

Case History

Comparing a new technology with a proven one

Place: Taranto Installation: 2018

Instrument: PyxisGC BTEX

Costumer: ARPA Puglia



INTRODUCTION

ARPA Puglia carries out the air quality monitoring thanks to the Regional Air Quality Monitoring Network fixed stations, implementing campaigns with mobile laboratories and additional sampling tools. Given the recent years' technological advances, ARPA Puglia is keener to include smarter technologies for the application of more efficient and effective monitoring networks.

REQUEST

In order to monitor the BTEX presence in ambient air, ARPA Puglia carried out a measurement and monitoring operation in parallel with PyxisGC BTEX and GC 866 Chromatotec, where they were both installed inside an air quality cabin which is located in Taranto, Via Alto Adige, in an area where the pollution level is mainly influenced by emissions from neighbouring roads, with medium-high traffic flows.





SOLUTION

In 2018 Pollution Analitycal Equipment developed the current **PyxisGC BTEX analytical core**. In order to verify its instrumental performance, both from the point of view of data quality and long-term performance, a **test activity** was carried out in the ARPA Puglia Air Quality cabin located in Taranto, with analytical instrumentation directly on-site.

The PyxisGC BTEX installation operations in the cabin were carried out by ARPA Puglia specialized technicians, with pre-calibrated instrumentats. In order to evaluate the PyxisGC BTEX instrumental performance, the test was structured following two steps. First of all, the parallel measurement of gas from a pre-and post-monitoring certified cylinder was carried out. Finally, monitoring was carried out in parallel with PyxisGC BTEX and GC 866 Chromatotec, both installed inside the ARPA Puglia air quality cabin, over a period of 7 weeks.



CONCLUSIONS

In the light of the results obtained, we can say that the Pyxis GC BTEX follows perfectly the trend of the measurements detected with the ARPA Puglia control unit, even though it hadn't been calibrated during the entire test period, thus demonstrating **the instrument high reliability and the accuracy of the measurements.**

