

# **Industrial Water Division**

Product line



## **Sphagnum Moss**

The story behind our discovery is genuinely unique, and began with the frustration one of our founders was feeling from his inability to keep his spa clean. An esteemed vascular surgeon and cellular biologist, Dr. David Knighton is also a pilot, inventor, and committed outdoorsman, with a broad understanding of ecological processes.

Already intrigued by the storied use of moss in wound healing, he believed that it was having a similar effect on the lakes he viewed during his flights "up north" in Minnesota. The further north he went, the clearer the water became.

Working with his business partner, Vance Fiegel, they gathered some moss and began the series of experiments that led to the formation of Creative Water Solutions. After testing a multitude of moss types and species, they narrowed down the suitable material to two species of the Sphagnum moss genus. This species of moss is used in orchid germination, and harvested in a highly innovative and sustainable manner.

And, the use of Sphagnum moss has proved to have remarkable and pervasive effects on water, which have led to applications going far beyond the pool industry, into various industrial water treatments, including cooling towers, boilers, steam generators, and closed recirculation systems.





### **KEY BENEFITS OF PROMOSS™ USE**

- **Reduced Organic Contamination**
- Reduced Scale
- Reduced Corrosion
- •• Stabilized pH and Alkalinity
- Reduced Water Usage
- ■■ Reduced Energy Usage
- Reduced Chemical Usage
- **■■** Reduced Maintenance



### ProMoss<sup>™</sup> 6



For use in 10" offline contact chambers, ProMoss<sup>™</sup> 6 is the primary moss unit used in small, closed loop water systems.

The moss is enclosed in a specialized blue mesh. When it contacts water, the moss expands to fill the sleeve.

Each application can use as many units as the dosage requires, and ProMoss<sup>™</sup> 6 is changed at regular intervals, usually monthly.





### ProMoss<sup>™</sup> 4



For use in 20" offline contact chambers, ProMoss™ 4 is the primary moss unit used in medium to large closed loop water or glycol systems.

For contact chambers at least 30" tall, ProMoss™ 4XL can be used.

The moss is enclosed in a specialized blue mesh. When it contacts water, the moss expands to fill the sleeve.

Each application can use as many units as the dosage requires, and ProMoss™ is changed at regular intervals, usually monthly.





### ProMoss<sup>™</sup> 4XL



For use in 30" and taller offline contact chambers, ProMoss™ 4XL is the primary moss unit used in large closed loop water or glycol systems.

Two ProMoss<sup>TM</sup> 4 units are enclosed in a special blue mesh, with a seal between them to keep separation. When exposed to water, the moss units will expand and fill each section of the 30" sleeve.

Each application can use as many units as the dosage requires, and  $ProMoss^{TM}$  is changed at regular intervals, usually monthly.





### ProMoss<sup>™</sup> 3



In holding tank/basin and large offline contact chambers, ProMoss™ 3 is the primary moss unit used in industrial water applications.

A durable strainer bag contains 3 "bricks" of ProMoss™, which are broken up and placed inside the contact chamber.

Each application can use as many units as the dosage requires, and  $ProMoss^{TM}$  is changed at regular intervals, usually monthly.





### ProMoss<sup>™</sup> 2



In holding tank/basin and large offline contact chambers, ProMoss™ 2 is typically used with ProMoss™ 3 to achieve an accurate Sphagnum moss dosage.

The strainer bag contains 2 "bricks" of ProMoss<sup>TM</sup>, which are also broken up and placed inside the contact chamber.

ProMoss™ 2 is used and cared for in the same manner as ProMoss™ 3.





### ProMoss<sup>™</sup> 1 and .5



In holding tank/basin, small cooling tower, water loop or fountain, ProMoss™ 2 is typically used with ProMoss™ 1 or .5 to achieve an accurate Sphagnum moss dosage.

The strainer bag contains 1 or 1/2 "brick" of ProMoss<sup>TM</sup>, which are also broken up and placed inside the contact chamber.

ProMoss™ 1 and .5 are used and cared for in the same manner as ProMoss™ 3 and 2.







### CC-ITL

One of the more popular and most simple ProMoss™ application methods uses the holding tank or basin.

ProMoss  $^{\text{TM}}$  is broken up within the strainer bag, loaded into the contact chamber, and lowered into the holding tank or basin.

The existing circulation and water movement in the holding tank or basin works with  $ProMoss^{TM}$  to deliver the benefits throughout the system.

## SIZING and KEY ATTRIBUTES

- 37" x 13" x 19" (HWD)
- 94cm x 33.02cm x 48.26cm (HWD)
- Capacity: 8 ProMoss<sup>™</sup> 3 or 2
- Easily accessed and maintained
- Standard rope length: ~10 ft.
  - \* Wooden pedestals are no longer used

#### Also in this product family:

CC-ITS with 1 ProMoss<sup>™</sup> 3, 2 or 1 capacity CC-ITM with 4 ProMoss<sup>™</sup> 3 or 2 capacity





### **CC-ITM**

The CC-ITM can be used independently, or in conjunction with the CC-ITL. It is approximately half the size of the CC-ITL.

