



Sonimix 2130 Nox Converter Tester

Description

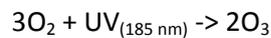
The sonimix 2130 NOx converter tester has been designed to generate a stable NO₂ concentration with a small reaction time. The good results are got using together sonic nozzles (ISO 6145-6 technology) and high stability pressure regulators.

The NOx converter tester is often used together with a multi-steps gas divider also based on sonic nozzles and high precision pressure regulators.

In order to validate NOx measurements, the efficiency of the NO₂ converter must be higher than 90 %, it is therefore very important to check easily and precisely the efficiency of the NO₂ converter.

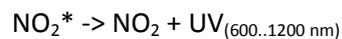
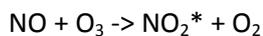
The SONIMIX converter tester is based on the process known under the name **Gaseous Phase Titration**.

The UV light at about 185 nm emitted by an high energy lamp transforms a part of the Oxygen in the Air in Ozone :



If a more important concentration of NO₂ is required, the system could be alimented with pure oxygen.

After creation, the ozone and the NO (provided by a pre-mixed cylinder of 100 ppm NO/N₂ for example) are mixed together in a reaction chamber. The following reaction takes place :



US EPA Method

Simple interface

Applications



The NOx Converter tester has been designed and developed to test the efficiency of the converter.

NO₂ → NO of the NOx gas analysers, involved in the emission measurements on the stack monitoring and automotive industry.

Specifications

NOx converter tester	Low concentrations	High concentrations
O3 generation (setting by potentiometer or remote control) <i>Or as alternative</i>	30 to 100 ppm <i>5 to 50 ppm</i>	300 to 1200 ppm
NO2 generation (setting by potentiometer or remote control)	25 to 90 ppm	280 to 1100 ppm
Inlet pressures	2.5 to 4 bar rel. (37 to 58 PSI)	2.5 to 4 bar rel. (37 to 58 PSI)
Outlet pressure : Standard	< 250 mbar rel (< 5PSI)	< 250 mbar rel (< 5PSI)
Option 1	910 mbar rel. (13 PSI)	910 mbar rel. (13 PSI)
Alimenting gases Diluted line <i>Or as alternative</i>	100 ppm NO in N2 <i>50ppm NO in N2</i>	1200 ppm NO in N2
Carrier line	Clean and dry Air	100 % O2 (class5.0) or Air
Stabilisation time for the NO	< 1 min.	< 1 min.
Stabilisation time for the O3	< 3 min.	< 5 min.
Stabilisation time for the NO2	< 3 min.	< 5 min.
Flow on the Air line	0.2 NI/min	0.2 NI/min
Flow on the NO line	2 NI/min	2 NI/min
Materials in contact with gases		
NO	Stainless steel, Teflon, Gold, Silver	Stainless steel, Teflon, Gold, Silver
O3 and NO2	Stainless steel, Teflon, Gold, Silver,	Stainless steel, Teflon, Gold, Silver,
Air	Stainless steel, Aluminium, Silver, Brass	Stainless steel, Aluminium, Silver, Brass
Presentation of the device	In a stand alone casing or as a module mounted in a gas divider	In a stand alone casing or as a module mounted in a gas divider
Fluidic connections	¼" Swagelok	¼" Swagelok

Options – Accessories – Spare parts

Models:

6800 50 001	NO2 converter tester 5 to 50 ppm
6800 50 002	NO2 converter tester 25 to 100 ppm
6800 50 003	NO2 converter tester 300 to 1000 ppm

Options:

6800 10 000	Portable casing
6700 13 867	Voltage 230V/50-60HZ
6700 13 868	Voltage 115V/60Hz



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