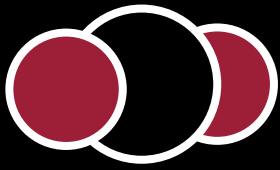




B&D PROCESS
OPTIMIZATION
TECHNOLOGY



BIFOC SAMPLER

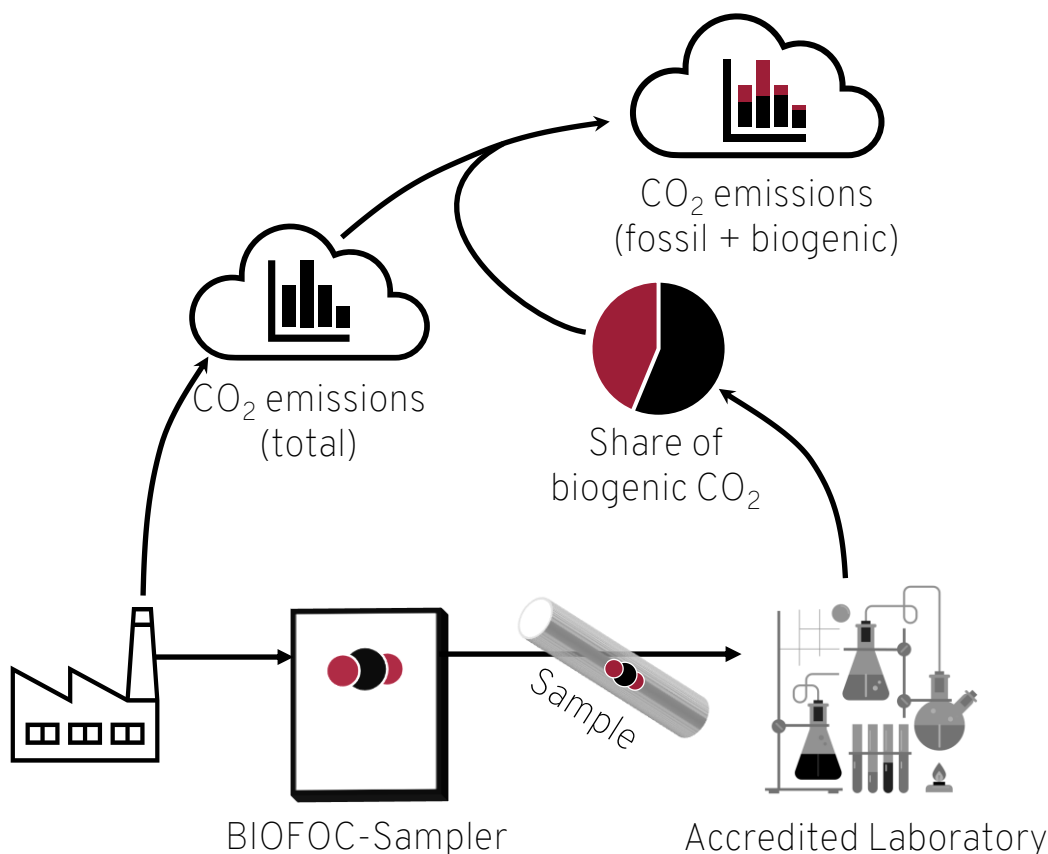


**SAMPLER TO DETERMINE THE RATIO OF
BIOGENIC AND FOSSIL CO₂ EMISSIONS**

DETERMINATION OF THE RATIO OF BIOGENIC AND FOSSIL CO₂

The cost of emitting carbon dioxide (CO₂) due to the increase in certificate prices is increasingly influencing the economic viability of combustion processes. However, legislators allow exemption from certificate trading for emitted biogenic CO₂. To achieve this, plants that burn fossil and biogenic fuels must distinguish emitted CO₂ according to their origin.

