



## BouMatic CIP Program

*BouMatic* cleaning and sanitizing formulas are designed to provide maximum value and performance for today's dairy producers. The *BouMatic Guardian II* washer system lets you customize your CIP system, chemical usage and water requirements.

*BouMatic's* CIP specialists are trained to improve the performance of your facility using tools such as the *Dairy Profiler* and the *CIP Optimizer*. Cost per wash analysis, proper water volume usage, proper chemical level rates, and proper detergent and acid selection all play a role in your profitability. With larger and larger Co-op premiums and bonuses at stake, many top dairy producers across North America have found it pays to invest in the *BouMatic* CIP Program.

### Helps Select the Right Product at the Right Rate, Right on Your Dairy

The characteristics of water on each dairy are unique and determine the CIP detergent and acid that are best for your wash-up. The *CIP Optimizer* helps your *BouMatic* CIP Specialist analyze important CIP water quality parameters such as hardness, pH, and ppm of iron and buffers.

## Water Quality Testing with the *BouMatic CIP Optimizer*

### Water Hardness Test –

Measures the amount of calcium and magnesium dissolved in your water, which is defined as "hardness." Knowing the hardness level is critical to the selection of the correct *BouMatic* detergents for your wash.

### Iron Test –

Determines the amount of iron present in your water. Iron can only be removed from equipment surfaces with the proper cleaning agents.

### pH Test –

Determines whether your water source is alkaline or acidic, which can change dosage amounts.

### Buffer Test –

Measures the amount of carbonates and bicarbonates found in certain water supplies. The amount of these buffers present in your water determine which *BouMatic* acid to use and the best usage rate.

The *CIP Optimizer* also allows your *BouMatic* CIP Specialist to analyze your CIP solutions to determine the levels of active alkalinity, chlorine, sequestration, or acidity present. All are critical to maintain a sparkling clean milking system.

**Ask your *BouMatic* Dealer about "Optimizing" your CIP program.**



## CIP Optimizer System Wash Solution Testing

### Active Alkalinity Test –

The measure of a detergent's ability to remove milk fat.

### Chlorine Titration Test –

The measure of a cleaner's ability to remove milk protein, or sanitize the CIP system.

### Sequestration Titration Test –

The measure of a detergent's ability to tie-up minerals in the CIP water. Conditioning the water is required to clean milking equipment effectively.

## Optimizing your CIP System

In addition to the *CIP Optimizer*, your *BouMatic CIP Specialist* has a unique *BouMatic Dairy Profiler* software program that works with the *CIP Optimizer* to analyze and set your CIP system for maximum performance and efficiency.

Water volume usage, water temperature, air injection settings, drainage, and vacuum level all need to be set for optimum performance and the *Dairy Profiler* software program helps measure those settings. Armed with this data, your *BouMatic CIP Specialist* can recommend improvements to your system design, if needed, and help ensure optimum performance of your CIP system.

## BouMatic Guardian™ II Cleaning System

*BouMatic Guardian II*, the dairy industry's most advanced CIP system, automatically cleans and sanitizes your system after each milking. The *Guardian II* combines maximum washing efficiency with the security of a wash monitoring system and includes a safety alarm to warn you when anything falls outside of normal washing parameters.

The *Guardian II* pipeline washer offers the cleaning and sanitation features you deserve and the safety features you expect.

The *Guardian II* system allows for a customized mixture of super concentrated CIP chemical, set precisely for your water condition and milking system.

The *Guardian II* is the most advanced dairy CIP wash system available. It provides the perfect wash every time, day after day, for the best cost per wash. Available exclusively from your *BouMatic* dealer.

Contact your local *BouMatic* Dealer for a complete list of features, benefits, and pricing options. Find your nearest *BouMatic* Dealer, at: [www.boumatic.com](http://www.boumatic.com).



