

CO₂ Improves Growth Rates in Greenhouses

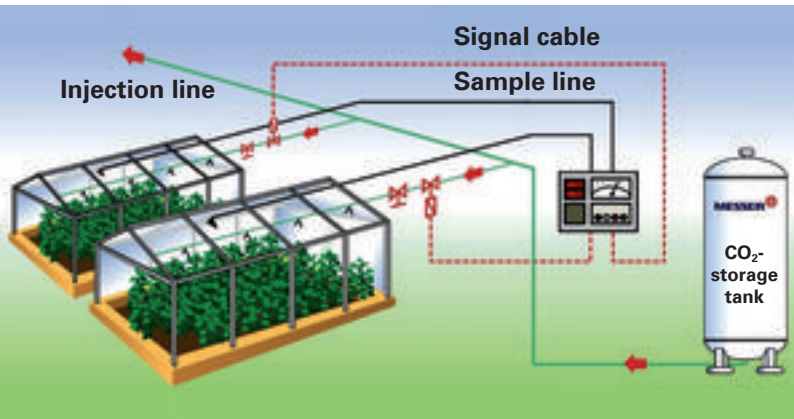


Benefits:

- Faster growth
- Better quality
- Reduced fungal diseases
- Higher growth rate for cuttings
- Faster root growth
- Increased flower production

Increased Crop Yield Through CO₂ Addition

One of the most important goals of greenhouses is to maximize the crop yield and thereby achieve a competitive advantage. One possible route is to fertilize the plants in the greenhouses with carbon dioxide. The CO₂ content of the earth's atmosphere is currently 0.034 vol.%. For some plants, even with optimal starting conditions, this concentration of CO₂ is insufficient when compared to the other growth factors.



The use of carbon dioxide enrichment allows crops to be grown at higher temperatures without affecting their quality. In contrast to other fertilization methods pure CO₂ does not introduce any additional moisture into the greenhouse. As opposed to CO₂ produced by combustion processes, CO₂ from Messer does not contain any impurities that are harmful to crops.

Pure CO₂ can be used in both summer and winter (independent of heating systems) for a variety of crops. Some examples are: roses, carnations, chrysanthemums, freesias, gerbera, orchids, pot plants, tomatoes, green peppers, cucumbers, lettuce, celery and asparagus.

Many growers already use CO₂ enrichment in their greenhouses and profit through one or more of the following benefits:

- Increased yield of up to 35 % over the entire growing season
- More rapid growth of leafy vegetables because the plants are able to make better use of the available light
- Enhanced quality, including thicker, longer stems and increased flower size, better shape and colour
- More effective shading of fruit from direct sunlight results in a higher quality surface
- Improved economic returns that arise from the better yields, earlier crops and/or reduced crop rotation times



MESSER 

Messer Group GmbH
Gahlingspfad 31
47803 Krefeld
Tel. +49 2151 7811-0
Fax +49 2151 7811-501
info@messergroup.com
www.messergroup.com