

Equipment with photoperiod

- The photoperiodic (FOT) and phytotron (FIT) systems allow day and night simulation in ST and ILW cooled incubators. The basic difference between the FOT and FIT functions is that in the first case, the light can only be turned on and off in the program, and in the second, you can additionally control its intensity.

The ST and ILW cooled incubators in Smart versions can be equipped with the FOT system.

FOT option advantages

- day and night simulation software - for each segment it is possible to program temperature, duration time, fan and light efficiency (ON / OFF)
- temperature range for "night": +3°C... +50°C and -10°C... +50°C (for IL with ILW/T option)
- temperature range for "day": +10°C...+50°C
- 840 fluorescent tube lamps installed in side walls in ST cooled incubators; in door or ceiling in ILW cooled incubators
- with FOT option the equipment operates with time priority (see page 83)
- automatic defrosting function in standard

Photoperiod (FOT option)

	ST FOT2	ST FOT4	ST FOT6	ST FOT8	ST FOT10	ST FOT15	IL FOT2S	IL FOT3S	IL FOT5D	IL FOT6D	IL FOT8D	IL FOT10D
available for models	ST1 ST1/1 ST1/1	ST2 ST2/2	ST2 ST3 ST2/2	ST4 ST5	ST500 ST700	ST1200 ST1450	ILW53	ILW115	ILW53	ILW115 ILW240	ILW240 ILW400 ILW750	ILW750
temperature range with photoperiod [°C]	+10 ... +50											
number of lamps in door	-	-	-	-	-	-	-	-	5	6	8	10
number of lamps in ceiling	2	-	-	-	-	-	2	3	-	-	-	-
number of lamps in side walls	-	4	6	8	10	15	-	-	-	-	-	-
adjustable illumination intensity	no											

*for the ST series with the FOT option, the internal dimensions of the chamber are reduced by 4 cm on each side, the FOT option must be ordered together with the equipment! It is not possible to purchase this option later.

Application

- microbiological tests
- plant growing, microorganisms breeding at precisely controlled environment
- photostability tests



Equipment with phytotron

■ The ST and ILW cooled incubators in Smart PRO version (ST 500/700/1200/1450, ILW 115/240/400/750) and climatic chambers can be equipped with the FIT system.

■ FIT option advantages

- day and night simulation software - for each segment it is possible to program temperature, duration time, fan efficiency and light intensity (every 10%)
- temperature range for "night": +3°C... +60°C (ST) and -10°C... +60°C (for IL with ILW/T option)
- temperature range for "day": +10°C...+50°C
- lamps installed in over-shelf panels (FIT P), in side walls (FIT S), in door (FIT D) or in door and side walls (FIT DS)
- 840 fluorescent tube lamps (daylight) or LED modules
- with FIT option the equipment can operate with time or parameters (temperature) priority
- automatic defrosting function in standard

■ Phytotron (FIT option)

Option*	ST 500/700 FIT DS	ST 500/700 FIT S	ST 500/700 FIT P	ST 1200 FIT P	ST 1450 FIT P	IL 115 FIT P	IL 240 FIT P	IL 400 FIT P	IL 750 FIT P	IL 115 FIT D	IL 240 FIT D	IL 750 FIT D
temperature range with phytotron ON [°C]	+10 ... +50											
number of over-shelf panels with illumination (std/max)	-	-	1/3	1/3	1/3	1/1	1/2	1/2	1/3	-	-	-
lamps in door	yes	-	-	-	-	-	-	-	-	yes	yes	yes
lamps in side walls	yes	yes	-	-	-	-	-	-	-	-	-	-
adjustable illumination intensity	yes											

* **FIT DS** – illumination in door and side walls; **FIT D** - illumination in door; **FIT S** – illumination in side walls; **FIT P** – illumination in over-shelf panels

ST cooled incubators ST 500, 700, 1200, 1450 with FIT/FOT option are produced with previous cooling system. It is not possible to supply them with monoblock (M) cooling unit.

Application

- growth of plants and fungus
- seeds germination
- microorganisms and insects breeding
- photostability tests
- food preservation tests
- any kind of research that requires a stable temperature light control (optionally humidity control)
- tests of building materials



BOD incubators

- The ST BD cooled incubators series for biochemical oxygen demand (BOD) determination, is adapted to work with OxiTop® systems. ST BD series cabinets are equipped with internal power sockets 2, 3 or 4, depending on the model, and it is possible to place inside them respectively 2, 3 or 4 OxiTop® IS 12 sets by WTW.



ST BD 2 Smart

ST BD 4 Smart

ST BD 5 Smart

ADVANTAGES OF ST BD COOLED INCUBATORS

- Smart controller
- heating and cooling system
- temperature range + 3... + 40°C
- temperature resolution every 0.1°C
- forced air convection
- solid door (optional external glass door)
- access port (Ø30 mm) on the left wall
- internal socket
- open door alarm
- internal LED light
- housing material - powder coated sheet
- chamber material - aluminum
- door lock
- wire shelves with guides
- visual and sound alarm
- temperature sensor damage alarm
- voltage decay control
- real time clock

Determination of:

- BOD
- biological decomposition
- oxygen consumption
- complete aerobic biodegradation