## BouMatic Series H-100 Water Conditioners

### Benefit from Softened Water Throughout Your Home and Dairy

- Save up to 50% on pipeline detergent and acid
- Dishwashers and laundry machines last up to 30% longer
- Water heater efficiency is increased from 21% to 29%
- Eliminate water spots on equipment and stainless steel
- Clothing will be whiter, brighter and last longer



### H-100 Conditioning System Features:

- Selectable programming options ensure conditioned water for your family's needs
- Noryl™ corrosion-resistant control valve body is durable for long life; all internal components are lead-free
- Pre-fill brine tank with softened water reduces salt-bridging problems and cleaning of brine tank
- No need for battery backup
- Permanent memory backup of all programmed settings during power outages

### H100-24

Part No.	Mineral (cu. ft.)	Med. Salt (grains/lbs.)	Service Flow	Flow Rate Rating (gpm/psi)	Back Wash @ 15 psi	Mineral Tank (in.)	Brine Tank Size (in.)	Salt Storage (lbs.)
2036007	0.75	21,040/7.5	9.8	13.1	1.3	8 x 44	18 x 33	360

### H100-32

Part No.	Mineral (cu. ft.)	Med. Salt (grains/lbs.)	Service Flow	Flow Rate Rating (gpm/psi)	Back Wash @ 15 psi	Mineral Tank (in.)	Brine Tank Size (in.)	Salt Storage (lbs.)
2036001	1.0	28,060/10.0	10.1	13	1.7	9 x 48	18 x 33	360

### H100-48

Part No.	Mineral (cu. ft.)	Med. Salt (grains/lbs.)	Service Flow	Flow Rate Rating (gpm/psi)	Back Wash @ 15 psi	Mineral Tank (in.)	Brine Tank Size (in.)	Salt Storage (lbs.)
2036002	1.5	42,090/15.0	10.5	14.1	2.2	10 x 54	18 x 40	360

## BouMatic Series H-100 Water Conditioners continued

### H100-96

Part No.	Mineral (cu. ft.)	Med. Salt (grains/lbs.)	Service Flow	Flow Rate Rating (gpm/psi)	Back Wash @ 15 psi	Mineral Tank (in.)	Brine Tank Tank Size (in.)	Salt Storage (lbs.)
2036006	3.0	84,180/30.0	14.4	19.2	4.2	14 x 65	24 x 41	660

### H125-128ED

Part No.	Mineral (cu. ft.)	Med. Salt (grains/lbs.)	Flow Rate Rating (gpm/psi)	Back Wash @ 15 psi	Mineral Tank (in.)	Brine Tank Tank Size (in.)	Salt Storage (lbs.)
5100349	4.0	112,000/40.0	25/15	5.3	16 x 65	24 x 41	640

### H150-150

Part No.	Mineral (cu. ft.)	Med. Salt (grains/lbs.)	Flow Rate Rating (gpm/psi)	Back Wash @ 15 psi	Mineral Tank (in.)	Brine Tank Tank Size (in.)	Salt Storage (lbs.)
5100350	5.0	140,000/50.0	46/15	9.0	22 x 60	24 x 50	750

### TN2-150-18

#### Dual Tank

- 80.5 in. System Height; 70 in. In/Out Height; 45 in. Width-Single; 66 in. Width-Twin

Part No.	Mineral (cu. ft.)	Med. Salt (grains/lbs.)	Flow Rate Rating (gpm/psi)	Back Wash @ 15 psi	Mineral Tank (in.)	Brine Tank Tank Size (in.)	Salt Storage (lbs.)
5100397	5.0	140,000/50.0	67/15	9.0	18 x 65	24 x 50	750



## The Iron Curtain™ Filtration System

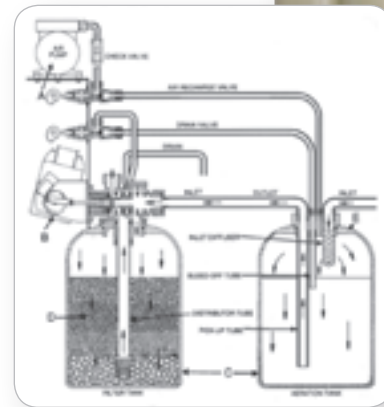
Hellenbrand's Iron Curtain™ Filtration System is the single system that guards against a multitude of water problems. Imagine. No more iron taste. No more sulfur smell. No more corroding pipes. Longer life for your appliances, water heater and softener. Fresh, clean smelling, great tasting water can be yours with the Iron Curtain™ filtration system.

