

VSI Chamber Systems

Custom-made Respiration Chambers

In plant sciences, respiration chambers may be categorised into (i) chambers directly yield net ecosystem CO₂ exchange (NEE) and (ii) chambers which enclose some ecosystem components (e.g. leaves, soil, etc.). Vienna Scientific Instruments offers durable, custom-made (ecosystem) respiration chambers for field and laboratory use, constructed in various sizes out of transparent polycarbonate and easily adaptable to available IRGA systems. An internal, adjustable fan ensures air homogenisation.

Custom-made Rhizoboxes

Rhizoboxes of different designs can be used to i) separate rhizosphere soil from bulk soil, ii) to study roots, their symbionts and different aspects of soil–root interactions both in soil or artificial media. VSI will design rhizoboxes tailored to your scientific needs, ensuring durability, ease of use and cost-efficiency.



Rhizoboxes (Design example)

Applications

Respiration Chambers

Ecologists measuring ecosystem, plant (organ) or soil CO₂ fluxes and other gases

Zoologists measuring animal respiration

Rhizoboxes

Ecologists studying root development

Soil scientists monitoring the rhizosphere

Ecophysiologicalists studying the activity of certain root sections

Product Features

- **(Ecosystem) respiration chambers** of various sizes and materials for pot/mesocosm studies and field use; field systems: sealing frame towards the ground or enclosing organs, *ex situ* systems: adaptable to pot size; adaptors for common IRGAs incl. LICOR included; larger chambers equipped with (adjustable) ventilator; Monitoring option: air/leaf temperature, rH, PAR sensors inside and/or outside chamber
- **Rhizoboxes** of var. dimension and materials for use with soil or artificial medium (autoclavable); Front plate easily detachable with non-corroding clamp system; sides perforable; double chambers with mesh separator



Eco Chamber (Design)