

Monitoring of TOC of Airport Runoff Streamlines



Objective

Pollution monitoring & environmental compliance

Parameters

TOC (Total Organic Carbon)

Integrated system consisting of:

- AnaShell type AS4600 insulated analytical shelter (2 m x 5 m) with H-AC unit, lightning protection, equipment grounding, special rodent protection
- BioTector TOC analyser
- Sample vessel, space and power sockets for existing customer equipment

Problem

Continuous measurement of TOC (Total Organic Carbon) in the airport runoffs is an essential part of environmental monitoring and management. It helps in detecting organic pollutants to save operational costs and ensure regulatory compliance. The customer recognised the need to upgrade their TOC monitoring and needed a suitable enclosure to protect the analytical equipment at the remote location.

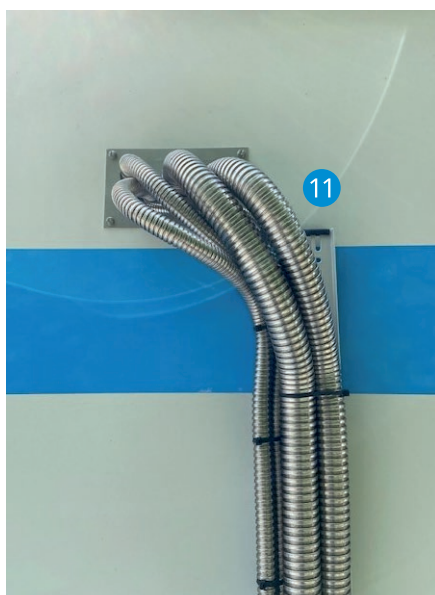
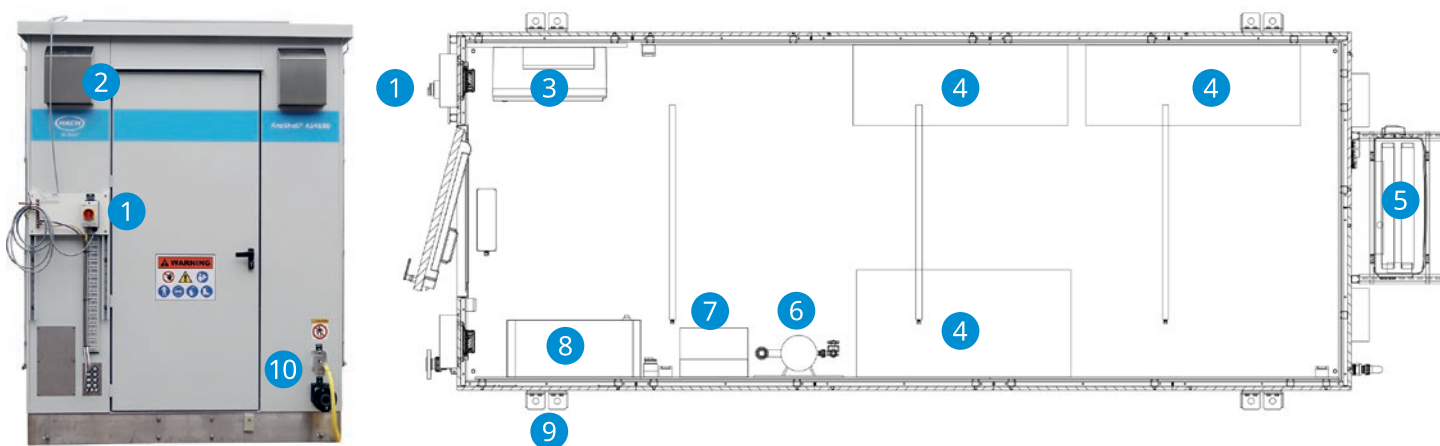
Solution

The Hach[®] inhouse engineering team designed a turnkey monitoring solution for a BioTector TOC analyser, plus existing customer equipment. The TOC analyser and auxiliaries were pre-mounted and connections for installation of the additional equipment were prepared. Additionally the shelter was equipped with special rodent protection features like steel-coated cables. The entire shelter underwent a factory acceptance test (FAT) prior to shipment for sustainable and long-lasting operational reliability on site.

Benefits

- Fast realisation of the project with a single source supplier
- Remote installation of analytical equipment in an enclosure to protect equipment and personnel against environmental conditions, rodents, and pests.
- Stable, laboratory-like conditions for the instruments to achieve high accuracy and uptime.
- CE certification and full documentation

Details & Components



- 1 Main Power Switch
- 2 Stainless steel cover and mesh to cover ventilation inlet / outlet
- 3 Local power distribution panel and signal junction box
- 4 Space reserved for onsite installation of existing customer equipment
- 5 Air conditioning unit
- 6 Sample vessels
- 7 Compressor
- 8 BioTector TOC analyser
- 9 Lifting / mounting brackets
- 10 Sample inlet / outlet flanges with protective stainless steel mounting brackets
- 11 Stainless steel protection for cables
- 12 Stainless steel mesh screwcap to cover pipe ventilation
- 13 Durable chemical resistant HPL (high pressure laminate) mounting plates