### Our Revolutionary Design Means Efficient Operation

The Iron Curtain™ is unlike old-fashioned iron filters. Its unique operation reduces costs and maintenance while delivering years of trouble-free service.

#### The Iron Curtain™

- Requires no chemicals or salt for operation or regeneration
- Requires no air injectors, venturis or micronizers
- Removes dissolved and precipitated iron in high concentrations
- Automatically increases pH of acid water on type "A" systems



Operation is simple. Mineral rich water is forced through an aeration tank that converts dissolved minerals such as iron, manganese and sulfur into solid particles. These tiny mineral particles then circulate in the system for a period of time long enough where they are trapped in the filter. This way the highest level of dissolved minerals can be easily removed from your water.

### IC-10<sup>1</sup>

Part No.	Filter Aeration Tank (in.)	Media (cu. ft.)	Inlet Outlet (in.)	Max. Service		Floor Space - W x H x D (in.)
				Flow Rate Rating (gpm)	Back Wash Rate <sup>2</sup> (gpm)	
2036003	10 x 54	1.5	.75	5.0	5.0	26 x 70 x 16

<sup>1</sup> Model IC-10 was tested under the Water Quality Association S-200 Standard to provide filtered water with less than 0.2ppm (Fe) Iron when challenged with 10ppm (Fe) Iron, less than 0.05ppm (Mn) Manganese when challenged with 2ppm (mn) Manganese, and less than 0.2ppm (H<sub>2</sub>S) Hydrogen Sulfide when challenged with 10ppm (H<sub>2</sub>S) Hydrogen Sulfide.

<sup>2</sup> Water temperature above 60°F will require higher backwash rates – contact factory for more information.

### IC-12

Part No.	Filter Aeration Tank (in.)	Media (cu. ft.)	Inlet Outlet (in.)	Max. Service		Floor Space - W x H x D (in.)
				Flow Rate Rating (gpm)	Back Wash Rate (gpm)	
2036004	12 x 52	2.0	1	7.0	8.0	30 x 68 x 18

### IC-13

Part No.	Filter Aeration Tank (in.)	Media (cu. ft.)	Inlet Outlet (in.)	Max. Service		Floor Space - W x H x D (in.)
				Flow Rate Rating (gpm)	Back Wash Rate (gpm)	
2036005	13 x 54	2.5	1	9.0	10.0	32 x 70 x 20





## Custom Blend, Super Concentrated CIP Products

### **Guard® 100**

#### **Super Concentrated Alkaline CIP Detergent**

- Use with the *Guardian*, *Guardian II*, *Glacier Guard*, and *Dari-Chem* CIP systems
- Use in most water hardness conditions - see label directions
- Packed with sequestering agents, which deliver maximum cleaning power
- Removes Orbeseal (Pfizer trademark) pipeline residues - see label directions
- Use with *Tru-Blu Chlor 125* In CIP washing systems

#### **ORDER INFORMATION**

5 gal.	8523137
15 gal.	8522137
30 gal.	8522138
55 gal.	8522129
275 gal.	8522708

### **Guard® 50**

#### **Super Concentrated Alkaline CIP Detergent**

- Use with the *Guardian*, *Guardian II*, *Glacier Guard*, and *Dari-Chem* CIP systems
- Use in water with 10 or less grains of hardness
- Excellent cost per wash savings in soft water conditions
- Use with *Tru-Blu Chlor 125* In CIP washing systems

