

## Ice Machine Cleaning & Filtration

### DO YOU HAVE THESE ICE MACHINE PROBLEMS?

- LIME SCALE FORMATION
- SLIME GROWTHS
- SEDIMENT
- CLOUDY OR MILKY ICE
- DIRTY COOLING COILS
- ROUGH FREEZING SURFACE
- OBJECTIONABLE TASTES OR ODORS

### Reduce Service Calls On Major Water Problems Encountered In Ice Making Equipment

#### Lime Scale Formation

Lime scale is a common problem in ice machines. Scale-forming minerals tend to reduce heat transfer concentrate in the water and precipitate on the freezing surfaces. The ice tends to stick to the scale and this jams the machine. Years of experience with ice making equipment have proven that the best way to solve this problem and reduce service calls is to prevent this scale formation by treating the water with proper filtration. Before the treatment is started, however, the machine should be cleaned and sanitized.

#### Removing Scale Deposits

##### Liquid Ice Machine Cleaner

Liquid Ice Machine Cleaner is a food-grade phosphoric acid that is fast acting yet safe to use. It has been formulated for removing scale deposits from ice machines and coffee urns, and does not give off any harsh fumes or contain chlorine or chlorides that would attack stainless steel. NSF registered.

8 fl. oz. bottle: 4207-47

1 gallon bottle: 4207-08



##### Nickel Safe Ice Machine Cleaner

Nickel-Safe Ice Machine Cleaner is a specially formulated food-grade product for removing scale deposits from ice machines having nickel-plated or tin-plated evaporators. It is acceptable for use in such machines made by Manitowoc and other manufacturers using nickel. It mixes to form a green solution which makes rinsing easier. NSF registered.

16 fl. oz. bottle: 4287-34

1 gallon bottle: 4287-08



#### Controlling Slime Growth

##### IMS-III Sanitizing Concentrate

IMS-III is an EPA-registered sanitizing concentrate formulated exclusively to sanitize hard, non-porous surfaces to eliminate odors and slime growths. No rinsing is required when used as directed. Formulated for general use in ice machines, ice cream dispensing equipment and other hard surface equipment. OEM approved

16 fl. oz. bottle: 4211-34



#### Advanced Protection

##### IceGuard Plus

Ice Guard Plus contains advanced technology to dramatically reduce ice machine maintenance and cleaning. This technology utilizes the known properties of silver and copper, incorporated into a drop-in device. The device is placed directly into the recirculating water sump, providing treatment of the machine in one easy step.

1 unit: 4209-07



#### Ice Machine Disinfection

##### Oxidice™

Oxidice treats the ice machine's incoming water supply, reducing the growth of bacteria, molds, yeast and other contaminants. It is a natural sanitizer that disinfects the air, water and surfaces within the machine, extending the time between maintenance and cleaning. Oxidice fits any size ice machine and is programmable for varying situations. Applications include restaurants/bars, hotels, hospitals, convenience stores, schools, bakeries and more. NSF registered.

One Unit: CD385A



## Prevent Lime Scale, Sediment or Objectionable Tastes and Odors

### NP Series

The NP Series is a complete, multi-functional treatment system, consisting of two different size housings, the NP24DD and the NP48DD, and a family of “problem-solving” cartridges.

The NP Series has been developed in order to permit the service technician or user to customize their installation to address a specific water-related problem or problems. There are six different cartridges for the control of scale, silt and sediment and for the removal of objectionable tastes and odors.

Two different bracket assemblies are available to permit the installation in series of two or three NP Housings. Also, a gauge package is available for use where it is necessary to continually monitor the pressure of the water serving the ice machine, beverage machine, etc.

NP24DD Housing, 3/8" FPT: 4704-24

NP48DD Housing, 1/2" FPT: 4714-24

\*Both housings are rated to 125 psi maximum pressure and 80°F max. temperature.



## Select the Appropriate NP Cartridge\* to Solve Your Specific Problem

### Carbon Block Cartridge

The NP24C Cartridge fits the NP24DD Housing while the NP48C fits the NP48DD. These carbon blocks will remove most objectionable tastes and odors and are rated down to 10 microns.

NP24C: 4701-87

NP48C: 4711-87



### Micromet/Carbon Cartridge

A custom cartridge, combining phosphate for scale-control and a carbon block for taste and odor control, and sediment (10 microns).

NP24PC: 4706-87

NP48PC: 4716-87



### Sediment Cartridge

The NP24S (5") and the NP48S (10") are made from FDA-approved polypropylene construction and filter to 5 microns. In addition, the 10" as well as a 20" version are available in bulk packaging.

NP24S: 4702-87

NP48S: 4712-87

EC210: 4621-43 (20")



### 6R Micromet/Sediment Cartridge

Another custom cartridge within the NP Series, consisting of polypropylene for filtration (5 microns) and 6R Micromet phosphate for scale-control.

