



**NORWECO, INC.**

220 Republic Street  
Norwalk, OH 44857  
USA

**CAN/BNQ 3680-600/2023 (R2024)**

*Onsite Residential Wastewater Treatment Technologies*

Certificate number: **2406**

Issue date: **2026-04-15**

Expiry date: **2028-04-30**

**Stand-alone wastewater treatment systems**

**Model Hydro-Kinetic®**

Capacity

| Model Number  | Model Designation | Capacity (Liters/day) |
|---|-------------------|-----------------------|
| 1260L-3M, 1260L-4M<br>1260L-4T, 1260L-DT              | 1260L FEU         | 1260                  |
| 1600L-3M, 1600L-4M<br>1600L-4T, 1600L-DT              | 1600L FEU         | 1600                  |
| 1890L-4M, 1890L-4T,<br>1890L-3M, 1890L-DT             | 1890L FEU         | 1890                  |
| 2270L-4M, 2270L-4T<br>2270L-3M, 2270L-4G,<br>2270L-DT | 2270L FEU         | 2270                  |
| 3020L-3M, 3020L-4M,<br>3020L-DT                       | 3020L FEU         | 3020                  |
| 3780L-3M, 3780L-4M<br>3780L-4T, 3780L-DT              | 3780L FEU         | 3780                  |
| 4730L-3M, 4730L-4M                                    | 4730L FEU         | 4730                  |
| 5670L-3M, 5670L-4M                                    | 5670L FEU         | 5670                  |

Model Configuration

3M: Pre-treatment tank, three chamber treatment tank, Bio-Film Reactor tank.  
3780L-3M, 4730L-3M, 5670L-3M: Pre-treatment tank, anoxic tank, three chamber treatment tank, Bio-Film Reactor tank.

2270L-4G: Four chamber HDPE treatment tank, followed by HDPE Bio-Film Reactor tank.  
4M: Four chamber treatment tank, Bio-Film Reactor tank.

3780L-4M, 4730L-4M, 5670L-4M: Pre-treatment tank, anoxic tank, four chamber mid seam treatment tank, Bio-Film Reactor tank.

4T: Four chamber top seam tank, followed by Bio-Film Reactor tank.

3780L-4T: Pre-treatment tank, anoxic tank, four chamber top seam treatment tank, Bio-Film Reactor tank.

DT: Two chamber pre-treatment/anoxic tank, two chamber aeration/clarifier tank, Bio-Film Reactor tank.

Material

Constructed using concrete or plastic tanks that conforms with the strength and watertightness requirements of Standard CAN/CSA-B66 or Standard BNQ 3680-905, or equivalent acceptable to the Authority having jurisdiction.

Treatment Class

B-IV, D-I and N-I.



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**Stand-alone wastewater treatment systems**

**Model Hydro-Kinetic®**

Certificate precisions

This onsite domestic wastewater treatment system, designed for the treatment classes corresponding to the treated effluent (B-IV, D-I and N-I.), also meets the requirements of a lower classification (e.g., B-III, D-I and N-I.) for each treatment type, respectively

The tests specified in articles 8.1 and 8.2 were carried out with wastewater, at a minimum controlled temperature of 11 °C ± 1 °C.

Note that this treatment chain has no septic tank.

Pre-treatment and anoxic tanks can be combined into a single tank or two tanks in series. A single Bio-Film Reactor tank with up to two reactor elements is utilized for models rated 3020 L/d or less.

Models rated for 3780 L/d and greater may use two Bio-Film Reactor tanks with two reactor elements per tank, or one Bio-Film Reactor tank with four reactor elements.