#### **ORDER INFORMATION**

15 gal.	8523940
30 gal.	8524236
55 gal.	8523941
275 gal.	8523942

### **Maxi-Guard™**

#### **Super Concentrated Specialty Cleaner for Very Difficult Wash Conditions**

- Use with the *Guardian*, *Guardian II*, *Glacier Guard*, and *Dari-Chem* CIP systems
- Use in difficult cleaning conditions
- Water over 30 grains of hardness and/or water with silica minerals
- Use with *Tru-Blu Chlor 125* In CIP washing systems

#### **ORDER INFORMATION**

5 gal.	8523975
15 gal.	8523976
30 gal.	8524235
55 gal.	8523977

### **Tru-Blu Chlor™ 125**

#### **Chlorine Sanitizer and Cleaning Agent**

- Proven, quick-acting germicide when used at recommended concentrations
- Effective against a wide range of bacteria
- Helps clean milk protein from equipment surfaces
- EPA-registered sanitizer

#### **ORDER INFORMATION**

4X1 gal.	8521152
5 gal.	8521153
15 gal.	8522965
55 gal.	8522130
275 gal.	8523583

### **Acid-Guard™ S**

#### **Concentrated Acid Cleaner**

- Use with the *Guardian*, *Guardian II*, *Glacier Guard*, and *Dari-Chem* CIP systems
- Highly concentrated, low foaming CIP acid cleaner
- Can be used in highly buffered water
- Tackles hard to clean mineral deposits on CIP equipment surfaces



#### **ORDER INFORMATION**

5 gal.	8523984
15 gal.	8523985
30 gal.	8523986
55 gal.	8523987
275 gal.	8523988

## Chlorinated Alkaline Liquid CIP Detergents



### **Kleenline™**

#### **Super Concentrated for Difficult Wash Conditions**

- Powerful, high-end CIP detergent
- Versatile - can be used in water with high levels of hardness
- Very high level of water conditioning sequesterants

#### **ORDER INFORMATION**

5 gal.	8521129
30 gal.	8522949
55 gal.	8523152
275 gal.	8522220

### **Challenge™**

#### **Highly Concentrated Cleaner for Average Wash Conditions**

- Use in low to high levels of hardness water
- Provides excellent cleaning capabilities in most water conditions
- Economical cost per wash in typical water conditions found on most dairies

#### **ORDER INFORMATION**

5 gal.	8521132
15 gal.	8521133
30 gal.	8521134
55 gal.	8523766
275 gal.	8522219

### **Tru-Blu LCD™**

#### **Economical Cleaner for Applications with Soft Water**

- Excellent performance and cost per wash in soft water
- Ideal to use with water that is 10 or less grains of hardness

#### **ORDER INFORMATION**

5 gal.	8523452
15 gal.	8523451
30 gal.	8524237
55 gal.	8523454
275 gal.	8523552

### **Maxi-Power™**

#### **Specialty Cleaner for Very Difficult Wash Conditions**

- Designed to clean in the toughest water conditions
- Use when silica is present in water

#### **ORDER INFORMATION**

5 gal.	8522131
15 gal.	8522132
30 gal.	8521126
55 gal.	8522133
275 gal.	8522218



## CIP Specialty Detergent

### **System Shock™**

#### **Powerful CIP Detergent Booster**

- Use *System Shock* when that “extra punch” is needed to eliminate milkstone buildups
- Removes mineral residues from stainless steel including difficult to remove barium sulfate
- Enhanced with chelating agents, extra alkalinity and other additives
- Does not contain phosphates
- May be used in the normal alkaline wash

#### **ORDER INFORMATION**

4X1 gal.	8523925
5 gal.	8523926
15 gal.	8523927

## Chlorinated Alkaline Powdered CIP Detergents

### **Excel Plus™**

#### **For Difficult Conditions Requiring Higher Alkalinity**

- Use to maintain hard-to-clean CIP equipment free from fat or grease buildups
- Use to remove fat or grease buildups quickly
- Use when conditions dictate very high alkalinity levels
- Can be used at high concentration levels without overdosing chlorine levels

