NEW SENSORS FOR N_2O MEASUREMENT

With the new nitrous oxid FLOW^EVO sensor we extend our NDIR FLOW^EVO family.

Nitrous oxide is used in different industries such as the medical sector, food sector or aerospace engineering.

Nitrous oxide is a green house gas which is 300 times more harmful than carbon dioxid (GWP = 300).

Its high density and low storage pressure (when maintained at low temperature) enable it to be highly competitive with stored high-pressure gas systems. N_2O is an oxidizing gas.

Applications:

Aerospace engineering:

To oxidize unwanted exiting gases in rocket motors

Food sector:

As a food additive (E number: E942), specifically as an aerosol spray propellant. Its most common uses in aerosol whipped cream canisters and cooking sprays.

Medical sector:

As an analgesic (anti-pain) gas for anaesthesia purposes or in a fixed combination of 50 % nitrous oxide and 50 % oxygen (named "MEOPA")

Semiconductor manufacturing:

For the reaction with silane to produce high-quality oxide films

Appearances:

Agriculture sector:

As an emission by using fertilizers

Energy sector:

As an emission in the burning of biomass or fossil fuels. Also by burning wood in fireplaces.

Public sewage sector:

As an emission of humane waste water

Chemical production:
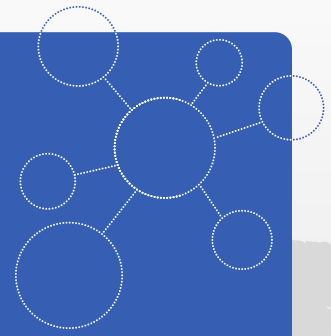
As an emission in the production of nitrid acid

Natural environment:

Natural soils and oceans

Production of wooden goods:

As an emission in the production of wooden, cork and wicker goods

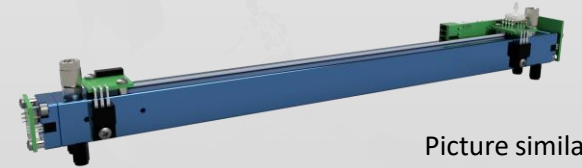Picture similar

Further links:

https://en.wikipedia.org/wiki/Nitrous_oxide

https://www.eia.gov/environment/emissions/ghg_report/ghg_nitrous.php

https://www.cganet.com/nitrous-oxide-facts/

https://www.smartgas.eu/fileadmin/11_aktuelle_datenbl%C3%A4tter_flow/DS_F3-272504-05000_N2O_500_ppm.pdf