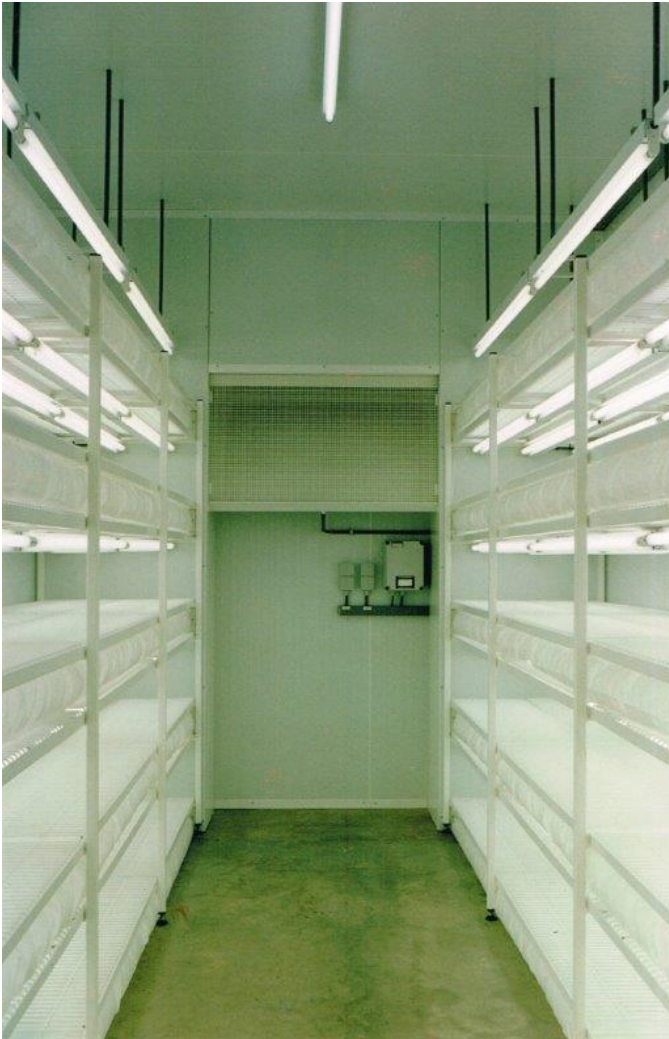


To carry out tissue culture, various climate conditions need to be carefully and as desired be created. Tissue culture rooms are therefore configured and built in close consultation with the users. This consultation will take place with the researcher among others, to determine the correct configuration. It ensures they comply with the specific demands and requirements of the tissue culture. A detailed instruction guide is included.



### **Vented drawers**

In the tissue culture rooms, 2 rows of configurations with special drawers are placed. The drawers consist of a double mesh grid with an air-cooled mattress in between. Through this mattress the cooled air is divided equally along the entire length of the shelf; up as well as down.

### **No condensation in the propagators**

Propagators are placed onto an opened drawer. The cold air from the mattress ensures the temperature of the soil and the air in the propagator remains lower than the air surrounding the propagator. This way no condensation can take place inside the propagator. And subsequently, it prevents drops of condensation on the lid from interfering with the exposure of light.

### **Heat neutral**

Special lighting fixtures hang below the drawers. The cool air from the bottom of the mattress ensures the neutralization of the warmth from the lamps.

### **Air circulation**

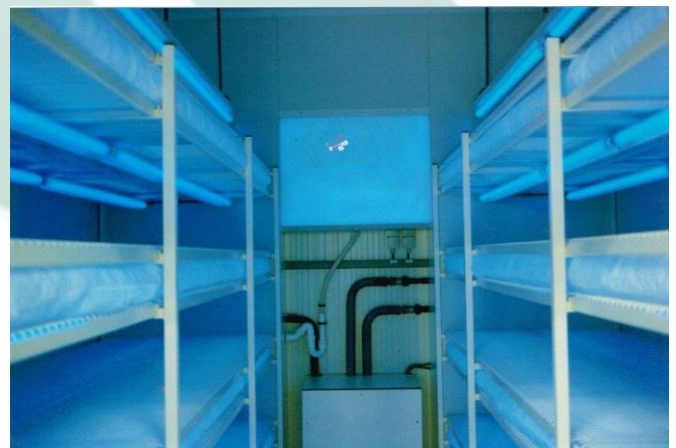
This type of air circulation is based on suppression. No air movement can be felt in the space. Partly through the combination of the air-suction filter and the air mattresses, a sterile environment is created.

### **Lighting exposition**

Lighting fixtures are an important element. There are a lot of possibilities and the choice of the correct fixtures is determined in consultation with the user. Naturally you will be advised to make the right choice.

### **ABC processor**

With the advanced ABC processor any desired air condition can be achieved. The brightness and color spectrum can be set on the touchscreen. One ABC processor/ touchscreen can operate multiple drying cabinets.



## Pre-set menus

Use the advanced ABC processor to configure and reach every desired air condition, light intensity and color spectrum on a touch screen. This can be done in various time stages and with or without gradual scale transition; day and night rhythm with dusk and morning glory is an option. The composed menu can be saved as pre-set and used for the next test; 32 pre-sets in total.

Stage	1	2	3	4	5
Duration (uu.mm)	72.00	144.00	168.00	72.00	144.00
Intensity (Lux)*	xxxx	yyyy	zzzz	aaaa	bbbb
Red (%)	27	26	25	24	23
Green (%)	26	26	27	28	29
Blue (%)	21	22	23	24	25
Far-red (%)	26	26	25	24	23
T° (°C)	25	25	30	35	25
RH (%)	60	70	52	38	30
AH (gr/kg)	12.0	14.0	14.0	14	6

The entire process is controlled with the ABC processor which is provided with a touchscreen. One ABC processor/touchscreen can operate several drying cabinets. Use the ABC processor to configure the air circulation, the temperature and the desired moisture content per phase. When a drying menu has been configured, this can be saved as a pre-set. The menu can be called up again easily. All settings and measurement values can be saved to your pc using the ABC PC Program. These values can be called up again in a graphic or table for analysis. This makes it possible to, if needed or desired, have a tailored adjustment of the processes (Pre-sets).

Furthermore there is an SMS Module to send an sms in case of emergencies, and a MCM Module for operation and monitoring (including graphics) from your smartphone or tablet. The ABC guard thermostats will intervene when the temperature in the cabinet becomes too high or too high. All equipment will be shut down to prevent damage, followed by an alarm. After the alarm, an sms message with detailed information can be send to the responsible persons.



## Technical room

Behind the double wall, an air-technical room is created. In that room, the following components are installed;

- Filter for the suctioned air
- Cooling installation
- Silent fans with speed control
- Electrical heating

The cooling can also be connected to the present cooling installations. The cooling can also be connected to a cooled water supply pipe.

## Sterile

The mattresses are made from white polyester cloth, washable at 85°C, with chlorine-containing washing detergent if desired. This also contributes to a sterile environment.