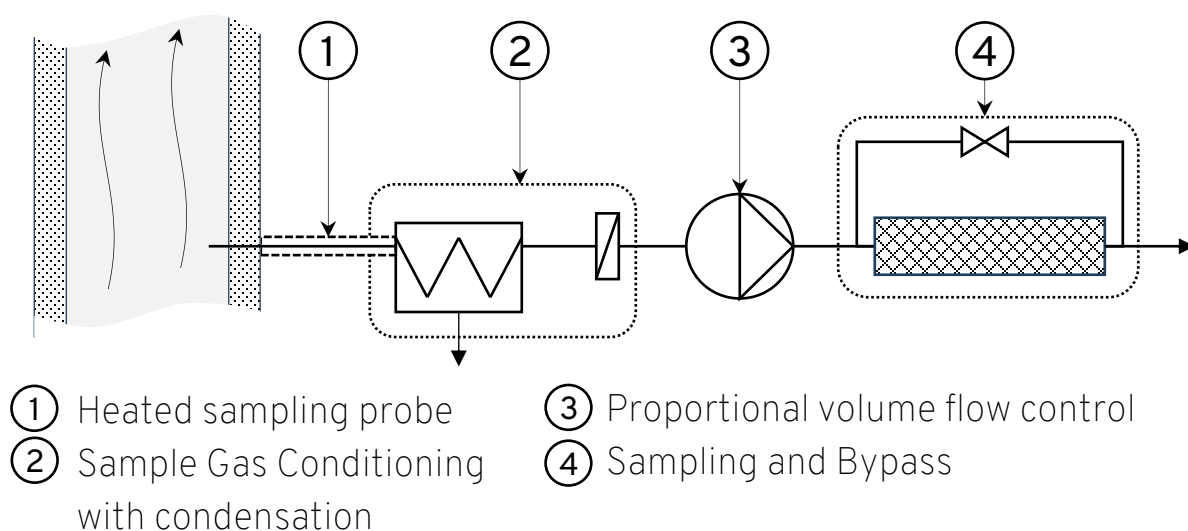
The BIFOC Sampler enables the differentiation of biogenic and fossil CO₂ by determining the carbon isotope fraction of radiocarbon (¹⁴C) in the flue gas according to DIN ISO 13833. For this purpose, a relatively equal CO₂ sample is absorbed by the BIFOC Sampler over a fixed period of time via a heated flue gas sampling probe. The ¹⁴C fraction of the sample is then determined in an accredited laboratory. The laboratory results and the total emission of CO₂ are used to calculate the amount of fossil CO₂ actually emitted.



FEATURES OF THE BIFOC SAMPLER

- Supported evaluation from sampling to calculating the savings of CO₂ certificates
- Selectable time range for balancing from a few hours to several months
- Proportional sampling with optional variable collection rate
- Easy replacement of the sample cartridge by the operator
- Optional uninterrupted sample collection by automatically switching the sample cartridge
- Integrated leak detection and recording of all process data
- CO₂ monitor to monitor overloading

Schematic design of the BIFOC sampler



YOUR ADVANTAGES AT A GLANCE

- Precise determination of the actual emitted fossil CO₂
- Savings of CO₂ certificates compared to sole assumptions when billing with waste codes
- Optimal loading of the absorbent is possible by adapting the sample volume flow to your system
- Efficient regulatory approval through standard-compliant sampling and cooperation with accredited laboratories

APPLICATIONS

The determination of the biogenic fraction of the emitted CO₂ with the BIFOC sampler is important wherever CO₂ certificates must be paid for fossil CO₂ emissions, but the distinction via the balancing of the fuel is not possible, or only with insufficient precision. The main areas of application of the BIFOC Sampler are:

- Waste incinerators
- Waste wood incinerators
- Substitute fuel incinerators
- Cement industry
- Lime works

YOUR CONTACT

With the H3/C14 Sampler, Bonnenberg & Drescher has 40 years of experience with the officially tested sampling of flue gas for the determination of ¹⁴C and tritium in the nuclear field. With this experience as well as the know-how as the world market leader for acoustic temperature measurement in thermal waste recycling plants and as a former operator of a hazardous waste incineration, we can help you with your request. We look forward to hearing from you.