#### **ORDER INFORMATION**

20 lb.	8522174
100 lb.	8522175
400 lb.	8522176

### **Score II™**

#### **For Typical and Hard-to-Clean Applications**

- Strong, alkaline/chlorine balanced, CIP detergent
- Works extremely well in most systems and water conditions
- Recommended for use in a wide range of water hardness
- Recommended for use in extreme water conditions over 35 grains of hardness
- Recommended for use in water where silica is present

#### **ORDER INFORMATION**

20 lb.	8523763
100 lb.	8523764
400 lb.	8523765





## CIP Acid Cleaners

### **Acid 60™**

#### **Non-Foaming, Heavy Duty Acid Cleaner for Highly Buffered Water**

- Buffers hinder acids from reducing the pH of wash solutions
- Acid 60 is effective and economical in over 600+ buffered water
- Recommended for use in barium water
- Recommended for use in iron water
- Brightens stainless steel
- Helps pasivate stainless steel to prevent rusting
- Phosphoric/nitric blend

#### **ORDER INFORMATION**

5 gal.	8523164
15 gal.	8523165
30 gal.	8523674
55 gal.	8523166
275 gal.	8523167

### **Acid 40™**

#### **Non-Foaming, Acid Cleaner for Mid-Range Buffered Water**

- Perfect balance between performance and economy
- Low in phosphates
- Phosphoric/sulfuric blend

#### **ORDER INFORMATION**

4X1 gal.	8523928
5 gal.	8521148
15 gal.	8521150
30 gal.	8521151
55 gal.	8523172
275 gal.	8522223

### **Tru-Blu LCA™**

#### **Non-Foaming, Acid Cleaner for Slightly Buffered Water**

- Formulated for low buffered water
- Provides savings without sacrificing performance in quality water
- Phosphoric/sulfuric blend

#### **ORDER INFORMATION**

5 gal.	8523456
15 gal.	8523458
30 gal.	8523709
55 gal.	8523459
275 gal.	8523553

### **Acid-Guard™ S**

#### **Concentrated Acid Cleaner**

- Use with the *Guardian*, *Guardian II*, *Glacier Guard*, and *Dari-Chem* CIP systems
- Highly concentrated, low foaming CIP acid cleaner
- Can be used in highly buffered water
- Tackles hard to clean mineral deposits on CIP equipment surfaces



#### **ORDER INFORMATION**

5 gal.	8523984
15 gal.	8523985
30 gal.	8523986
55 gal.	8523987
275 gal.	8523988

## Acid Sanitizers

Acid sanitizers combine the acid rinse cycle and the sanitizing cycle into a single, fast step. They play a dual role as an acidifier AND sanitizer, **saving time and labor**. **Acid sanitizers also reduce chlorine damage to rubber, and conserve water** by eliminating the final chlorine sanitizing cycle. Acid sanitizers are formulated to safely remain in the CIP or bulk tank equipment between milkings where they maintain a low pH environment to help reduce bacterial growth until the next milking.



### **Protocol™** Acid Sanitizer

- Powerful commercial grade cleaner
- High level of surfactants that penetrate, soften and remove milkstone
- Low-foaming at recommended usage levels in water over 10 grains of hardness
- Higher-foaming in soft water
- Pleasant smell
- No iodine staining
- EPA registered

#### ORDER INFORMATION

15 gal.	8523727
55 gal.	8523728

### **Tru-Blu One Step Ahead™** Fatty Acid Sanitizer

- Effective against a broad range of micro-organisms
- Very concentrated
- No iodine staining
- EPA registered fatty acid sanitizer

#### ORDER INFORMATION

4X1 gal.	8522636
5 gal.	8523464
15 gal.	8523466
55 gal.	8523468

### **SanAcid™** Acid System Conditioner

- More concentrated
- Low foaming
- High surfactant

#### ORDER INFORMATION

15 gal.	8524228
55 gal.	8524229