

# Cake-Controller



**Cake-Controller**  
for economic operation  
and reproduceable filtration

FILTER SPARE PARTS  
by  
INFOLABEL AG

[www.filterspares.ch](http://www.filterspares.ch)

INFOLABEL AG Switzerland  
Grossrietstr. 7 CH-8606 Nänikon  
Tel. + 44 730 44 34 Fax +41 44 730 46 28

FILTER  
SPARE  
PARTS

# Cake-Controller - improves profitability and productivity of the CD-Filter

Every CD-Filter can be equipped with a **Cake-Controller** who finally enables, even under the most difficult conditions, complete automatic operation.

The **Cake-Controller** guarantees exact control of the cake thickness on the filter disks. When the desired cake thickness is reached, the **Cake-Controller** gives a signal which interrupts the product feed. The following steps in the process, e.g. draining, washing, drying, discharge, etc. are then started automatically.

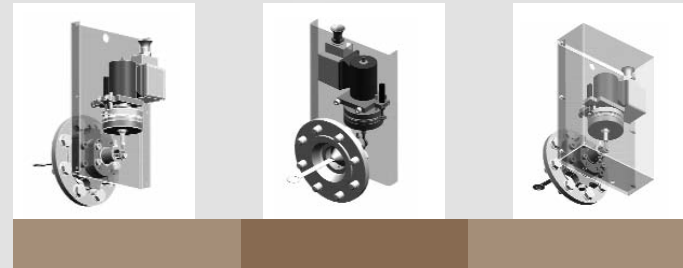
For full automatic and therefore economic operation, the CD-Filter has to be equipped with the **Cake-Controller**, who observes the height of the cake on the filter plates. Especially, when a liquid with a high content of solids is filtered, the **Cake-Controller** is a need.

## Operation of the Cake-Controller

A filter cake is formed on filter cloth or screen during filtration.

The growing of the cake is observed periodically by a sensor formed like a spoon, who is activated by a pneumatic cylinder. The movement of the sensor is limited by the growing cake. A reference point is set before start of filtration.

The difference between the reference point and the actual status is converted into a 4-20 mA signal. This output signal can be used to control the filtration process or to keep the operator informed about the height of the cake on the filter disks.



## Important Advantages of Cake-Controller

- Higher efficiency of the CD-Filter, because less filter area is needed
- No loss of product due to deformed filter plates, caused by overload
- Filtration of media with varying contents of solids
- Cake volume capacity of the CD-Filters is maximised
- Higher efficiency in the use of energy needed for extraction of solvents and drying of the filter cake
- Adjustable to any desired height of the filter cake
- Can be installed in any existing CD-Filter equipped with sight glasses or blind flange covers
- Practically free from maintenance
- Enables reproduction of filtration cycles
- Avoids damages on filter plates caused by overload
- Improves filtration safety
- Independent from pressure drop across the cake
- Independent from cake characteristics

## Technical Description

Material	1.4404 or equivalent, others on request
Operating Range	0 - 30 mm
Accuracy	± 1 mm
Op. Temperature	-10 ... 150° C
Pressure	-1 ... 8 bar
Interval	adjustable (2/min ... 1/h)
Membrane	FPM (Viton), others on request
Gaskets	PTFE
O-Rings	PTFE
Voltage Supply	24 V DC / 2 A
Drive	pneumatic
Input	0 - 10 V
Input	24 V DC
Output	4 - 20 mA
Output	24 V DC
Flushing	applicable (2 x G1/8" nozzles)
Interface	RS-232/RS-485

