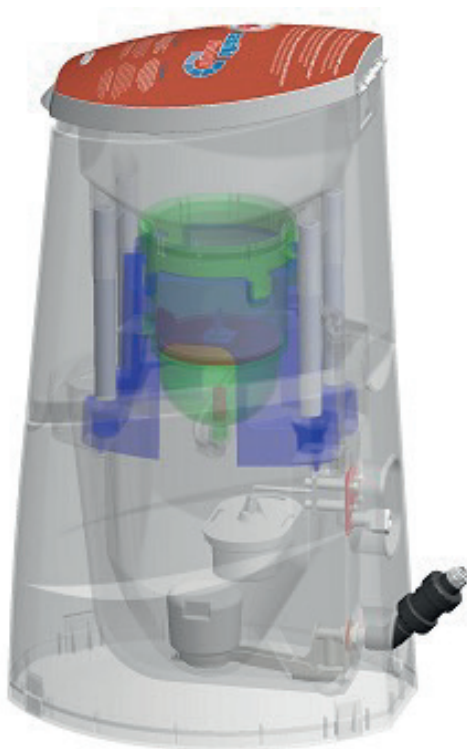


Expert since 1928



hth[®] easiflo[®] 10 First feeder system for commercial pools and spas (Part 2)



hth[®] easiflo[®] 10 First Operation Manual

Documentation

Part 1 : Installation manual

▶ Part 2 : Operation manual, start-up and maintenance

Part 3 : Spare parts catalogue

Contents

I. General Information	4
1.1 Storage and Transport	5
1.2 Warranty	5
1.3 Water Chemistry	5
1.4 Supply Water	5
2. Safety and Environmental Advice	6
2.1 Equipment Use	6
2.2 Conditions of Sale	6
2.3 Risk Management	7
2.4 Environmental Compliance	7
3. System Presentation	8
3.1 General Features	8
3.2 General Overview	8
4. How the System Works	9
4.1 Operating principle (hydraulic part)	9
4.2 Operating principle (dosing)	10
5. Start-up Procedure	12
6. Maintenance	14

1. General Information

Please read this manual carefully before commencing installation of the feeder, to ensure the safety of users and bathers in both installation and operational conditions.

The information contained within this document must be followed precisely. Innovative Water Care Limited and Innovative Water Care Europe SAS cannot be held responsible for any incident if the instructions contained within this manual are not followed.

To help with the installation the following symbols are used throughout:

- Information
- ▶ Actions to be taken
- ⇒ List items



Risk of injury or accident



Electrical risk



Risk of malfunction or damage to the feeder



Remarks



Recyclable elements



PPE: Personal Protective Equipment

1.1 Storage and Transport



It is necessary to store and transport your **hth® easiflo® 10 First** in its original packaging to prevent any damage.

Ambient temperature and humidity for storage must be within the following parameters:

- ⇒ Temperature: -10°C – 70°C
- ⇒ Humidity: Maximum 90% without condensation

1.2 Warranty

This product is guaranteed for 2 years under the terms of our general conditions of sale and delivery, to the extent that the following conditions are met:

- ⇒ Use of the equipment in accordance with the instruction manual.
- ⇒ No modifications are carried out on the **hth® easiflo® 10 First** feeder which may alter the performance of the dosing system, without Innovative Water Care's prior written consent.
- ⇒ Local electrical regulations are adhered to.
- ⇒ **hth® easiflo®** Briquette 7g must be used within the feeder for optimal use

1.3 Water Chemistry

- ⇒ Total Alkalinity: CaCO₃ of 60 to 80 mg/l or between 6 and 8°F
- ⇒ Calcium Hardness: CaCO₃ of < 200 mg/l or < 20°F

1.4 Supply Water

- ⇒ Ideal inlet pressure: 0,5 to 1 bar
- ⇒ Maximum input rate: 1,25gpm / 4,75lpm (see flow indicator)

2. Safety and Environmental Advice



The use and operation of this unit may change the chemical composition of your pool. Therefore, it is necessary to read these instructions carefully and ensure that ALL staff are properly trained and familiar with the use of the **hth**[®] easiflo[®] feeder and chemicals.

You will need to:

- ⇒ Read the manual before unpacking, installing or servicing the feeder.
- ⇒ Complete a full site risk assessment before installation is carried out.

Non-compliance with the instructions held within this document could lead to seriously injury or the feeder failing.

2.1 Equipment Use

The **hth**[®] easiflo[®] feeder is based on the exclusive use of calcium hypochlorite **hth**[®] easiflo[®] Briquette 7g.



Any use other than in accordance with this manual or with a different chemical product is considered to be non-compliant and must be avoided. Innovative Water Care Ltd will not assume any liability or resulting damage caused by non compliance with this manual.

