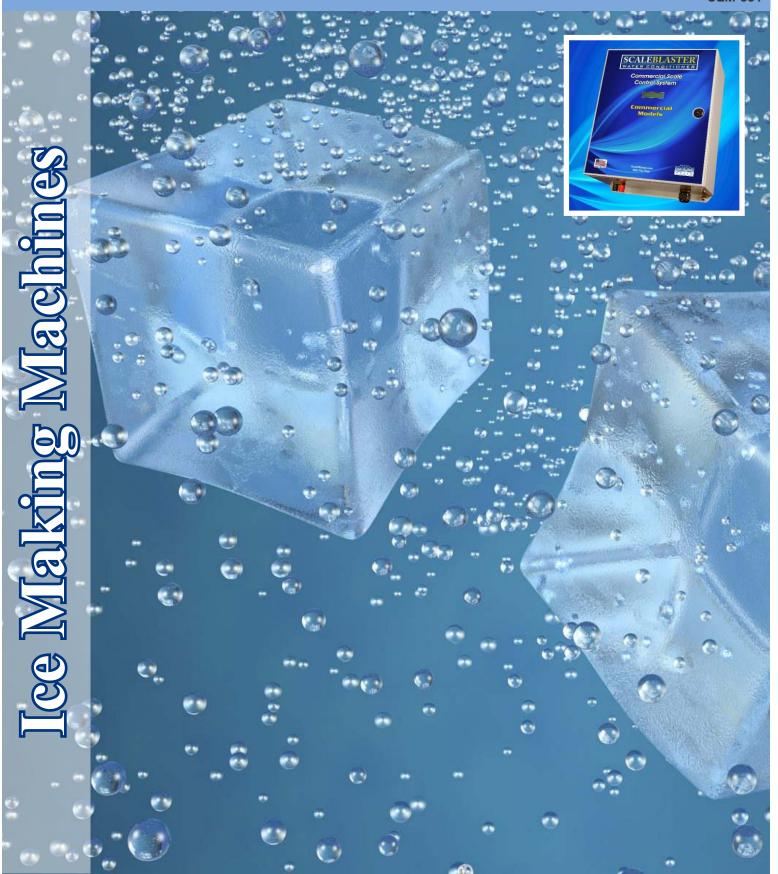
# SCALEBLASTER® WATER CONDITIONER

## **APPLICATIONS**

Sustainable Solutions to Hard Water Problems

CLM-531



### **Ice Machine Applications**

- Hard water causes ice to be cloudy. This is because the dissolved calcium and magnesium solidify into particles during the freezing process and become trapped in the ice.
- Hard minerals, such as calcium and magnesium, leave scale deposits. Scale causes a number of problems with cubers:
  - Scale on the ice thickness probe can trigger a false harvest. If it can't sense the water, it may start the harvest cycle prematurely, releasing the ice before it is fully shaped.
  - Scale can cause "freeze up," a fairly common problem. As minerals collect on the evaporator plate, they can impede the heat transfer. This can result in ice that sticks to the evaporator instead of dropping during the harvest. The ice refreezes with each cycle, creating large chunks.
  - Scale can cause valves and floats to stick:
    - An inlet valve or float that is stuck partially closed can result in a longer harvest cycle and unusually large cubes. Low water flow can also lead to small cubes. If the valve is stuck completely closed, it would activate the low water safety and stop ice production. (Note: Low water flow can also be due to an inlet screen that is plugged with debris.)
    - A valve that is stuck open can cause leaking and overfilling of the reservoir or sump. This can cause three problems:
      - 1. The water temperature can be tempered to the point that ice cannot form.
      - 2. Freeze up and bridging of cubes:
        - Low water flow caused by a stuck valve can cause freeze up, in which the ice stays attached to the evaporator plate during harvest.
        - Excessive water in the reservoir, due to a valve stuck open, can release too much water during the freeze cycle, building excessive layers of ice that "bridge" together. When released, the cubes don't break apart in the bin, but instead remain as large chunks.
      - 3. A valve stuck open can also result in a lot of water waste.
  - Water distribution tubes can clog due to scale. This can lead to ice bridging on some portions of the evaporator plate and no ice on other portions.
  - A stuck bin control due to scale can send a false signal that the bin is full, stopping ice production.
    - Reduces maintenance and service calls dramatically
    - Produce clearer, "better looking" cubes, improve customer satisfaction
    - Eliminates line clogging due to scale build-up
    - Allows cube and crushed ice to dispense more easily, less scale means less "drag" during ice release
    - Prolongs use of equipment

#### **Maintenance Free**

The **ScaleBlaster** water conditioning system requires no maintenance, thus eliminating maintenance costs.

#### **Environmentally Friendly**

There are no harmful chemicals or salts which dispose chlorides into the environment.

#### **Space Efficiency**

The unit takes up little space. Simply mount the **ScaleBlaster** water conditioner on your incoming pipes and you are good to go!

Commercial buildings may be susceptible to problems with hard water, but you now have an effective solution to prevent it.