NP48PS: 4717-87

CG5-20S: 9108-27 (20")



### 6R Micromet® Cartridge

The NP246R Micromet Cartridge contains 1 pound of 6R Micromet, and it fits the NP24DD Housing. The NP486R Cartridge contains 2 pounds of 6R and fits the NP48DD Housing.

NP246R: 4705-87

NP486R: 4715-87



### NP Series Brackets

Some installations may require two or three NP Series housings to meet more than one specific water-related condition. This custom installation can be accomplished through the use of one of the NP Series multi-housing brackets.

Two housing brackets: NP2BR

Three housing brackets: NP3BR



\*NP24 designates 5" cartridges and NP48 designates 10" cartridges

## Selection Chart for NP Series

| Cartridge Type  | Problem to Solve |              |       | Daily Capacities     |                      |
|-----------------|------------------|--------------|-------|----------------------|----------------------|
|                 | Sediment         | Taste & Odor | Scale | "24's"               | "48's"               |
| "S" Cartridges  | ✓                |              |       | 1800 lbs. (200 gal.) | 3600 lbs. (400 gal.) |
| "C" Cartridges  | ✓                | ✓            |       | 1800 lbs. (200 gal.) | 3600 lbs. (400 gal.) |
| "6R" Cartridges | ✓                |              | ✓     | 900 lbs. (100 gal.)  | 1800 lbs. (200 gal.) |
| "PC" Cartridges | ✓                | ✓            | ✓     | 600 lbs. (65 gal.)   | 1200 lbs. (135 gal.) |
| "PS" Cartridges | ✓                |              | ✓     | N/A                  | 550 lbs. (60 gal.)   |

## Prevents Scale, Removes Sediment & Objectionable Tastes And Odors

### MICRO-PLUS® IN-LINE FILTER PLUS FEEDER

The complete “in-line” treatment program for commercial ice makers, coffee urns and brewers, beverage makers and other water-using equipment such as humidifiers, steamers and residential refrigerator ice makers. Micro-Plus is available in a variety of sizes, capable of treating capacities of 125 lbs. of ice (12.5 gallons) to 1,000 lbs. of ice (100 gallons) per day. They are designed and manufactured to eliminate or control the three primary water-related problems: lime scale, sediment (down to 20 microns), and objectionable tastes and odors. When properly sized, Micro-Plus will last for six months.

All units are tapped on each end with 1/4" FPT connections for use with flare or compression fittings.

For taste and odor problems only on equipment using up to 50 gallons of water per day, use the Micro-Carbon 4.



Tested and Certified by NSF against ANSI NSF Standard 42 for odor and taste reduction, chlorine reduction

| Part Number | Micro-Plus     | TREATMENT CAPACITIES    |               |                                   |
|-------------|----------------|-------------------------|---------------|-----------------------------------|
|             |                | Water gals/day Capacity | Ice Makers    | Coffee Makers                     |
| 4615-W3     | MICRO-PLUS 2   | 12.5                    | 125 lbs./day  | 25 lbs. (1,250 cups) coffee/wk.   |
| 4612-W3     | MICRO-PLUS 4   | 25                      | 250 lbs./day  | 50 lbs. (2,500 cups) coffee/wk.   |
| 4613-Y8     | MICRO-PLUS 8   | 50                      | 500 lbs./day  | 100 lbs. (5,000 cups) coffee/wk.  |
| 4614-Y8     | MICRO-PLUS 16  | 100                     | 1000 lbs./day | 200 lbs. (10,000 cups) coffee/wk. |
| 4617-24     | MICRO-CARBON 4 | 50                      |               |                                   |

### Replacement Cartridges for existing CUNO®\* CFS/HFS Installations

These systems offer sanitary quick change cartridges to fit the existing (Cuno CFS/HFS brand). The Nu-Plus products provide you with “break-through” filtration technology providing performance driven filtration for all of your water using equipment: ice machines, fountain beverages, steam ovens, and drinking water applications. A new and innovative, cost-conscious water filtration system for food service applications. Nu-Plus is the reliable common sense choice when looking for water filtration to prevent unwanted troubles caused by sediment, scale, or taste & odor.

- Single, Twin, and Triple head manifolds that permit new installations (CFS only)
- Inhibit scale
- Sediment removal
- Remove objectionable taste and odor



