

Models: NP24DD and NP48DD

INSTALLATION AND OPERATING INSTRUCTION BULLETIN

IMPORTANT READ BEFORE INSTALLING OR OPERATING THIS EQUIPMENT

The NP Series is a multi-functional treatment system, consisting of two different sizes of housings, the NP24DD and the NP48DD. They will hold any one of the several NP Series cartridges depending upon the water-related problem that needs to be addressed: sediment filtration, removal of objectionable taste and odor, or the control of scale formation. The NP Series is designed for correcting these problems in water supplied to ice machines, coffee urns, water fountains, beverage equipment and other similar potable water-using equipment. Housings may be installed individually, or they may be grouped in series of two or three using the appropriate bracket assembly.

This bulletin covers the selection, application, and installation of the *NP Series* including both housings and the appropriate treatment or filter cartridges.

- For Scale Control: Use the appropriate sized <u>NP Housing</u> along with the corresponding 6R Micromet[®] (4705-87 & 4715-87), combination 6R Micromet[®] / carbon block cartridge (4606-87 & 4716-87) or combination 6R Micromet[®] / sediment filter (4717-87).
- For Taste and Odor Control: Use the appropriate sized *NP Housing* along with the corresponding carbon block cartridge (4701-87 & 4717-87).
- For Silt / Sediment Control: Use the appropriate sized <u>NP Housing</u> along with the appropriate polypropylene filter cartridge (4702-87 & 4712-87).
- For Pressure Reading: Use the appropriate <u>NP Series Gauge Package</u> (NP24GG & NP48GG).
- For Connecting two or three NP Housings in a Series: Use the appropriate <u>NP Bracket Assembly</u> (NP2BR & NP3BR).

HOUSING SELECTION

The correct housing to use will depend upon the volume of water to be treated per day and the water-related problem. And, up to three housings may be connected in a series using one of the NP Brackets.

The <u>NP24DD</u> (4704-24) is equipped with 3/8" FPT connections and can handle up to 100 gallons of water (900 lb. of ice) per day where scale is the problem, and up to 200 gallons of water per day where sediment or taste and odor are the problems.

The <u>NP48DD</u> (4714-24) is equipped with 1/2" FPT connections and can handle up to 200 gallons of water (1800 lb. of ice) per day where scale is the problem, and up to 400 gallons of water per day where sediment or taste and odor are the problems.



CARTRIDGE SELECTION

CARTRIDGES <u>FUNCTION</u>

6R Micromet® A slowly soluble food grade polyphosphate that is NSF listed. Stabilizes mineral hardness and prevents scale formation. When properly sized it can control scale up to six months.

Carbon Block
 NP24C (4701-87)
 NP48C (4711-87)
 A molded block of activated carbon that has superior filtration and absorption capabilities when compared to standard granular activated carbon. Removes most objectionable tastes and odors such as those attributed to chlorine and hydrogen sulfide (rotten egg odor). And it filters to 10 microns.

Polypropylene A spun polypropylene sediment cartridge that filters silt, sediment, and dirt down to 5 microns.

• NP48S (4712-87)

Carbon Block-6R Micromet® A carbon block for taste, odor and chlorine removal as well as sediment

• NP24PC (4706-87) removal to 10 microns, and it includes a volume of 6R Micromet® for scale

• NP48PC (4716-87) control.

Polypropylene-6R Micromet® A spun polypropylene sediment cartridge that filters silt, sediment, and dirt down to 5 microns, and it includes a volume of 6R Micromet® for scale control.

APPLICATION SELECTION

The control of scale, sediment, taste and odors is a two step process: select the appropriate cartridge and follow with the selection of the required housing.

SCALE CONTROL

DAILY VOLUME		NP HOUSING	NP CARTRIDGE	
Water	ater Ice Model Number Mod		Model Number	
100 gallons	900 pounds	NP24DD	NP246R	
200 gallons	1800 pounds	NP48DD	NP486R	

SEDIMENT CONTROL

DAILY VOLUME	NP HOUSING	NP CARTRIDGE	
Water	Model Number	Model Number	
200 gallons	NP24DD	NP24S	
400 gallons	NP48DD	NP48S	

TASTE & ODOR CONTROL

DAILY VOLUME	NP HOUSING	NP CARTRIDGE	
Water	Model Number	Model Number	
200 gallons	NP24DD	NP24C	
400 gallons	NP48DD	NP48C	

SCALE & SEDIMENT CONTROL (5 Microns)

DAILY VOLUME		NP HOUSING	NP CARTRIDGE	
Water	Ice	Model Number	Model Number	
60 gallons	550 pounds	NP48DD	NP48PS	

SCALE & SEDIMENT (10 Microns), TASTE & ODOR CONTROL

DAILY VOLUME		NP HOUSING	NP CARTRIDGE	
Water	Ice Model Number M		Model Number	
65 gallons	600 pounds	NP24DD	NP24PC	
135 gallons	1200 pounds	NP48DD	NP48PC	

NOTE: In all cases, cartridges should be changed every six months

ACCESSORIES LIST

For certain water conditions and/or volumes, housings placed in a series may be necessary. Example 1: For a given water supply that is scale-forming and has high sediment, use a two housing system in series with a sediment cartridge and a 6R Micromet® cartridge, in that order. Example 2: For a water supply that is scale forming, has high sediment and has bad taste and odor use a three housing system with a sediment cartridge, carbon block and a 6R Micromet® cartridge in that order. Select the correct bracket using the parts list below.