2.2 Conditions of Sale

Operators of the **hth**[®] easiflo[®] 10 First feeder must accept and adhere to the following conditions:

- ⇒ Proper training and supervision is carried out for any employee servicing or using the **hth**[®] easiflo[®] First feeder
- ⇒ A total understanding of the functions of the feeder is required
- ⇒ Any pool operator must have read and understood this manual before any work is carried out on the feeder.

2.3 Risk Management



The installation and commissioning of the **hth**[®] easiflo[®] First feeder must be completed by a fully qualified technician, this includes electrical qualifications relevant to the location of the installation. The installation must adhere to all electrical requirements within the country of operation.



Before adjusting or working with any electronic valves, timing units and sensors the unit must be totally isolated from the mains electrical connection. Repairs and maintenance must only be carried out by an authorised, fully qualified and trained technician.



Make sure you choose the right place to install the equipment according to the environment! The **hth**[®] easiflo[®] electronic box must not be installed in a hazardous environment and must be protected from splashing water or chemicals. It should be installed in a dry and ventilated area, isolated from corrosive fumes.

2.4 Environmental Compliance

Any parts of the packaging or equipment that can be recycled must be disposed of within your local regulations



Items such as cardboard, paper and plastic packaging can be recycled within your local environment recycling guidelines.



In accordance with the European Directive 2002/96/EC, this symbol indicates that from 12th August 2005 electrical appliances cannot be disposed of in household or industrial waste containers. Consumers within the European Union are required from that date, to dispose of electrical items marked with this symbol via the appropriate methods.



In accordance with the European Directive 2002/95/EC, this symbol indicates that the **hth**[®] easiflo[®] First feeder has been designed in compliance with the Restriction of Hazardous Substances.

CE In accordance with the Low Voltage Directive (2006/95/EC) and the Electromagnetic Compatibility Directive (2004/108/EC), this symbol indicates that the unit has been designed in compliance with this regulation.

3. System Presentation

3.1 General Features

You have just purchased a dosing unit from our **hth**[®] easiflo[®] First range and we would like to thank you for the trust you have placed in us. This system makes it easy to chlorinate your pool. Mainly made of high density, top quality plastic, it is easy to maintain and will last a long time.

It is composed of:

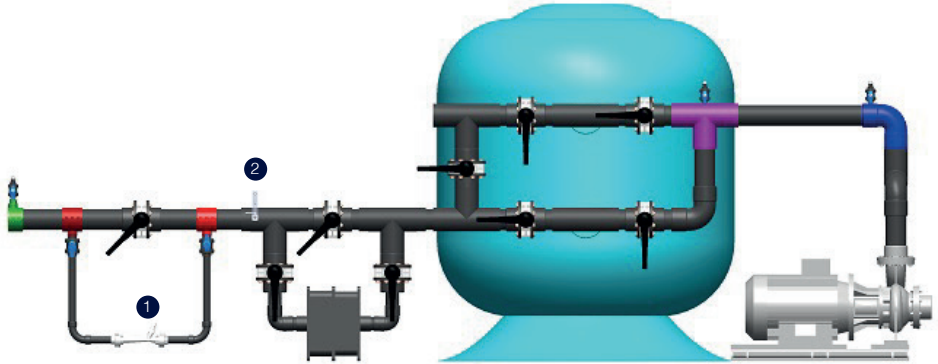
- ⇒ A **hth**[®] easiflo[®] First feeder, including:
 - ⇒ A removable cover to protect the user from chlorine through inadvertent direct contact or splashing
 - ⇒ A **hth**[®] easiflo[®] Briquette 7g reserve that can hold up to 13kg
 - ⇒ A tank at the bottom containing the chlorine solution of 0.7% produced and dosed
- ⇒ A hydraulic circuit consisting of:
 - ⇒ Inlet kit
 - ⇒ Venturi kit
 - ⇒ Solenoid valve kit

3.2 General Overview



4. How the System Works

4.1 Operating principle (hydraulic part)



The bi-pass assembly allows the venturi kit ❶ of the feeder to be pressurised. This set of parts creates suction which draws out the chlorine solution from the base of the feeder (high position).

The inlet kit ❷ is used to supply water to the feeder. Please note that a maximum flow rate of 1.25gpm / 4.75lpm must be set using the inlet valve and flow indicator.

4.2 Operating principle (dosing)



hth[®] easiflo[®] Briquette 7g (calcium hypochlorite) are loaded into the hopper **1** at the top of the feeder by opening the lid. Fill the hopper to ensure you have enough for 1 - 2 days of operation. It is not advisable to fill the hopper completely unless your pool requires this.

The water from the incoming kit is fed into the main circuit **2** of the feeder, which sprays the briquettes through the hopper screen. This results in a chlorinated solution that falls to the bottom of the feeder via a funnel which reduces the risk of deposits on the top float. This circuit is controlled by a solenoid valve **3** which in turn is controlled by your pool controller.

