Integrated Systems

Stormwater Management in the Chemical Industry





Objective
Protection of the treatment plant & environmental compliance

Parameter
TOC (Total Organic Carbon)

Integrated system consisting of:
- AnaShell type AS4300 insulated analytical shelter (2 m x 3 m) with H-AC unit, lightning protection
- Two BioTector B7000i TOC analysers for two sample streams

Problem

A manufacturer of agrochemicals wanted to protect their wastewater treatment plant from potentially dangerous substances in stormwater. For this purpose they were looking for a reliable online TOC analyser solution, so that during a heavy rainfall event or an accident, water with a high organic load could be diverted to an emergency tank. Internal company rules required a redundant analyser system.

Solution

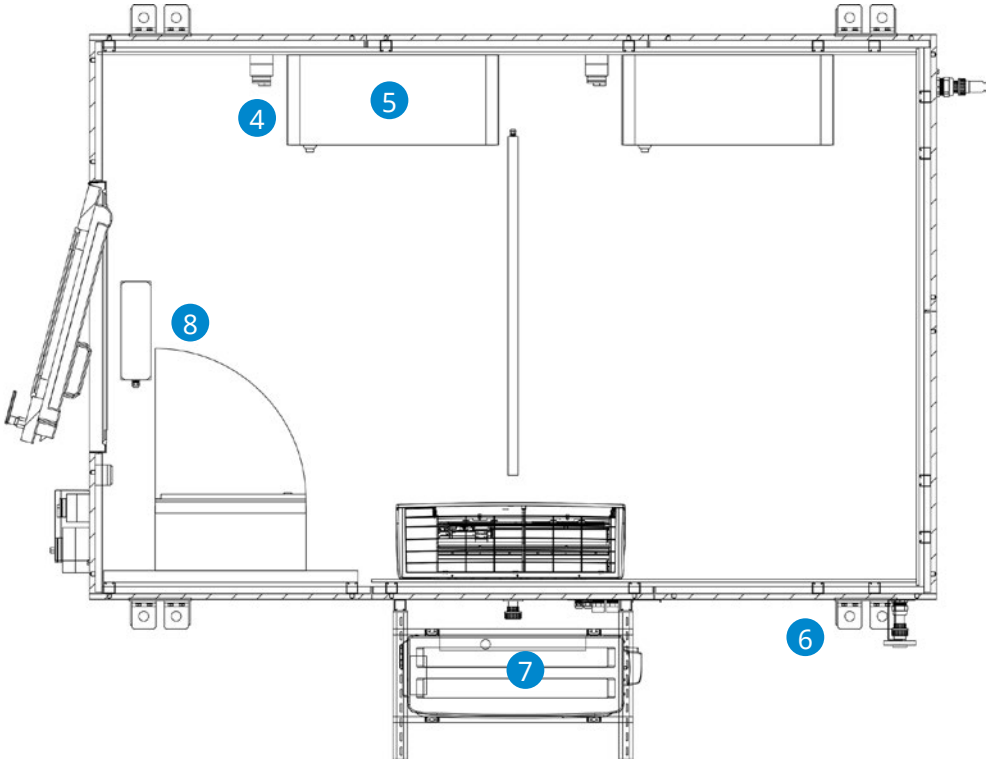
The Hach® inhouse engineering team designed a turnkey monitoring solution. A weather and corrosion resistant AnaShell analytical shelter provides sufficient space for two TOC analysers, with the option to add a third one in the future. Before delivery the entire shelter and its components underwent a factory acceptance test (FAT) for instant and sustainable operational reliability on site.

Benefits

- Risk mitigation
- Significantly reduced project management workload through single source supplier with engineering and application expertise
- Fast realisation at a fixed price
- Stable, laboratory-like conditions for optimal analytical performance of the analysers
- Safe working environment for maintenance personnel
- CE certification, full documentation
- Low installation effort, fast start-up

Details & Components









1 Door with antipanic bar which can be opened from the inside even when locked
2 Main Power Switches
3 Signal junction box
4 Individual maintenance switch for every analyser
5 TOC analyser
6 Lifting / mounting bracket
7 Air conditioning unit
8 Emergency light
9 Durable chemical resistant HPL mounting plates, modular mounting profiles
10 Sample vessel
11 Flange with protective stainless steel mounting bracket