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**Stand-alone wastewater treatment systems**

**Model Hydro-Kinetic® + phosphorus removal + UV disinfection**

Capacity

| Model Number   | Model Designation | Capacity (Liters/day) |
|--|-------------------|-----------------------|
| 1260L-P-UV-3M, 1260L-P-UV-4M<br>1260L-P-UV-4T, 1260L-P-UV-DT                   | 1260L FEU         | 1260                  |
| 1600L-P-UV-3M, 1600L-P-UV-4M<br>1600L-P-UV-4T, 1600L-P-UV-DT                   | 1600L FEU         | 1600                  |
| 1890L-P-UV-4M, 1890L-P-UV-4T<br>1890L-P-UV-3M, 1890L-P-UV-DT                   | 1890L FEU         | 1890                  |
| 2270L-P-UV-4M, 2270L-P-UV-4T<br>2270L-P-UV-3M, 2270L-P-UV-4G,<br>2270L-P-UV-DT | 2270L FEU         | 2270                  |
| 3020L-P-UV-3M, 3020L-P-UV-4M,<br>3020L-P-UV-DT                                 | 3020L FEU         | 3020                  |
| 3780L-P-UV-3M, 3780L-P-UV-4M<br>3780L-P-UV-4T, 3780L-P-UV-DT                   | 3780L FEU         | 3780                  |
| 4730L-P-UV-3M, 4730L-P-UV-4M   | 4730L FEU         | 4730                  |
| 5670L-P-UV-3M, 5670L-P-UV-4M   | 5670L FEU         | 5670                  |

Model Configuration

P-UV-3M: Pre-treatment tank, three chamber treatment tank, Bio-Film Reactor tank, Phos-4-Fade, UV disinfection.

3780L-P-UV-3M, 4730L-P-UV-3M, 5670L-P-UV-3M: Pre-treatment tank, anoxic tank, three chamber treatment tank, Bio-Film Reactor tank, Phos-4-Fade tank, UV disinfection.

2270L-P-UV-4G: Four chamber HDPE treatment tank, HDPE Bio-Film Reactor tank, Phos-4-Fade tank, UV disinfection.

P-UV-4M: Four chamber treatment tank, Bio-Film Reactor tank, Phos-4-Fade tank, UV disinfection.

3780L-P-UV-4M, 4730L-P-UV-4M, 5670L-P-UV-4M: Pre-treatment tank, anoxic tank, four chamber treatment tank, Bio-Film Reactor tank, Phos-4-Fade tank, UV disinfection.

P-UV-4T: Four chamber top seam treatment tank, Bio-Film Reactor tank, Phos-4-Fade tank, UV disinfection.

3780L-P-UV-4T: Pre-treatment tank, anoxic tank, four chamber treatment tank, Bio-Film Reactor tank, Phos-4-Fade tank, UV disinfection.

P-UV-DT: Two chamber pre-treatment/anoxic tank, two chamber aeration/clarifier tank, Bio-Film Reactor tank, Phos-4-Fade tank, UV disinfection.

Material

Constructed using concrete or plastic tanks that conforms with the strength and watertightness requirements of Standard CAN/CSA-B66 or Standard BNQ 3680-905, or equivalent acceptable to the Authority having jurisdiction.



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Expiry date: **2028-04-30**

**Stand-alone wastewater treatment systems**

**Model Hydro-Kinetic® + phosphorus removal + UV disinfection**

|                        |  |
|------------------------|--|
| Treatment Class        | B-IV, P-II, D-IV and N-I.  |
| Certificate precisions | <p>This onsite domestic wastewater treatment system, designed for the treatment classes corresponding to the treated effluent (B-IV, P-II, D-IV and N-I), also meets the requirements of a lower classification (e.g., B-III, P-I, D-IV and N-I) for each treatment type, respectively</p> <p>The tests specified in articles 8.1 and 8.2 were carried out with wastewater, at a minimum controlled temperature of 11 °C ± 1 °C.</p> <p>Note that this treatment chain has no septic tank</p> <p>Pre-treatment and anoxic tanks can be combined into a single tank or two tanks in series. A single Bio-Film Reactor tank with up to two reactor elements is utilized for models rated 3020 L/d or less.</p> <p>Models rated for 3780 L/d or greater may use two Bio-Film Reactor tanks with two reactor elements per tank, or one Bio-Film Reactor tank with four reactor elements.</p> |

**Authorized UV Lamp:**

Model AT 1500 from Norweco is authorized for systems with hydraulic capacity of 5670 L/d or less.  
UV system can be installed inside Bio-Film Reactor tank when the configuration utilizes a single Bio-Film Reactor tank.  
UV system can be installed inside Phos-4-Fade tank when the configuration utilizes a single Phos-4-Fade tank.



