

Limitations of Tank Level In Determining Flow Rate

CUSTOMER VALUE

Application Sheet #42

SITUATION

- Operators attempt to use tank level monitors to calculate the *rate* of chemical injection.
- Comparison to *actual* field rate measurements revealed significant errors.
- Tank level measurements are impractical for determining injection rate:
 - Typical tank sizes and injection rates require **several days** of injection to produce a level drop that is suitable to determine flow rate.
 - Tank levels experience small fluctuations due to daily temperature changes.
 - The irregular shape of the chemical tank often skews both volume and rate measurement measurements.

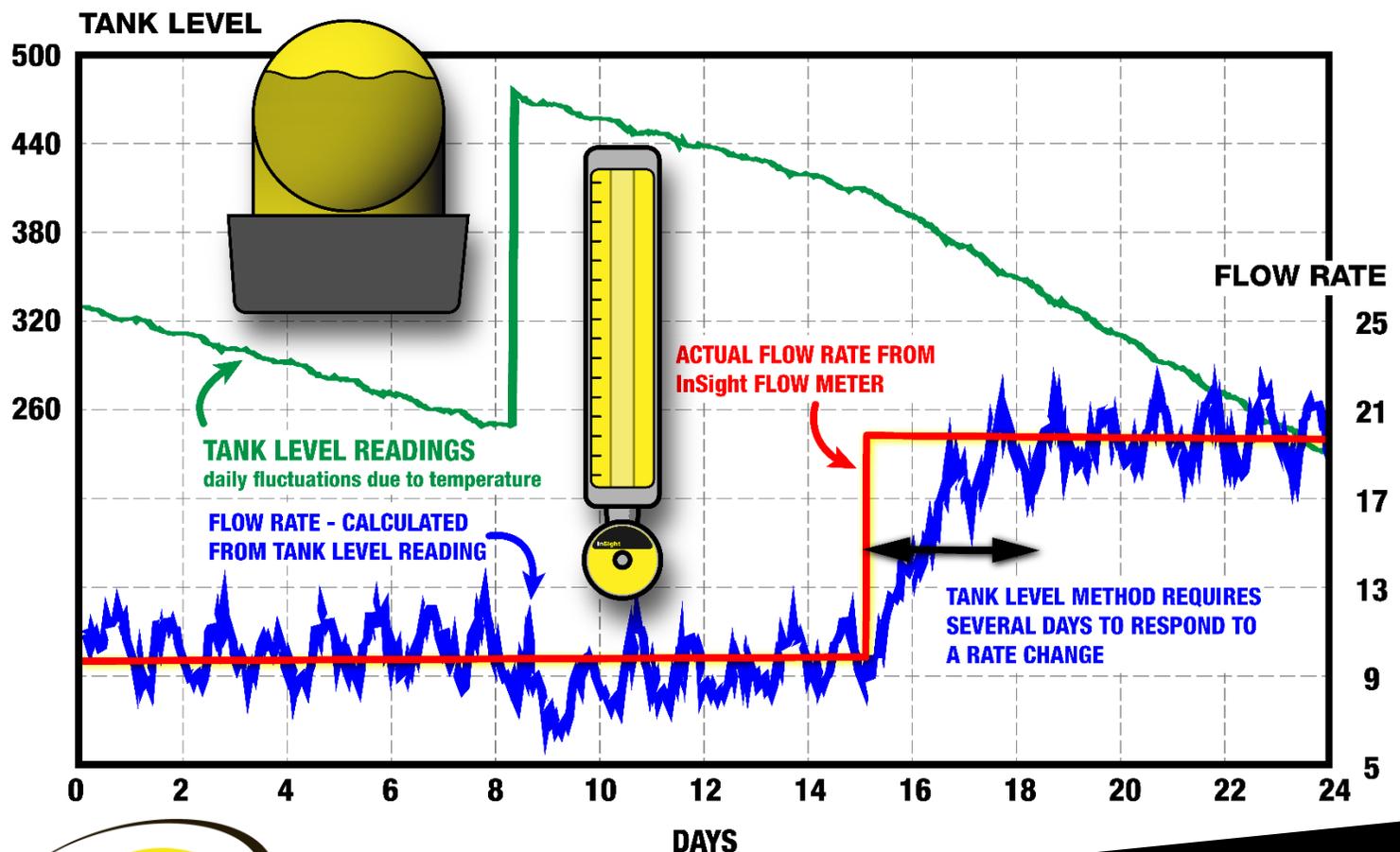
SOLUTION

- Sirius installed an InSight™ smart sight glass along with Connect IIoT monitoring and controls.
- The InSight directly measures the flow rate for an instantaneous and accurate measurement.
- The InSight also provides a separate, independent measurement of tank level.

Rapid, accurate rate measurements.
Managing by exception.

RESULTS

- The operators gained the ability to respond to real-time changes in system performance.
- Operators lowered their operating costs by managing by exception.



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