

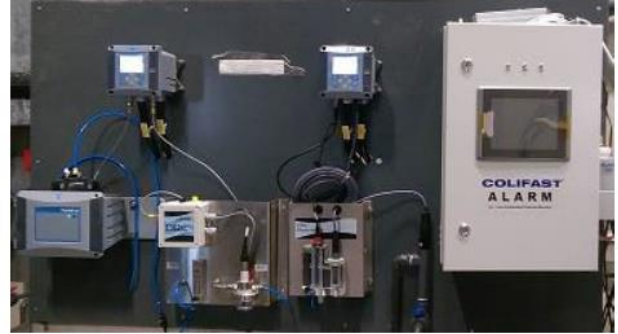
# Application Note

## Colifast ALARM

### Monitoring treated waste water for reuse in car industry



Hyundai Assan car factory in Turkey



Colifast ALARM analyses treated wastewater

### The instrument

The Colifast ALARM is fully automated and performs a presence/absence analysis in 6-15 hours. This shortens the time-to-result compared to when traditional methods are used. The Colifast ALARM measures presence/absence of *E. coli*, fecal coliforms or total coliforms in a 100 mL water sample. The Colifast ALARM only requires that operators change growth media bottle and discards of the non-hazardous waste every 21 days.

### Application

Like all automobile manufacturers, Hyundai needs high purity water for paint preparation and car painting. The manufacturer wants to reduce the use of water by treating and reuse the wastewater. Hyundai requires chemically and microbiologically purified water, however, they also want to protect nature, save water and reduce the production costs.

Hyundai cars offers their customer 10-years paint warranty. An important factor to be able to fulfil this customer guarantee is to secure that no microorganisms are present in the water used in the production. The treated water for reuse is monitored for microbial contamination by the Colifast ALARM instrument.

### Customer

*User:* Asim Kibar Organized Industrial Zone  
*Sector:* Automotive Production  
*Producers:* Hyundai Assan, Hyundai Steel etc.

**Treatment and Recycling Investment of Wastewater**  
The wastewater of all producers in the organized industrial zone is collected in a central wastewater treatment facility. Treatment plant capacity is 4000 m<sup>3</sup> / day. Reuse technologies are ultrafiltration and reverse osmosis.

### Technical information

The Colifast ALARM is connected to a sample container with continuously flowing water. When the Colifast ALARM system detects 1 cfu or more, an alarm is generated. The instrument is integrated with local SCADA using analogue and Modbus communication protocol. When a target bacteria is detected the user is alarmed and the entire disinfection process can be repeated.

This application note is written by our distributor in Turkey  
**Thermomed *Medikal ve Analitik Cihazlar Tic.Ltd.Şti.***

Email address: [ikaplan@thermomed.com.tr](mailto:ikaplan@thermomed.com.tr)

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