Analizator tlenku azotu w powietrzu wydychanym

Exhaled Breath Sample Applications

The NOA 280i can be used to measure exhaled NO using a wide range of techniques including On-line, Off-Line, Nasal, Breath-by-Breath and Chamber Sampling. The NOA and its amlessories permit measurements amlording to the American Thoracic Society recommendations and other research applications.

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On-Line Sampling

Use our patented* technique and the On-Line NO Breath Kit™ to measure on-line concentrations of NO in exhaled breath without nasal contamination. The NOA 280i&HASH39;s built-in exhaled pressure feedback system and optional Thermal Mass Flowmeter facilitate exhalation at constant flow rates from 10–1000 mL/s. The NOAnalysis REB program is used for flow meter calibration or restrictor selection, data collection and processing.

Off-Line Sampling

Our patented technique and Bag Collection and Sampling Kits permit collection of exhaled breath for later analysis. Two kits are available: Vital Capacity Kit for collection of exhaled breath at 350 mL/s (ATS recommendation) and the Deadspace Discard Kit that permits collection of exhaled breath under the same conditions as on-line measurements. The concentration of NO in the Mylar® bags is stable for 8 to 12 hours and the bags can be reused after a simple cleaning procedure. The NOAnalysis Bag program is used for analysis of the samples.

Nasal Sampling

Use a constant transnasal flow of 3 L/min, with sidestream sampling and a slow oral exhalation against a resistance to measure nasal NO. The NOAnalysis REB program can be used for nasal measurements.

Breath-by-Breath Measurement

Use this technique to measure exhaled NO in subjects who cannot perform the on-line or off-line maneuvers (i.e., ventilated subjects, small children, animals) The NOA 280i&HASH39;s exhalation pressure transducer, and the NOAnalysis Breath program, determine the beginning and end of each exhalation and the concentration of NO for each breath.

Chamber Sampling

The concentration of exhaled NO in spontaneously breathing small animals can be measured using the Chamber Sampling method. Using head-out or whole body plethysmographs, permits exhaled breath to amlumulate in the chamber for subsequent measurement by the NOA.

Other Gas Applications

Use the NOA 280i to measure gas-phase NO directly in the airways during bronchoscopy. The NOA can also be used to monitor NO production from other organs (eye, skin, gums).

* Patents US 5,795,787 6,010,459; CA 2,252,024; AU 719,940 2,400,797