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**Stand-alone wastewater treatment systems**

**Model Hydro-Kinetic® + UV disinfection**

Capacity

| Model Number   | Model Designation | Capacity (Liters/day) |
|--|-------------------|-----------------------|
| 1260L-UV-3M, 1260L-UV-4M<br>1260L-UV-4T, 1260L-UV-DT                 | 1260L FEU         | 1260                  |
| 1600L-UV-3M, 1600L-UV-4M<br>1600L-UV-4T, 1600L-UV-DT                 | 1600L FEU         | 1600                  |
| 1890L-UV-4M, 1890L-UV-4T<br>1890L-UV-3M, 1890L-UV-DT                 | 1890L FEU         | 1890                  |
| 2270L-UV-4M, 2270L-UV-4T<br>2270L-UV-3M, 2270L-UV-4G,<br>2270L-UV-DT | 2270L FEU         | 2270                  |
| 3020L-UV-3M, 3020L-UV-4M,<br>3020L-UV-DT                             | 3020L FEU         | 3020                  |
| 3780L-UV-3M, 3780L-UV-4M<br>3780L-UV-4T, 3780L-UV-DT                 | 3780L FEU         | 3780                  |
| 4730L-UV-3M, 4730L-UV-4M   | 4730L FEU         | 4730                  |
| 5670L-UV-3M, 5670L-UV-4M   | 5670L FEU         | 5670                  |

Model Configuration

UV-3M: Pre-treatment tank, three chamber treatment tank, Bio-Film Reactor tank, UV disinfection.  
 3780L-UV-3M: Pre-treatment tank, anoxic tank, three chamber treatment tank, Bio-Film Reactor tank, UV disinfection.  
 2270L-UV-4G: Four chamber HDPE treatment tank, followed by HDPE Bio-Film Reactor tank, followed by UV disinfection.  
 UV-4M: Four chamber treatment tank, Bio-Film Reactor tank, UV disinfection.  
 3780L-UV-4M: Pre-treatment tank, anoxic tank, four chamber treatment tank, Bio-Film Reactor tank, UV disinfection.  
 UV-4T: Four chamber top seam treatment tank, Bio-Film Reactor tank, UV disinfection.  
 3780L-UV-4T: Pre-treatment tank, anoxic tank, four chamber top seam treatment tank, Bio-Film Reactor tank, UV disinfection.  
 UV-DT: Two chamber pre-treatment/anoxic tank, two chamber aeration/clarifier tank, Bio-Film Reactor tank, UV disinfection.

Material

Constructed using concrete or plastic tanks that conforms with the strength and watertightness requirements of Standard CAN/CSA-B66 or Standard BNQ 3680-905, or equivalent acceptable to the Authority having jurisdiction.

Treatment Class

B-IV, D-IV and N-I.



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**Model Hydro-Kinetic® + UV disinfection**

Certificate precisions      This onsite domestic wastewater treatment system, designed for the treatment classes corresponding to the treated effluent (B-IV, D-IV and N-I), also meets the requirements of a lower classification (e.g., B-III, D-IV and N-I) for each treatment type, respectively

The tests specified in articles 8.1 and 8.2 were carried out with wastewater, at a minimum controlled temperature of 11 °C ± 1 °C.

Note that this treatment chain has no septic tank.

Pre-treatment and anoxic tanks can be combined into a single tank or two tanks in series.

A single Bio-Film Reactor tank with up to two reactor elements is utilized for models rated 3020 L/d or less.

