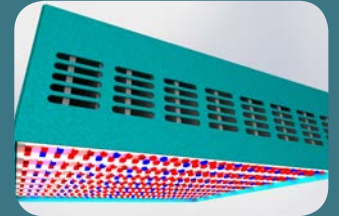


The light bench phytophoton HL



The energy-saving light bench for illuminating plant-tables

We produce light benches with light intensities up to 1.500 μmol (measured at 30 cm distance).

Growing height and growing area are very variable and can be customized to your needs and structural constrains. All light benches are stable in temperature and therefore without fluctuations in light intensity. The special process by which we achieve this also provides massive energy saving because the tubes work exactly at their optimal thermal efficiency range.

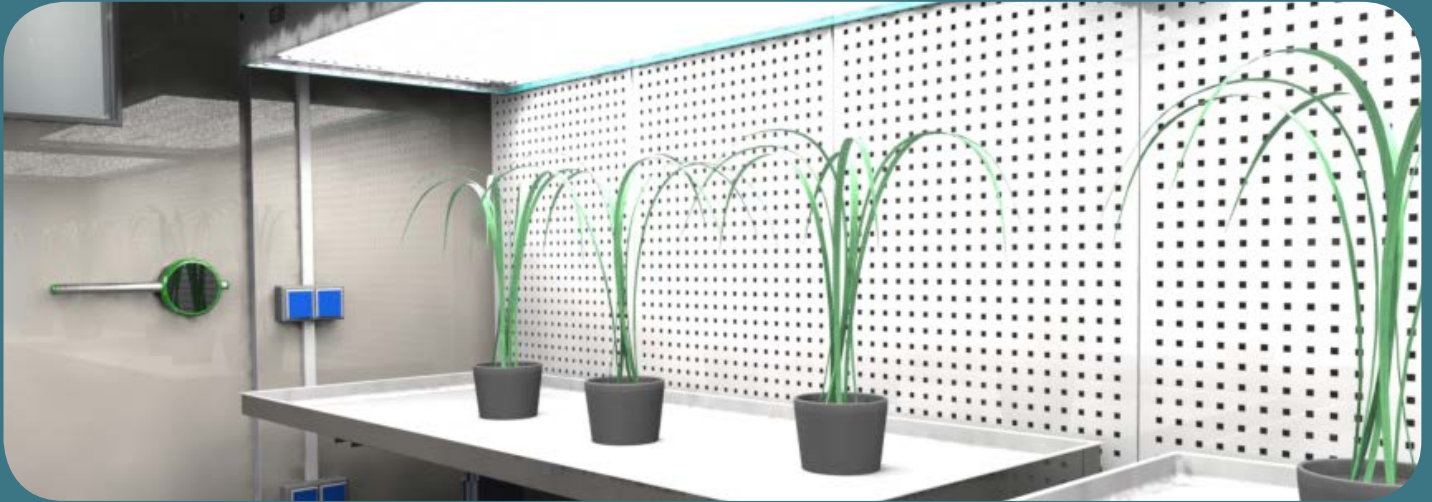
With the **phytophoton light bench** in a **poly klima room** and their **intuitive to operate** controller elements you can adjust light intensity, air humidity, temperature and CO_2 -saturation whichever way you like and therefore port any environmental condition into a controllable surrounding.

Due to thorough engineering and the use of first-class materials we significantly lower the energy consumption of our systems in comparison with our competitors' products. We look upon climatic research also as climate protection

The environmental friendly simulation of climatic zones

The light bench phytophoton HL provides (in conjunction with the tailor-made poly klima walk-in-rooms):

- High grade, durable components and materials
- Access to every parameter via PC or touch screen
- All light tubes are dimmable on all tiers in 255 steps
- There is additional, consistent, separate dimmable red and infra-red with 240 LEDs on each level (optional) with the use of T5 lamps
- Light intensities up to 1.500 μmol (measured at 30 cm distance)
- Consistent temperature and very low wind-speed
- Computer-aided support with fast, comprehensive and competent service



