

# LOWER EXPLOSURE LIMIT MONITORING SYSTEMS

- Fast response time (T90 in 1,4 sec.)
- High reliability
- EN 1539 certified
- Low management costs
- Single or multipoint monitoring





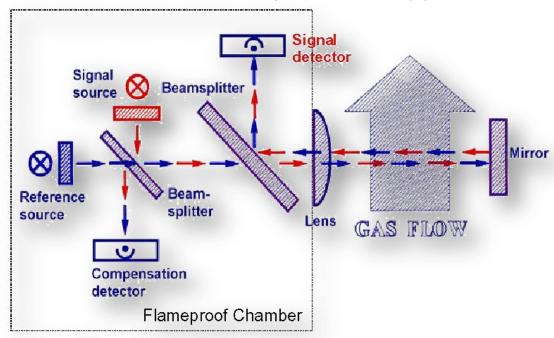
Sagittarius 5000 (IR)



# SAGITTARIUS 5000 LEL I.R. INFRARED DETECTOR

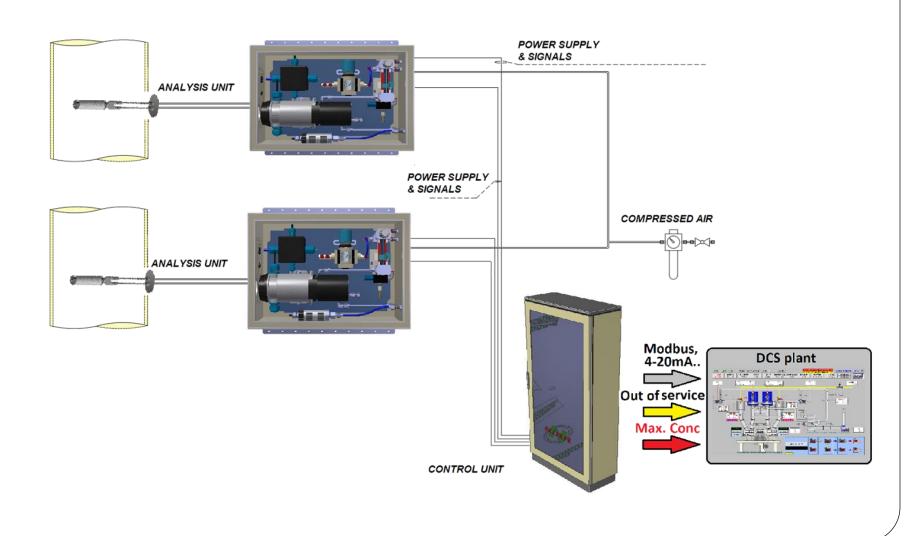
The sample gas flow passes through an analytical cell (optical path). The infrared light emitted by the source is absorbed by the sample gas in the cell and caught by a receiver. The decreased intensity between the light emitted and the one caught, is proportional to the solvent concentration.

The infrared system is the cost-effective solution for simple solvent mixtures in low temperatures applications.





## SAGITTARIUS 5000 LEL I.R. Layout





## SAGITTARIUS 5000 LEL I.R. **Compliances**

TÜV Rheinland Italia Sri

Via Enrico Mattel, 3 I - 20010 Pogliano Milanese (MI) Tel. +39 02 8396871,



#### **Technical Statement**

291160030 Assessment no.: N.I.R.A. S.r.I. Applicant . Via Locatelli, 113 I - 20853 Biassono (MB) Manufacturer Same as above "Applicant" Gas Concentration Monitoring System type "SAGITTARIUS 5000" and Sampling System Assessment of performance level according to EN ISO 13849-1:2008

TUV Rheinland Italia S.r.I has been committed by N.I.R.A, with order 8740683, as a third independent party, to assess the Gas Concentration Monitoring System type "SAGITTARIUS 5000".

TÜV Rheinland Italia S.r.I herewith states that the Gas Concentration Monitoring System, type "SAGITTARIUS 5000", including the Sampling System (gas transfer line) from the sampling point, as a separate entity and performing the safety function of "LEL Detection", fulfills the requirements of Performance Level "d", according to EN ISO 13849-1:2008, stated into EN 1539:2015 at § 5.9.2.2.4.

Diagnostic available by the Gas Concentration Monitoring System shall be handled by the end user according to the indication included into the safety manual.

The Proof Test Interval considered is 3 years.

Gas Concentration Monitoring System type 'SAGITTARIUS 5000' has the Gas Detector which complies to the relevant parts of the standard EN 60079-29-1:2007 (ref. to EC Type Certificate 'Nemko 07ATEX1438 issue 3" dated sept 30th 2011) as stated into EN 1539:2015 § 5.9.2.2.4.

With reference to the ATEX technical file num. 0113-SGT (receipt of deposit num. 557/Ex-Ab 2149/13) the Gas Concentration Monitoring System type "SAGITTARIUS 5000", as equipment in used in potentially explosive atmospheres, is suitable to be installed in Zope marked as follow:

II 2G IIC T4 X

Industrial Service

Diege-Sirtori

TÜV Rheinland Italia Business Stream Manager Industrial Service

This statement has been issued by TÜV Phoinland Italia S. t.l. as Third Independent Party. For other processing we have stored espand at origin data.

The procedure of the data is guaranteed. The procedure training store exclusively to the described set object. Paging explicit of the Statement and rest report within a winter a minoration is not permitted.

page 1 of 2

#### Certificate of Acknowledgement of Receipt

(sealed Storage) (New Deposit)

Certificate Number of Registration 557/Ex-Ab 2140/13

TÜV certification body for ex-protected products of TÜV Industrie Service GmbH, Unternehmensgruppe TÜV Rheinland Group

> N.I.R.A. Srl Via Locatelli, 113 I - 20046 Biassono (MB)

The receipt for deposit of a technical file created in accordance with article 8 (1) b) ii) , for non-electrical equipment of category II 2):

#### Gas Concentration Monitoring System

Technical Data:

Application of: Ref. Order Tech. File No.: SAGTTARIUS 5000 14/06/2012

According to the Direct g ed by 65 57/Ex-Ab 2140/13 ed by us and is registered under our

Date: 23/12/2014 Period of deposit until: 23/12/2024

TÜV Rheinland Italia S.r.I. Seprizi Industriali /

muca Gianluca Matradi

www.tuv.com





# ENHANCED FEATURES FOR LEL DETECTION

## Comparison



### Traditional IR LEL

- Response time in 5 seconds.
- Frequent calibration needed due to Span and zero drifts
- Calibration on one single solvent or component
- Short sensor life, 2 years guarantee
- Developed for generic LEL monitoring applications.

### Sagittarius 5000 IR LEL

- Response time in 1,4 seconds.
- Auto-zero and Auto-span drifts compensation, no calibrations required
- Optimized calibration for the solvent mixture provided by the end user
- Long sensor life, 5 years guarantee (Detector)
- Certified for EN 1539:2015, the specific standard for ovens and dryers.



### SAGITTARIUS 5000 IR LEL REQUIREMENTS

Our IR systems require compressed air gas to work only



Power supply 230V or 115V



Air from your network (5 bar)

CONSUMPTION = 1m³/hour each line



### **COMPETENCE IN AFTERSALES**

# Our service department work worldwide every day, on 6 different kind of Nira instruments:

- Quick E-mail, Skype and phone service
- More than 500 interventions performed per year.
- More than 1000 instruments serviced worldwide.
- Less than 5 working days to organize an intervention within Europe, 10 worldwide.

