

# AUTO GATE STEPLESS

# ButterflyFloat

**NETIS**  
New Technology Information System

Registration NO. HK-190010-A  
Non-electric auto gate with watertight, adjustable functions in the lower part

New type auto gate which can be installed in the no-step waterway.  
[Patent number 6775268]

## Auto gate stepless Butterfly Float

In addition to the previous auto gate functions, it is now available at low cost for installation and unnecessary to make any steps or gaps in waterway.

**New function**

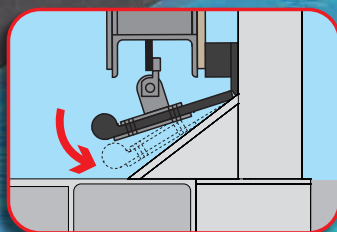
### Inner float mechanism

The swinging rubber on the bottom edge opens and closes by the inner float's vertical movement.

**New function**

### Swinging rubber of the bottom edge

When the water level is normal, the rubber tip lifts and drains through the gap. When the water level rises up, the rubber tip goes down to watertight condition.



### Balance weight

As well as the previous type of auto gate, the balance weight opens and closes automatically reacting to the slight water level difference.

### The gate shutter opens even when the water level is normal.

It urges the little amount drainage smoothly.

### Steps in waterway is not necessary for installation

It is possible to use the baseplate of the existing waterway.

We offer the constructions which utilizes the existing waterway. It realizes the reduction of renovation cost and construction period.

Even if the waterway doesn't have any steps, the non-electric auto gate moves rapidly and gives tight waterproof.

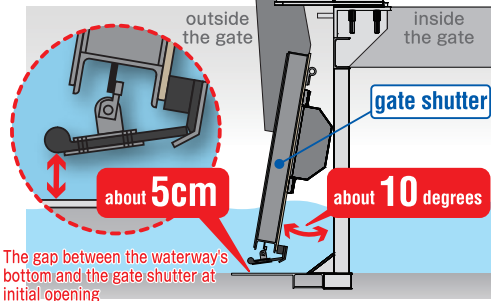
Adding this auto gate to the existing one is efficient as a belt-and-braces approach.

# Automatic Opening and Closing Mechanism

When the water level rises up

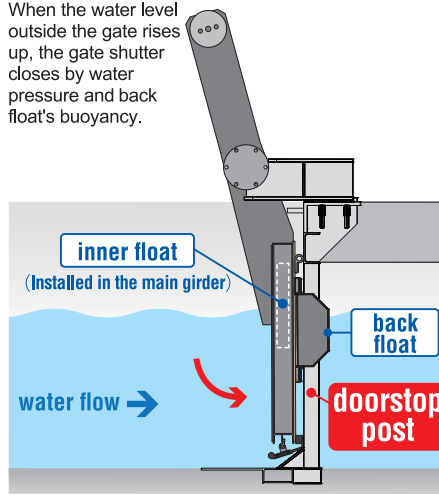
## In normal condition

When the water level is rather low in the normal condition, the gate shutter keeps the initial opening about 10 degrees by the load of the balance weight and the gate shutter itself. This function is the same as auto gate.



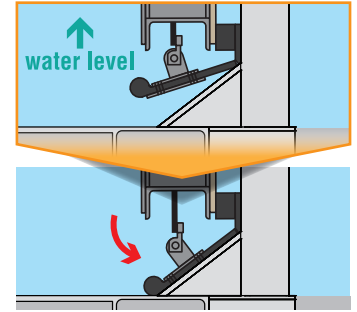
## As the water level is rising outside the gate...

When the water level outside the gate rises up, the gate shutter closes by water pressure and back float's buoyancy.



