A-TRACE

ADVANCED TRACKING TECHNOLOGY
TRADITIONAL TRACER TECHNOLOGIES

The traditional tracer technologies for cooling tower are based on the use of Fluorescein.

The fluorescent power of Fluorescein is affected by the interference of oxidizing agents and bacteria which can either change its chemical structure or consume it during their metabolism.
TRADITIONAL TRACER TECHNOLOGIES

Bacteria

Fluorescein

Oxydizing agent

NO FLUORESCENT MOLECULES

DAMAGED TRACER = UNRELIABLE MEASURING SYSTEM
Pyrene and its derivatives are used commercially to make dyes and dye precursors.

Such kind of fluorescent dyes are resistant to oxidation and bacterial degradation so their fluorescence doesn’t change during the measure.
WE DEVELOPED A TRACER TECHNOLOGY WHICH EXPLOITS THE STABILITY OF A PYRENE DERIVATIVE FLUORESCENT DYE.

**Increased stability towards oxidizing agents**

**Bioresistant**

**Non-toxic**
A-TRACE STABILITY IS UNIQUE

The usage of hypochlorite doesn’t affect the measure of the analyzer
A-TRACE STABILITY IS UNIQUE

A-TRACE is stable in a wide range of pH values.

The measure is stable and linear within a wide range of product concentrations.
A-TRACE STABILITY IS UNIQUE

A-TRACE SYSTEM

A-TRACE SYSTEM

Installation at clients location
CASE STORY

Customer: Industrial gas producer

Cooling towers number: 2

Type of cooling tower: induced drafts, crossflow

Make up water: river water

Chemical treatments

- Controlled pH, CF = 3.5
- Antiscale treatment (phosphonate and organic polymers)
- Anticorrosive treatment for Cu (azoles)
- Biocide treatment with NaClO, controlled by Redox
- Biodispersant treatment with polyethers
CASE STORY

Cooling tower South, TRACER TECHNOLOGY
CASE STORY

Cooling tower South, A-TRACE TECHNOLOGY

![Graph showing concentration over weeks](image-url)
A-TRACE

CASE STORY

Reliability of the tracer systems

Percentage difference between real values and values determined by tracer equipments
A-TRACE TECHNOLOGY ADVANTAGES

A-TRACE

Tracer technology *overcomes the limits* of the previous standard tracers based on fluorescein, with the use of a very stable tracer substance, *reducing the industrial water treatment costs* and *keeping a most reliable concentration value of the antiscalant or corrosion inhibitor chemical*.

VS.

OTHER TRACER TECHNOLOGY

The fluorescent power of traditional tracer based on fluorescein *is affected by the interference* of bacteria which can either change its chemical structure or consume it during their metabolism.
- Fluorescein is *destroyed by sodium hypochlorite or any oxidizing biocide technology*
- Its concentration changes during the oxidizing biocide shot or continuous dosage giving a mistake in the tracer value
- Higher chemical consumption than the needed value
- Expensive chemicals and equipment
- Increasing of industrial water treatment costs
For more informations please contact our partner:

CWG d.o.o.
10010 Zagreb
Buzinski prilaz 21
T. +385 1 6608 807
T. + 385 1 5601 117
F. + 385 1 6608 809
E. info@cwg.hr
W. www.cwg.hr