When using the CC-ITM, ProMoss™ is applied in exactly the same manner as the CC-ITL.

The existing circulation and activity in the holding tank or basin works with  $ProMoss^{TM}$  to deliver the benefits throughout the system.

#### SIZING and KEY ATTRIBUTES

- 19" x 13" x 19" (HWD)
- 48.26cm x 33.02cm x 48.26cm (HWD)
- Capacity: 4 ProMoss<sup>™</sup> 3
- Easily accessed and maintained
  - \* Wooden pedestals are no longer used

#### Also in this product family:

CC-ITS with 1 ProMoss<sup>™</sup> 3 or 2 capacity CC-ITL with 8 ProMoss<sup>™</sup> 3 or 2 capacity





### **CC-ITS**

The CC-ITS can be used independently, or in conjunction with the CC-ITL or CC-ITM. It is approximately 1/4 the size of the CC-ITM.

When using the CC-ITS, ProMoss™ is applied in exactly the same manner as the CC-ITL or CC-ITM.

The existing circulation and activity in the holding tank or basin works with  $ProMoss^{TM}$  to deliver the benefits throughout the system.

#### SIZING and KEY ATTRIBUTES

- 3.5" x 18.5" x 18.5" (HWD)
- 9 cm x 47 cm x 47 cm (HWD)
- Capacity: 1 ProMoss<sup>™</sup> 1 or 2
- Easily accessed and maintained
- Standard rope length: ~5 ft.
  - \* Wooden pedestals are no longer used

#### Also in this product family:

CC-ITM with 4 ProMoss<sup>™</sup> 3 or 2 capacity CC-ITL with 8 ProMoss<sup>™</sup> 3 or 2 capacity





### CC-F

It is the smallest contact chamber used for a small cooling tower, water loop or fountain. To keep submerged, add a small weight. To keep secured in place, use a magnet or thin rope.

The existing circulation and activity in the holding tank or basin works with ProMoss™ to deliver the benefits throughout the system.

#### SIZING and KEY ATTRIBUTES

Chamber diameter: 4.25" (10.80 cm)

• Chamber length: 12.5" (31.75 cm)

• Operating Temperature: Max 110°F (43°C)

Capacity: 1 ProMoss<sup>™</sup> .5

· Easily accessed and maintained





### **CC-BS**

The CC-BS can be used in closed hot or cold water loops.

The CC-BS will hold up to 5 ProMoss™ 6, which are placed around the cartridge filter.

The existing circulation in the water loop will deliver the benefits of ProMoss™ 6 throughout the system.

The filter cartridge and ProMoss™ need to be replaced monthly with the moss.

#### SIZING and KEY ATTRIBUTES

• Chamber Height: 10" (25.4 cm)

Chamber Width: Max 5.5"

• Pipe Size: 3/4" (2 cm) NTP

Flow Rate: 5-10 gpm

(19-38 L/M)

Operating Pressure: Max 125 psi

(8.8 Kg/cm<sup>2</sup>)

Operating Temperature: Max 165°F

(64°C)

Capacity: 5 ProMoss™ 6

Easily accessed and maintained

#### Also in this product family:

CC-BL with 5 ProMoss™ 4 capacity





### CC-BL

The CC-BL can be used in closed hot or cold water loops.

The CC-BL will hold up to 5 ProMoss™ 4, which are placed around the cartridge filter.

The existing circulation in the water loop will deliver the benefits of ProMoss™ 4 throughout the system.

The filter cartridge and ProMoss™ need to be replaced monthly.

#### SIZING and KEY ATTRIBUTES

• Chamber Height: 20" (50.8 cm)

• Chamber Width: Max 5.5"

• Pipe Size: 3/4" (2 cm) NTP

Flow Rate: 5-10 gpm

(19-38 L/M)

Operating Pressure: Max 125 psi

(8.8 Kg/cm<sup>2</sup>)

Operating Temperature: Max 165°F

 $(64^{\circ}C)$ 

Capacity: 5 ProMoss™ 4

Easily accessed and maintained

#### Also in this product family:

CC-BS with 5 ProMoss™ 6 capacity





### **CC-SSHTS**

The CC-SSHTS can be used in closed hot or cold water loops.

The CC-SSHTS will hold up to 5 ProMoss™ 6, which are placed around the cartridge filter.

The existing circulation in the water loop will deliver the benefits of ProMoss™ 6 throughout the system.

The filter cartridge and ProMoss™ need to be replaced monthly.

#### SIZING and KEY ATTRIBUTES

Chamber Height: 13 3/4"Chamber Width: 6"

Pipe Size: 1" FNTP

Flow rate: 7 gpm optimal
 Operating pressure: Max 250 psi
 Operating temperature: Max 275°F
 Capacity: 5 ProMoss™ 6

#### Also in this product family:

CC-SSHTM with 5 ProMoss™ 4 capacity CC-SSHTL with 10 ProMoss™ 4XL capacity CC-SSHTXL with 20 ProMoss™ 4XL capacity





### **CC-SSHTM**

The CC-SSHTM can be used in closed hot or cold water loops.