Models rated for 3780 L/d or greater may use two Bio-Film Reactor tanks with two reactor elements per tank, or one Bio-Film Reactor tank with four reactor elements.

**Authorized UV Lamp:**

Model AT 1500 from Norweco is authorized for systems with hydraulic capacity of 5670 L/d or less.

UV system can be installed inside Bio-Film Reactor tank when the configuration utilizes a single Bio-Film Reactor tank.

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**Stand-alone wastewater treatment systems**

**Model Hydro-Kinetic® + phosphorus removal**

Capacity

| Model Number  | Model Designation | Capacity (liters/day) |
|---|-------------------|-----------------------|
| 1260L-P-3M, 1260L-P-4M<br>1260L-P-4T, 1260L-P-DT                | 1260L FEU         | 1260                  |
| 1600L-P-3M 1600L-P-4M<br>1600L-P-4T, 1600L-P-DT                 | 1600L FEU         | 1600                  |
| 1890L-P-4M, 1890L-P-4T<br>1890L-P-3M, 1890L-P-DT                | 1890L FEU         | 1890                  |
| 2270L-P-4M, 2270L-P-4T<br>2270L-P-3M, 2270L-P-4G,<br>2270L-P-DT | 2270L FEU         | 2270                  |
| 3020L-P-3M, 3020L-P-4M,<br>3020L-P-DT                           | 3020L FEU         | 3020                  |
| 3780L-P-3M, 3780L-P-4M<br>3780L-P-4T, 3780L-P-DT                | 3780L FEU         | 3780                  |
| 4730L-P-3M, 4730L-P-4M  | 4730L FEU         | 4730                  |
| 5670L-P-3M, 5670L-P-4M  | 5670L FEU         | 5670                  |

Model Configuration

P-3M: Pre-treatment tank, three chamber treatment tank, Bio-Film Reactor tank, Phos-4-Fade tank.

3780L-P-3M, 4730L-P-3M, 5670L-P-3M: Pre-treatment tank, anoxic tank, three chamber treatment tank, Bio-Film Reactor tank, Phos-4-Fade tank.

2270L-P-4G: Four chamber HDPE treatment tank, HDPE Bio-Film Reactor tank, Phos-4-Fade tank.

P-4M: Four chamber treatment tank, Bio-Film Reactor tank, Phos-4-Fade tank.

3780L-P-4M, 4730L-P-4M, 5670L-P-4M: Pre-treatment tank, anoxic tank, four chamber treatment tank, Bio-Film Reactor tank, Phos-4-Fade tank.

P-4T: Four chamber top seam treatment tank, Bio-Film Reactor tank, Phos-4-Fade tank.

3780L-P-4T : Pre-treatment tank, anoxic tank, four chamber top seam treatment tank, Bio-Film Reactor tank, Phos-4-Fade tank.

P-DT: Two chamber pre-treatment/anoxic tank, followed two chamber aeration/clarifier tank, Bio-Film Reactor tank, Phos-4-Fade tank.

Material

Constructed using concrete or plastic tanks that conforms with the strength and watertightness requirements of Standard CAN/CSA-B66 or Standard BNQ 3680-905, or equivalent acceptable to the Authority having jurisdiction.



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**Stand-alone wastewater treatment systems**

**Model Hydro-Kinetic® + phosphorus removal**

|                         |   |
|-------------------------|---|
| Treatment Class         | B-IV, P-II, D-I and N-I.  |
| Certificate explanation | <p>This onsite domestic wastewater treatment system, designed for the treatment classes corresponding to the treated effluent (B-IV, P-II, D-I and N-I), also meets the requirements of a lower classification (e.g., B-III, P-I, D-I and N-I) for each treatment type, respectively</p> <p>The tests specified in articles 8.1 and 8.2 were carried out with wastewater, at a minimum controlled temperature of 11 °C ± 1 °C.</p> <p>Note that this treatment chain has no septic tank</p> <p>Pre-treatment and anoxic tanks can be combined into a single tank or two tanks in series.</p> <p>A single Bio-Film Reactor tank with up to two reactor elements is utilized for models rated 3020 L/d or less.</p> <p>Models rated for 3780 L/d or greater may use two Bio-Film Reactor tanks with two reactor elements per tank, or one Bio-Film Reactor tank with four reactor elements.</p> |