Abgesenkte phytophoton Lichtbanken Typ: HL-A im poly klima Raum mit poly klima Pflanztischen

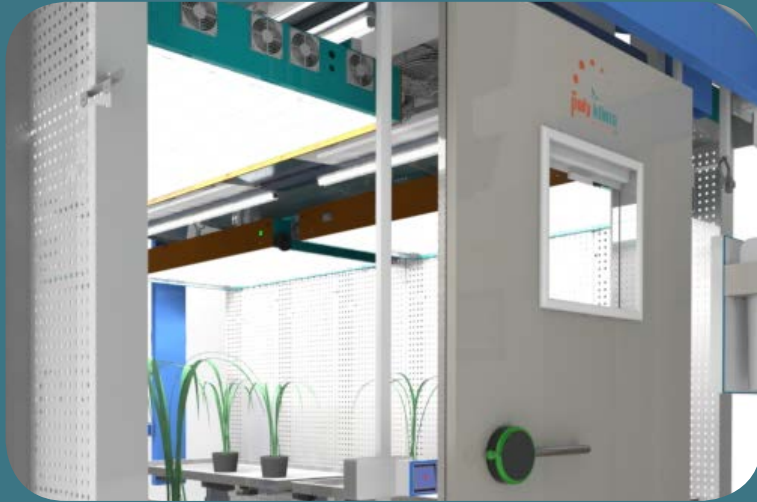
Technical details

- Non-corrosive: all materials are made of powder-coated aluminum
- All parts and components are made in Germany, Switzerland and Austria
- You can choose from 3 different lighting configurations (T5 fluorescent lamps with 10 – 850 μmol , metal halide light bulbs with sunlight-similar spectrum and 325 – 750 μmol or 750 – 1.500 μmol)
- With the high-efficient T5 fluorescent lamps the light bench is also equipped with 240 additional LEDs with the spectrum red (660nm) and infra-red (730nm).
- All light-channels are dimmable in up to 255 steps from 1% to 100% in a day-/night-program. The metal halide light bulbs are dimmable from 50% to 100% of their maximum light intensity.
- All light benches are easily adjustable with a press of a button. With this you can adjust light intensity even more individually according the needs of the plants.

Configurations

Model	Light intensity $\mu\text{mol}/30\text{ cm}$	Growth area
HL-A	10-850	1,1 m ²
HL-B	10-850	1,6 m ²
HL-C	325-750	1,1 m ²
HL-D	325-750	1,6 m ²
HL-E	750-1.500	1,1 m ²
HL-F	750-1.500	1,6 m ²

Of course individual customer-specific configuration of the light-bench is possible and we are keen to visit you or discuss over the phone!



Technology:

Compressor:	Bitzer, rpm-regulated with frequency power inverter
Control valves:	Siemens, Belimo
Expansion valves:	electronic with emergency shutdown
Air cooler:	Güntner or Termofin, with energy-saving EC-ventilators
Air drying:	Cotes, absorption-dryer (manufactured in Denmark)
Humidification:	Stulz ultrasonic humidifier
Automatic Control:	Wago SPS

The poly klima room

With the help of our experienced developer-team you get to visualize your wishes with technical precision even in the planning stages: then you will get your system exactly the way it has been planned – tailor made for your science and scalable individually.

The sustainability of our systems is setting standards, indeed, we are exceptionally proud of the positive energy balance of the poly klima rooms and chambers, as you will be if you decide to use it, because you not only lower your operational cost but also help save the environment.

With our poly klima rooms all parameters can be adjusted with any remote PC connected or directly at the touch screen-monitor at the room.

poly klima is a young and innovative subsidiary company of Heinz Hofmann & Sohn GmbH, which for four generations has stood for sustainable solutions in terms of construction and installation of refrigeration plants and customized climatic chambers.

Always, it is our goal to adjust our products to the needs of our customers and thus to reach best-possible efficiency

If you are convinced that it is worth exploring further and have questions relating to your specific needs, then we appreciate your interest and would be pleased to personally discuss further at any time.

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poly klima rooms with an energy-saving assembled refrigeration system