HOUSING TYPE	BRACKET(S)	APPLICATION	GAUGE KIT	FITTTING SIZE
NP24DD	NP2BR and NP3BR plus mounting screws	Installing two or three housings in a series.	NP24GG	3/8" MPT / 3/8" FPT
NP48DD	NP2BR and NP3BR plus mounting screws	Installing two or three housings in a series.	NP48GG	1/2" MPT / 1/2" FPT

Note 1: Brass MPT/MPT nipples for connecting housings in series are not included. These must be purchased from your local wholesaler.

Note 2: The small single bracket (NP1BR), that is included with each single housing, is not used when connecting with the NP2BR or NP3PR housings in a series.

Note 3: For water conditions that exhibit silt and sediment, one may want to be alerted when the cartridges are clogged and need to be replaced. The installation of a pressure gauge on the outlet side of the housing system will alert the user when the gauge reads 20 psi on the preset dial face. Select the appropriate gauge kit from the accessories list above.

CAUTIONARY NOTES

- Do not install where pressure is over 125 psi, water temperature is over 80 Degrees F or hot water may back into housing.
- Do not expose Housings to freezing temperatures and hot sun.
- Do not use housing to feed other chemicals.
- Install in a vertical convent location where it is easily accessible for replacing cartridges and allows at least 12" of open space below lowest point of installed housing.
- When treating cuber ice makers, bleed one half gallon of ice water for every ten (10) pounds of ice capacity the ice machine can produce.
- Replace cartridges every six months; when doing so, inspect the housing's O-Ring and lubricate as necessary.
- When treating <u>water-cooled</u> ice machines, do not install the housing to the equipment's <u>water-cooled</u> supply line.



PRODUCT INSTALLATION DRAWING

Installation Instructions: NP24DD / NP48DD Housings, Fittings, Brackets and Cartridges.

Bracket & Housing Assembly (See parts list)

Step 1: Turn off main water supply. Install shut-off-valve to the water supply line as shown in the diagram. A second shut-off-valve connected on the outlet side of the housing may be desireable on some installations to prevent back flow of water when changing cartridges.

Step 2: Connect MPT x MPT brass nipples to housing head.

Step 3 (Optional): Connect pressure guage to outlet side brass nipple (see digram).

Step 4: Connect housing head inlet port to shut-off-valve and the outlet port to water line or equipment.

Step 5: Attach housing head to bracket using the four provided screws.

Step 6: Mount the bracket to a wall stud or other permanent surface.

Cartridge Installation (See cartridge list)

Step 1: Remove plastic wrap from cartridge.

Step 2: Insert cartridge into housing bowl with labeled arrows facing up.

Step 3: Screw housing bowl onto the housing cap and hand tighten. (Use no tools for tightening).

System Test

Step 1: Open inletside shut-off-valve and allow water to flow through the filtration system.

Step 2: Check for leaks.

Step 3: If using carbon filled cartridges, open the nearest faucet or outlet after the housing to allow carbon fines to drain. Run water untill it becomes clear.

Step 4: Make note of date or mark the date of installation on housing in order to replace the cartridge every six months.

CARTRIDGE REPLACEMENT

Step 1: Shut off water supply at the valve.

Step 2: Press red pressure relief button to release pressure.

Step 3: With pressure fully released, unscrew body. Body wrenches are available as a replacement part although hand tightening is sufficient.

Step 4: Dump out water, discard old cartridge and insert a new cartridge after removing plastic wrap.

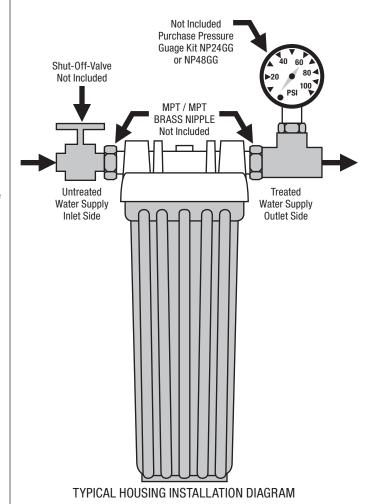
Step 5: Insert body into head and screw together hand tight.

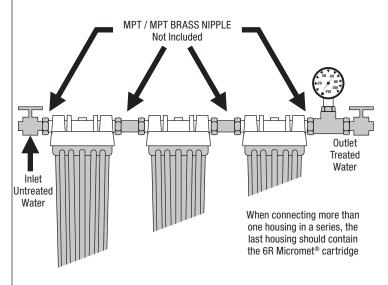
Step 6: Open water supply valve and check for leaks.

Step 7: If using carbon filters, open nearest faucet or outlet after housing and allow carbon fines to drain. Run water until it becomes clear.



Tested and Certified by NSF International against ANSI/NSF Standard 42 for material and structural only. NP48DD





TYPICAL HOUSING INSTALLATION DIAGRAM FOR MULTIPLE HOUSINGS