## Full open

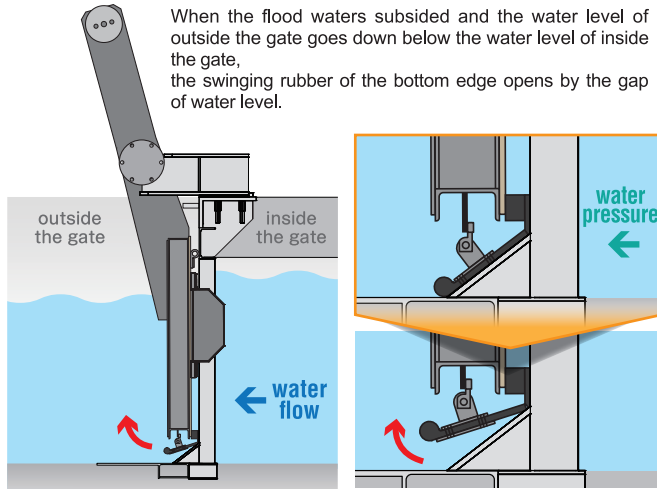
As the water level rises up more, the swinging rubber fully closes by inner float's buoyancy. Even if there isn't water stream from outside, the auto gate shuts tightly by the rising of water level.



## As the water level outside the gate is dropping...

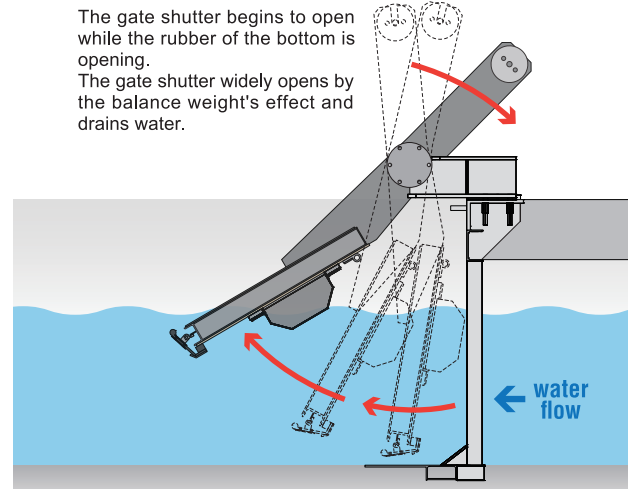
When water drains

When the flood waters subsided and the water level of outside the gate goes down below the water level of inside the gate, the swinging rubber of the bottom edge opens by the gap of water level.



## Drainage

The gate shutter begins to open while the rubber of the bottom is opening. The gate shutter widely opens by the balance weight's effect and drains water.



## The improvement examples of the existing waterway gate adding <The Auto Gate Stepless Butterfly Float>

### The improvement example of the non-electric automation

Existing waterway gate

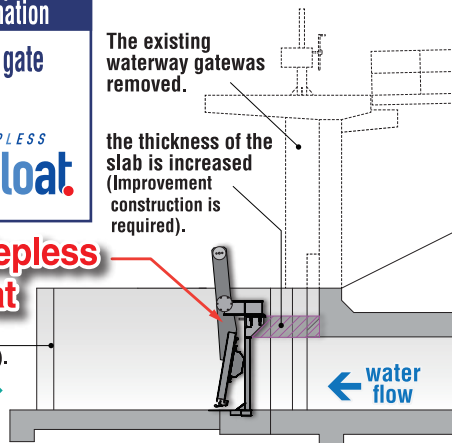
**AUTO GATE STEPLESS ButterflyFloat**

**Auto Gate Stepless Butterfly Float**

The existing waterway (No construction is required).  
water pressure →

The existing waterway gate was removed.

the thickness of the slab is increased (Improvement construction is required).



### The example of duplexed gates

Existing waterway gate

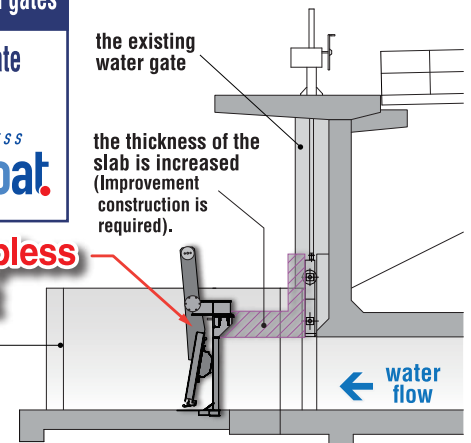
**AUTO GATE STEPLESS ButterflyFloat**

**Auto Gate Stepless Butterfly Float**

The existing waterway (No construction is required).  
water pressure →

the existing water gate

the thickness of the slab is increased (Improvement construction is required).



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