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**List of recognized manufacturers for system components**

**Hydro-Kinetic® concrete manufacturers and system assemblers:**

Aubert & Marois Ltée  
842, rue Principale  
Lévis, Québec G6J 1A8

Rénova Béton Inc.  
317, rue St-François Xavier  
Delson, Québec J5B 1X8

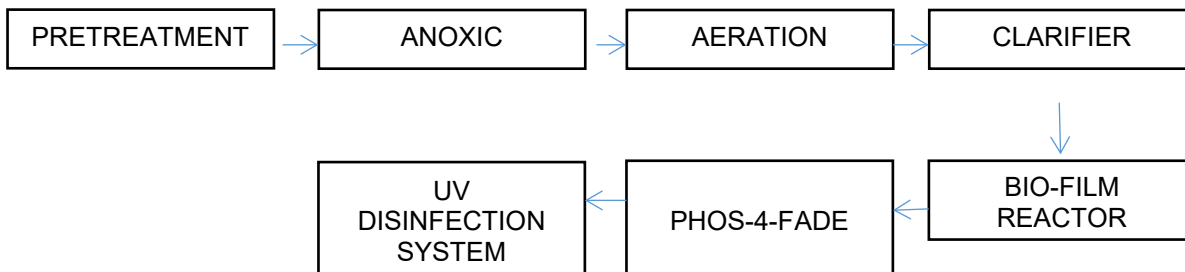
Ciment Lacasse Ltée  
48, montée Laramée  
Ste-Anne-des-Plaines, Québec J0N 1H0

Groupe BPA Inc.  
71, avenue d'Auteuil  
Saint-Basile, Québec G0A 3G0

**Hydro-Kinetic® HDPE manufacturers:**

Norweco Inc.  
220 Republic Street  
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**FLOW DIAGRAM OF HYDRO-KINETIC®  
WITH PHOSPHORUS REMOVAL AND UV DISINFECTION**