The CC-SSHTM will hold up to 5 ProMoss™ 4, which are placed around the cartridge filter.

The existing circulation in the water loop will deliver the benefits of ProMoss™ 4 throughout the system.

The filter cartridge and ProMoss™ need to be replaced monthly.

#### SIZING and KEY ATTRIBUTES

Chamber Height: 23 7/8"Chamber Width: 4"

• Pipe Size: 1" FNTP

□ Flow rate: 14 gpm optimal
 □ Operating pressure: Max 250 psi
 □ Operating temperature: Max 275 °F
 • Capacity: 5 ProMoss™ 4

#### Also in this product family:

CC-SSHTS with 5 ProMoss<sup>™</sup> 6 capacity CC-SSHTL with 10 ProMoss<sup>™</sup> 4XL capacity CC-SSHTXL with 20 ProMoss<sup>™</sup> 4XL capacity





### **CC-SSHTL**

The CC-SSHTL can be used in closed hot or cold water loops.

The CC-SSHTL will hold up to 10 ProMoss™ 4XL, which are placed in the perforated stainless steal basket.

The existing circulation in the water loop will deliver the benefits of the ProMoss™ 4XL sticks throughout the system.

The filter cartridge and ProMoss™ need to be replaced monthly.

#### SIZING and KEY ATTRIBUTES

Chamber Height: 34 7/8"Chamber Width: 6"

• Pipe Size: 1" FNTP

□ Flow rate:
 □ Operating pressure:
 □ Operating temperature:
 Max 150 psi
 Max 300°F

Capacity: 10 ProMoss™ 4XL

#### Also in this product family:

CC-SSHTS with 5 ProMoss<sup>™</sup> 6 capacity CC-SSHTM with 5 ProMoss<sup>™</sup> 4XL capacity CC-SSHTXL with 20 ProMoss<sup>™</sup> 4XL capacity





### **CC-SSHTXL**

The CC-SSHTXL can be used in closed hot or cold-water loops.

The CC-SSHTXL will hold up to 20 ProMoss<sup>™</sup> 4XL, which are placed in the perforated stainless steal baskets.

The existing circulation in the water loop will deliver the benefits of ProMoss<sup>™</sup> 4XL throughout the system.

The filter cartridge needs to be replaced monthly with the moss.

#### SIZING and KEY ATTRIBUTES

Chamber Height: 49 9/16"
Chamber Width: 26"
Flange Size: 3"

□ Flow rate:
 □ Operating pressure:
 □ Operating temperature:
 Max 150 psi
 Max 250°F

Capacity: 20 ProMoss™ 4XL

#### Also in this product family:

CC-SSHTS with 5 ProMoss™ 6 capacity CC-SSHTM with 5 ProMoss™ 4 capacity CC-SSHTL with 10 ProMoss™ 4XL capacity





# CC-I80, I90, I140 and I150

The CC-I80, I90, I140 and I150 are large offline chambers, and are easily plumbed into the existing industrial water system using a bypass (sidestream) method.

Creating a unique tumbling action within the chamber, each CC-I80, I90, I140 and I150 hold from 3 up to 16 ProMoss™ 3 or ProMoss™ 2. The effects are efficiently delivered throughout the system.

Facility operators and service people love the ease with which ProMoss™ can be managed and changed inside the CC-I80, I90, I140 or I150.

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#### SIZING and KEY ATTRIBUTES

Dimensions (inches)				
	CC-180	CC-190	CC-I140	CC-I150
Height	32.70	37.59	40.06	45.50
Width	21.72	27.72	34.22	39.59
Diameter	18.64	24.64	31.14	36.50
Dimension	s (cm)			
	CC-180	CC-190	CC-I140	CC-I150
Height	83.06	95.48	101.75	115.57
Width	55.17	70.41	86.92	100.56
Diameter	47.35	62.59	79.10	92.71

# Bags 3 6 12 16

CC-190

Easy to fill and empty with ProMoss<sup>™</sup>

ProMoss™ 3 or ProMoss™ 2 Capacity

CC-180

- Easy to access
- Also available with NSF 61 certified resin suitable for potable water

CC-I140

CC-I150



## **CC-180**

## **CC-190**





**CC-I140** 



**CC-I150** 







# **Breakaway® Flush**

Breakaway® flush helps get rid of those unseen deposits that build up within the plumbing and filter of your water treatment system. These elements reduce water circulation and filtration power.

Breakaway<sup>®</sup> flush has been specifically formulated to ensure that the unwanted build up of organic contamination is flushed away from the heart of your system, which helps it to achieve efficiency and effectiveness. Use with ProMoss™ water treatment for maximum results.

#### SIZING and KEY ATTRIBUTES

- □ 1.06 gallon (4L) jugs sold in case of 4
- □ 5 gallon (18.93L) pails also available
- ☐ Typical dosing is 1 gallon/ 10 square ft (4L /0.92m²) for particulate filters
- □ Dilute 1:10 in water for cartridge filter cleaning
- Use with Breakaway® Air Scour Kit for particulate filters







## Canadian Moss Solutions Inc.

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