### NU-Plus CFS/HFS Cartridge Options

| Part No. | Description | Replaces                   | Function   | Rating                    |
|----------|-------------|----------------------------|--|---------------------------|
| 4623-10  | CFS - S     | CFS 8110                   | Sediment - 5 Micron                                  | 1.67 gpm - 14,000 gallons |
| 4623-11  | CFS - SS    | CFS 8110-S                 | Scale Inhibitor, Sediment - 5 Micron                 | 1.67 gpm - 14,000 gallons |
| 4623-12  | CFS - TOP   | CFS 8112, 8112X, 8720      | Taste & Odor, Sediment - 1/2 Micron                  | 1.67 gpm - 14,000 gallons |
| 4623-13  | CFS - STOP  | CFS 8112S, 8720-S, 8812X-S | Scale Inhibitor, Taste & Odor, Sediment - 1/2 Micron | 1.67 gpm - 14,000 gallons |
| 4623-40  | HFS         | HF65                       | Taste & Odor, Sediment - 1/2 Micron                  | 3.4 gpm - 40,000 gallons  |
| 4623-41  | HFS-S       | HF65-S                     | Scale Inhibitor, Taste & Odor, Sediment - 1/2 Micron | 3.4 gpm - 40,000 gallons  |

\*Cuno® is a trademark of 3M. This product is not manufactured, sponsored, or affiliated with 3M.



**Nu-Plus HZ-S • P/N 4623-50**

A high performance yet economical alternative to expensive Hoshizaki\* replacement filters. Decreases machine maintenance by reducing lime scale build-up. Reduces chlorine from incoming water supply, eliminating bad tastes and odors from ice. Reduces particulate and sediment.

Replaces (Hoshizaki\*): 4HC-H, HC, HC-H, HF, HF-H and PRO 3500

\*Hoshizaki is a registered trademark of Hoshizaki Electric Co., Ltd. Corporation Japan.

**Specifications**

**Filter Application:** Chlorine/Taste/Odor, Particulates, Scale Inhibitor  
**Micron Rating:** 0.5 micron  
**Flow Rate:** 2.1 gpm (7.95 lpm)  
**Life:** 12 months or 29,000 gallons (109,776 liters)



**i2000<sup>2</sup> and i4000<sup>2</sup>**

Reduce water-related ice machine problems caused by dirt, objectionable tastes and odor and by scale build-up. Precoat submicron filtration removes particles as small as 1/2 micron along with chlorine and other offensive contaminants, and the feed of phosphate inhibits scale build-up caused by dissolved minerals. NSF Certified under NSF/ANSI Standards 42 and 53.

- Micro-Pure® II antibacterial protection
- Cyst reduction

9612-27: i2000<sup>2</sup> 9,000 gallon capacity  
 750 lbs. most cubers • 1,500 lbs. most flakers

9612-37: i4000<sup>2</sup> 12,000 gallon capacity  
 1,000 lbs. most cubers • 2,000 lbs. most flakers



**MC<sup>2</sup> and XC<sup>2</sup>**

Reduces chlorine taste and odor and other offensive contaminants that can adversely affect the taste of fountain beverages. Precoat submicron filtration removes particles as small as 1/2 micron, and it helps retain carbonation in drinks. NSF Certified under NSF/ANSI Standards 42 and 53.

- Micro-Pure® II antibacterial protection
- Reduces objectionable tastes and odors
- Cyst reduction

9612-55: MC<sup>2</sup> 9,000 gallon capacity  
 9613-97: XC<sup>2</sup> 12,000 gallon capacity



**7CB5-S**

The carbon block filter finely polishes the water allowing for high quality beverage and food applications. It has scale control and reduces chlorine taste and odor and other offensive contaminants. It also reduces particulate to 5 microns. NSF Certified under NSF/ANSI Standard 42.

- Taste and odor, chlorine reduction
- Scale Control
- Problem solving cartridge for high particulate or low flow water pressure areas
- 10,000 gallon capacity

7CB5-S: 9618-26



**QC7I HEADS**

Designed for all Everpure filters. All sizes come with a built-in shut off, flushing valve and an outlet pressure gauge which is included on the mounting bracket. (3/8 NPT)

Single: 9272-41      Triple Parallel: 9272-23  
 Twin Parallel: 9272-22      Quad Parallel: 9272-11



**EC110 and EC210**

10 and 20 inch 10 micron nominal sediment filters for filtering out larger dirt and rust particles, extending the life of primary filters.

EC110: 9534-40 (10")  
 EC210: 9534-20 (20")



**E10 and E20 Coarse Prefilters**

10" and 20" clear housings, each including a 10" and 20" replaceable prefilter cartridge. Filters out larger dirt and rust particles thereby extending the life of submicron carbon filters.

10": 9795-80  
 20": 9795-90

Optional: Wing Bracket for all multiple filter head systems manufactured after 2003: 3114-34



**IMF-7 and IMF-10**

Scale inhibition cartridges. The translucent cartridge allows for easy visual monitoring of the product's usage. (The IMF-10 is a longer life scale inhibition cartridge.)

IMF-7: 9799-32  
 IMF-10: 9799-02



**Scale Inhibitor Feeder**

A complete system for the control of scale in steam ovens, ice, coffee and combination applications. It dispenses a controlled amount of HydroBlend™ compound which provides for a more consistent feed and longer life. The system includes a clear housing and one cartridge and spacer.

Part Number: 9798-45

Optional: Wing Bracket for all multiple filter head systems manufactured after 2003: 3114-35