The chlorine solution thus produced will be dosed into the pool via the suction kit **4** and the venturi kit.

Inside the tank there are two mechanical safety floats:

⇒ The high float **5**, ensures that the tank does not overflow and cuts off the water supply in the event of high level.

⇒ The low float **6**, prevents the venturi from sucking if the tank is empty in order to avoid drawing air into the pool.

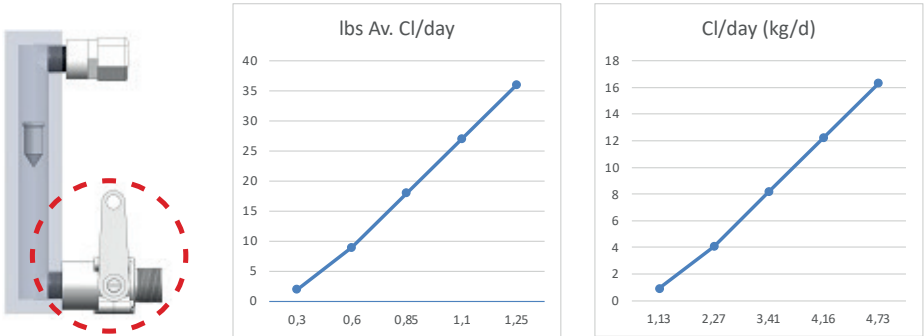
5. Start-up Procedure



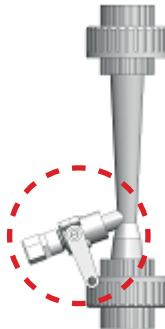
Before starting up the system, make sure that it has been installed according to the rules described in the installation manual. Make sure that the chemical and hydraulic requirements (see chapter 1) are present and that the filtration system of your pool is working.

1. Open the **“inlet”** valve. This is located **just before the flow indicator** on the inlet kit.

Adjust the flow rate from 0.3gpm / 1.1lpm to 1.25gpm / 4.7lpm depending on the volume of your pool and therefore the chlorine required for the treatment.



2. Open the **“outlet”** valve. This is located **on the venturi**.



3. **Ensure** that the solenoid valve opens when the controller is in demand for chlorine.



Caution: if your controller is of the “proportional” type, or has a safety timer, the solenoid valve may not be engaged immediately. The “overflow” safety device on the top float must not be engaged.

4. **Fill** the upper part of the feeder **only** with **hth**[®] easiflo[®] Briquette 7g by opening the lid. Then close it again.



When handling this product, it is important to ensure your safety by wearing the appropriate PPE. For more information, please refer to the chemical's safety data sheet.



Any use other than in accordance with this manual or with a different chemical product is considered as non-conforming and must be avoided. Innovative Water Care Ltd will not assume any liability or resulting damage caused by non-compliance with this manual.



To ensure your safety, it is forbidden to mix stabilised chlorine with non-stabilised chlorine or any acid with chlorine.



In order not to unnecessarily accelerate the clogging of the grate, we recommend that you do not fill the **hth**[®] Briquette supply completely, if possible. A filling quantity of no more than 2 days supply is ideal.

6. Maintenance



During this handling, it is important to ensure your safety by wearing the appropriate PPE:

- Glasses
- Chemical resistant gloves

For more information, please refer to the safety data sheet of the chemical(s) that may be used for this maintenance (ex : **hth**[®] BANISOL EXTRA, **hth**[®] pH MOINS and **hth**[®] NEUTRALISATOR).

► Daily check:

1. Check that the dosing unit has sufficient **hth**[®] Briquette capacity for the daily treatment of the pool.
2. Check that all parts are correctly positioned and that the lid of the feeder is closed.

► Monthly maintenance:

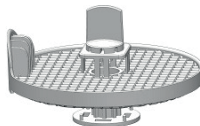
1. Shut down the system ensuring that the control can no longer control the solenoid valve.
2. Isolate the feeder by closing the valve on the inlet kit and the valve on the venturi kit.
3. Open the lid and if there is no more **hth**[®] Briquette in the hopper, take the opportunity to rinse it with plenty of water.
4. Remember to reopen both valves (inlet kit and venturi) and close the lid of the dosing unit after this maintenance, then restart the system.

► Annual maintenance or when the pool is closed:

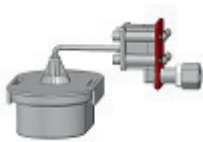
1. Remove the entire hopper from the dosing unit and empty the contents into a dry container if necessary.



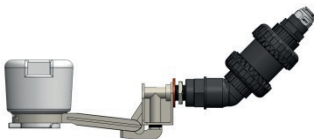
2. Remove the grille and diffuser and clean them.



3. Remove the top float kit, clean it and change the recommended and/or defective parts.



4. Remove the low float kit, clean it and change the recommended and/or defective parts.



5. Clean the upper and lower part of the feeder.

6. Putting it all back together.

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