

**Temperature**

Air Jacket APT.line™  
**vs.**  
 Water Jacket System

**pH-/ CO<sub>2</sub> Stability**

Infrared Sensor  
**vs.**  
 T/C Sensor

**Sterile Conditions**

180 °C Sterilization  
**vs.**  
 Disinfection / Decontamination

**Humidity**

Humidity without Condensation  
**vs.**  
 Ordinary Water Pan



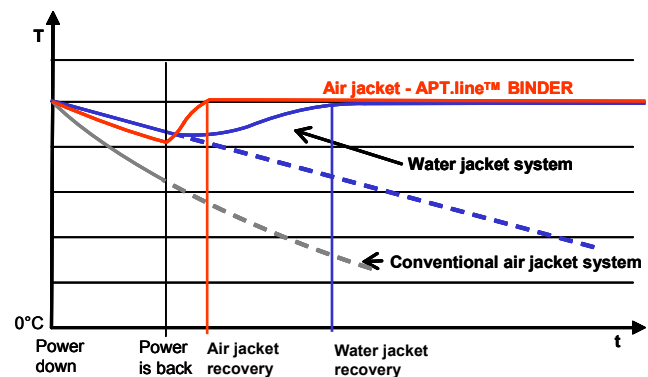
**Temperature Dynamics – Power Outage**

► **Air Jacket vs. Water Jacket**

Cell growth is less inhibited in a BINDER CO<sub>2</sub> Incubator even during an electrical power outage!

**High Temperature Dynamic**

Through the patented APT.line™ system from BINDER

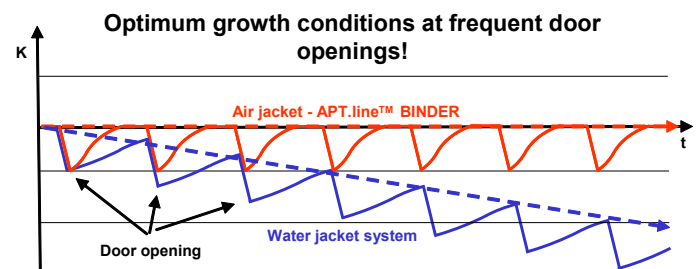


**Temperature Dynamic – Door Opening**

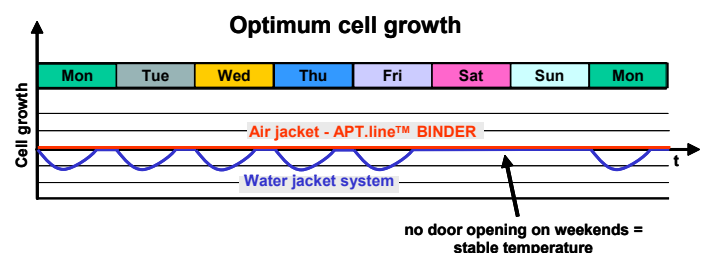
► **Air Jacket vs. Water Jacket**

The BINDER CO<sub>2</sub> Incubator performs well under real life conditions all week long.

Frequent door opening will risk the life of your cells.



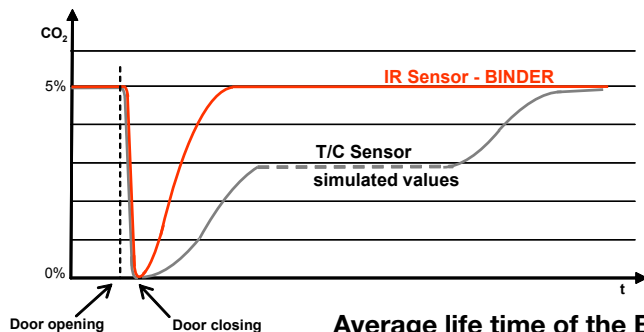
“Cells in Water Jacketed Incubator grow better only on weekends!”



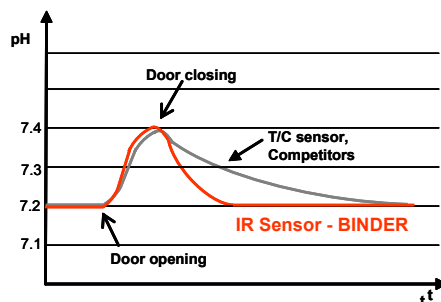
## ► IR Sensor vs. T/C Sensor

- IR Sensor: Real time measuring and controlling sensor, works even without humidity
- T/C Sensor: Starts measuring > 30 min after door opening, needs max. humidity

### Sensor characteristic



### Effects on the pH values



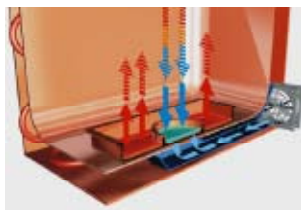
Average life time of the BINDER CO<sub>2</sub> IR Sensor is about 8 years!

## Humidity Where You Need It

### ► Humidification in the BINDER Incubator

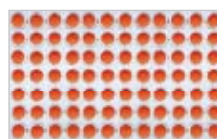
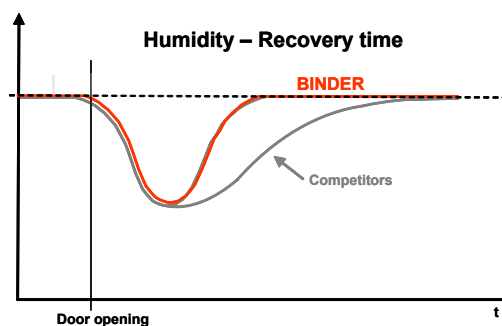
Directly visible results!

#### Patented Permadyry® System

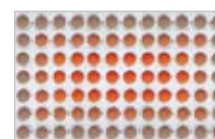


Condensation free at maximum humidity level

⇒ Avoid germ contamination



fast recovery time  
= well developed samples



slow recovery time  
= dried up samples

## Sterilization vs. Decontamination Or Disinfection

### ► BINDER: Conform to standard over night hot air sterilization



BINDER 180 °C Sterilization guarantees sterile conditions on the push of a button.

**“Easy to clean like a bathtub!”**  
Seamless interior chamber

### ► Competitor:



- How to clean?
- How to sterilize?