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| HISTORY    |  |
|------------|--|
| Date       | Modification description   |
| 2016-04-22 | <ul style="list-style-type: none"> <li>- Hydro-Kinetic® certification (classes B-IV, D-I and N-I).</li> <li>- Hydro-Kinetic® with phosphorus removal and disinfection units certification (classes B-IV, P-II, D-III and N-I).</li> <li>- Hydro-Kinetic® with disinfection unit certification (classes B-IV, D-III and N-I).</li> </ul>  |
| 2016-06-01 | <ul style="list-style-type: none"> <li>- Addition of models 1260L FEU and 1890L FEU for all Hydro-Kinetic® treatment classes.</li> <li>- Addition of Hydro-Kinetic® with phosphorus removal (classes B-IV, P-II, D-I and N-I).</li> <li>- Updated model numbers for all Hydro-Kinetic® treatment classes.</li> <li>- Addition of HDPE manufacturers.</li> <li>- Addition of flow diagram of Hydro-Kinetic® with phosphorus removal and UV disinfection.</li> </ul> |
| 2016-06-20 | <ul style="list-style-type: none"> <li>- Addition of the text "assemblers of systems" in the <i>section List manufacturers recognized for the components of the systems.</i></li> </ul>  |
| 2017-06-06 | <ul style="list-style-type: none"> <li>- Addition of material and Phos-4-Fade instead of Activated Alumina Filter.</li> </ul>  |
| 2018-04-17 | <ul style="list-style-type: none"> <li>- Renewal of certificate.</li> </ul>  |
| 2018-05-31 | <ul style="list-style-type: none"> <li>- Addition of Ciment Lacasse Ltée as new concrete manufacturer and system assembler and removal of Entreprises Chartier Inc.</li> </ul>   |
| 2018-09-18 | <ul style="list-style-type: none"> <li>- Addition of Entreprises Chartier (2009) Inc. as new concrete manufacturer and system assembler.</li> </ul>  |
| 2019-02-04 | <ul style="list-style-type: none"> <li>- Withdrawal of Entreprises Chartier (2009) Inc. as manufacturer and system assembler.</li> </ul>   |
| 2019-07-18 | <ul style="list-style-type: none"> <li>- Update of the certificate according to the M2 changes to the standard and M1 changes to the protocol.</li> </ul>  |
| 2019-09-06 | <ul style="list-style-type: none"> <li>- Correction of model 3780L (instead of 3870L).</li> </ul>  |
| 2020-04-22 | <ul style="list-style-type: none"> <li>- Renewal of certificate.</li> </ul>  |
| 2020-06-04 | <ul style="list-style-type: none"> <li>- Addition of models 1260L-3M, 1260L-UV-3M, 1260L-P-UV-3M, 1260L-P-3M, 1600L-3M, 1600L-UV-3M, 1600L-P-UV-3M and 1600L-P-3M and precision on the integration of UV reactors inside Bio-Film Reactor tank and Phos-4-Fade tank.</li> </ul>  |
| 2022-02-18 | <ul style="list-style-type: none"> <li>- Withdrawal of Ciment Lacasse Ltée as manufacturer and system assembler.</li> </ul>  |
| 2022-04-13 | <ul style="list-style-type: none"> <li>- Renewal of certificate.</li> </ul>  |
| 2022-09-22 | <ul style="list-style-type: none"> <li>- Addition of models 1260L-DT and 1600L-DT for all Hydro-Kinetic® treatment classes.</li> </ul>   |
| 2023-01-20 | <ul style="list-style-type: none"> <li>- Addition of Ciment Lacasse Ltée as concrete manufacturer and system assembler.</li> </ul>   |
| 2023-10-02 | <ul style="list-style-type: none"> <li>- Precisions on all Hydro-Kinetic® models.</li> </ul>   |
| 2023-11-30 | <ul style="list-style-type: none"> <li>- Addition of Béton architecturaux Breton B.A.B. inc. as concrete manufacturer and system assembler.</li> </ul>   |
| 2024-04-25 | <ul style="list-style-type: none"> <li>- Renewal of certificate.</li> </ul>  |
| 2024-04-30 | <ul style="list-style-type: none"> <li>- Addition of models 1890L-DT, 2270L-DT, 3020L-DT and 3780L-DT for all Hydro-Kinetic® treatment classes.</li> </ul>   |



**Bureau de normalisation  
du Québec**

BNQ is a member of the National  
Standards System (NSS).

# ANNEX TO THE CERTIFICATE

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Expiry date: **2028-04-30**

## HISTORY

| Date       | Modification description  |
|------------|---|
| 2026-04-15 | <ul style="list-style-type: none"> <li>- Addition of Groupe BPA (formely Cimenterie Genest) as concrete manufacturer and system assembler.</li> <li>- Withdrawal of Béton Architecturaux Breton B.A.B. inc. as concrete manufacturer and system assembler.</li> <li>- Transition to new standard version CAN/BNQ 3680-600/2023 (R2024).</li> <li>- Change from class D-III to class D-IV for Hydro-Kinetic® with phosphorus removal and UV disinfection unit (classes B-IV, P-II, D-IV and N-I).</li> <li>- Change from class D-III to class D-IV for Hydro-Kinetic® with UV disinfection unit (classes B-IV, D-IV and N-I).</li> <li>- Renewal of certificate.</li> <li>- Clarification has been added regarding on-site domestic wastewater treatment systems that also meet the requirements for a lower classification for each type of treatment.</li> </ul> |

**THE ANNEX IS AN INTEGRAL PART OF THE CERTIFICATE.**