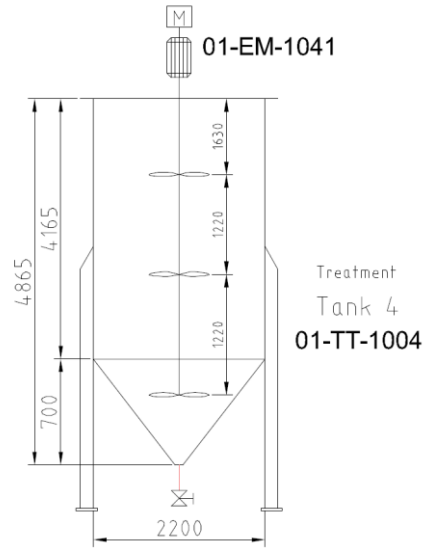


Radar Level Gauge Application Report 15

- Level monitoring at wastewater treatment plant -



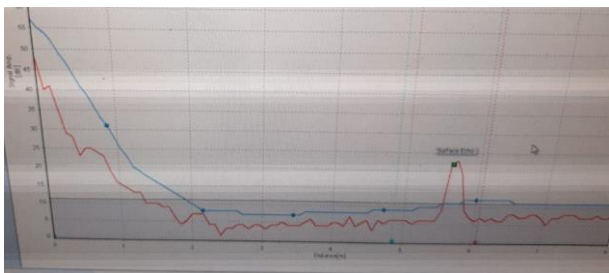
The KRG-10 Non-contacting Radar level gauge features accurate & non-contact level measurement with simple installation over a target liquid.

In this application, KRG-10 achieves simple control for each wastewater treatment procedure by monitoring water level.

Capacitance type level gauges are commonly applied in waterworks because of their relatively simple construction and design which involves direct sensor-liquid contact (wet installation). There are disadvantages however with this type of gauge. For example, the sensing elements of capacitance level gauges are also prone to substance adhesion, which may result in errors.

Ultrasonic level gauges are also frequently used as a non-contact means of level measurement. This type of gauge measures the round-trip transiting time of high frequency sounds to and from the surface of a liquid and converts this into distance. Ultrasonic level gauges however are easily affected by vapor, pressure, temperature changes, and other environmental factors.

Radar level gauges, which incorporate electromagnetic waves (microwaves) on the other hand, do not require direct contact with liquids, density parameters or complex capacitance comparisons. Microwave-based level gauges are also least affected by ambient conditions.



In addition, the KRG-10 radar level gauge with High frequency can remove disturbance from mixer as echo wave monitor indicated.

Non-contacting radar measurement achieves maintenance less condition in this application.

	KRG-10	Capacitance	Ultrasonic
Non-Contact	○	×	○
Vapor (High Temp & High Humidity)	○ Least affected	×	×
Temp. Change	○ Least affected	○ Not affected	×
Durability	○ Isolated from ambient conditions	×	×
		Wet	Exposed to ambient conditions

[Application Data]

Typical User : Wastewater treatment Plant
Target : Waste water

[Installation Data]

Main Unit : Non-contacting radar KRG-10
Antenna : 2inch cone antenna
Range : Approx. 5m

For more detailed information, please contact your local representative.

Representative in your Area