DATA SHEET

HMCT
Harris Membrane Clean Technology Inc.

DairyHWS- NF Membrane Series

Product Description

Membrane material: PA

MWCO: 15 0-300D

Outer wrap: Net

Application: Sanitary water for Dairy and Food

Spacer: 31/46 mil

Feature: Conform to 3A Standard

Membrane Characteristics

Product	Water Flux LMH	Salt Rejection /MgSO4	Salt Rejection /NaCl
Dairy HWS -NF	40	＞98%	/

Test Condition: 2000 mg/L $Mgs0_4$,110 psi(0.76Mpa),77℉(25℃),pH 8.

Product Specifications

Model	Spacer (mil)	Membrane area (ft2/m2)	Outer wrap
3838	46	60（5.6）	Net
3840	31	77(7.2)	Net
8038	31	350(32.5)	Net
	46	260（24.2）	

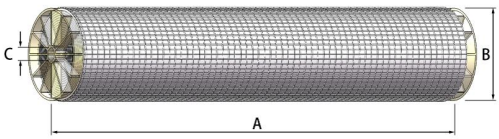
CIP Operation Conditions

Temperature	Minimum PH	Maximum PH
50˚C（122˚F）	3.0	10.0
45˚C（113˚F）	2.0	10.5
35˚C（95˚F）	1.5	11.5
25˚C（77˚F）	1.0	11.5

Operation and Design information

Typical Operating Pressure	200-500PSI
Maximum Operating Pressure	600PSI
Maximum Temperature	Continuous Operation：50˚C
	Hot-water disinfection：90˚C
Maximum Pressure Drop	＜15psi
Chlorine Tolerance	500ppm/h,dechlor is recommended
Maximum Feed Turbidity	＜1NTU
Maximum Feed SDI (15 minutes)	＜5

Nominal Dimensions



Products	Dimensions-(in/mm）		
	A	C	D
Dairy HWS- NF- 3838-46-C-0830	3.8(965)	3.8(97)	0.83(19.05)
Dairy HWS –NF-3840-31-C-0830	38.75（984）	3.8(97)	0.83（19.05）
Dairy HWS- NF-8038-31/46-C-1139	40（1016）	7.9（200.1）	1.139（28.9）

DATA SHEET

HMCT
Harris Membrane Clean Technology Inc.

DairyHWS-RO Membrane Series

Product Description

Membrane material: PA

Outer wrap: Net

Application: Sanitary water for Dairy and Food

Spacer: 31 mil

Feature: Conform to 3A Standard

Membrane Characteristics

Product	Water Flux LMH	Salt Rejection /MgSO4	Salt Rejection /NaCl
Dairy**HWS -RO**	**35**	**>98%**	/

Test Condition: 2000 mg/L $MgSO_4$,225 psi(1.55Mpa).77℉(25℃),pH 8.

Product Specifications

Model	Spacer (mil)	Membrane area (ft2/m2)	Outer wrap
3838	31	75(7.0)	Net
3840	31	77(7.2)	Net
8038	31	350(32.5)	Net

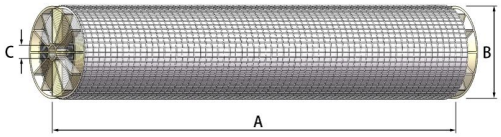
CIP Operation Conditions

Temperature	Minimum PH	Maximum PH
50℃（122℉）	2.0	11.5
45℃（113℉）	1.5	11.5
35℃（95℉）	1.5	11.5
25℃（77℉）	1.0	12.0

Operation and Design information

Typical Operating Pressure	200-500PSI
Maximum Operating Pressure	600PSI
Maximum Temperature	Continuous Operation：50℃
	Hot-water disinfection：90℃
Maximum Pressure Drop	＜15psi
Chlorine Tolerance	500ppm/h,dechlor is recommended
Maximum Feed Turbidity	＜1NTU
Maximum Feed SDI (15 minutes)	＜5

Nominal Dimensions



Products	Dimensions-(in/mm）		
	A	B	C
DairyHWS –RO-3838-31-C-0830	3.8(965)	3.8(97)	0.83(19.05)
DairyHWS -RO-3840-31-C-0830	38.75（984）	3.8（97）	0.83（19.05）
DairyHWS -RO-8038-31-C-1139	38（965）	7.9（200.1）	1.139（28.9）

Important information

- New spiral membranes must be cleaned prior to first use. The cleaning procedure should be in accordance with the instructions provided in the HMCT cleaning description for the spiral membrane concerned.
- The customer is fully responsible for the effects that any incompatible chemicals may have on the spiral membranes.
- After initial wetting, the spiral membranes must be kept moist at all times.
- If the operating specifications provided in this product description are not strictly followed, the limited warranty will be null and void.
- To prevent biological growth during system shutdowns, HMCT recommends that spiral membranes should be immersed in a protective solution.
- Avoid permeate-side back pressure at all times.
- HMCT recommends using a rigid stainless steel ATD end device at the housing outlet end.
- HMCT recommends that the inner diameter of the housing should be approx. 2 mm (0.08”) bigger than the outer diameter of the spiral membrane.
- For storage conditions, please see Storage document.
- For warranties, please see spiral membrane warranty document.

Operating guidelines

HMCT recommends the following start-up procedure from standstill to operating condition:

- The unpressurized plant should be refilled with water.
- Feed pressure should be gradually increased over a 30 – 60 second time scale.
- Before initiating cross-flow at high permeate flux condition (start-up with high-temperature water) the set feed pressure should be maintained for 5 – 10 minutes.
- Cross-flow velocity at the set operating point should be gradually achieved over a period of 15 – 20 seconds.
- Temperature variations should be implemented gradually over a period of 3 – 5 minutes.
- Avoid any abrupt pressure or cross-flow variations on the membranes during start-up, shutdown, cleaning or other sequences in order to prevent possible damage.

Harris Membrane Clean Technology Inc.