



Over 50,000
systems sold
worldwide



CEM has been an
ISO-certified facility
since 1994



All systems serviced
& supported by
experts with an
average of 15 years
of experience



CEM invests 11%
of annual revenue
into R&D, the result...
11 R&D 100 awards



IQ/OQ/PQ Validation
by certified CEM
Technicians

“

*Our commitment to you
doesn't end when your
system is shipped;
it begins.*

~Michael J. Collins
President & CEO, CEM

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Worldwide patents issued and pending
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PROCESS CONTROL
SOLUTIONS FOR ALL YOUR
Wastewater Treatment Plants

Improve Your Wastewater Treatment Process with Rapid Solids Analysis.



SMART 6 Moisture/Solids Analyzer

Enhance wastewater process and quality control with real-time results.

Solids management from the clarifier to final disposal represents 50-60% of the total operating expenses of the wastewater treatment process. The SMART 6™ system provides a rapid, accurate analysis that allows real-time adjustments of the dewatering process.

Reduce polymer costs with equipment adjustments.

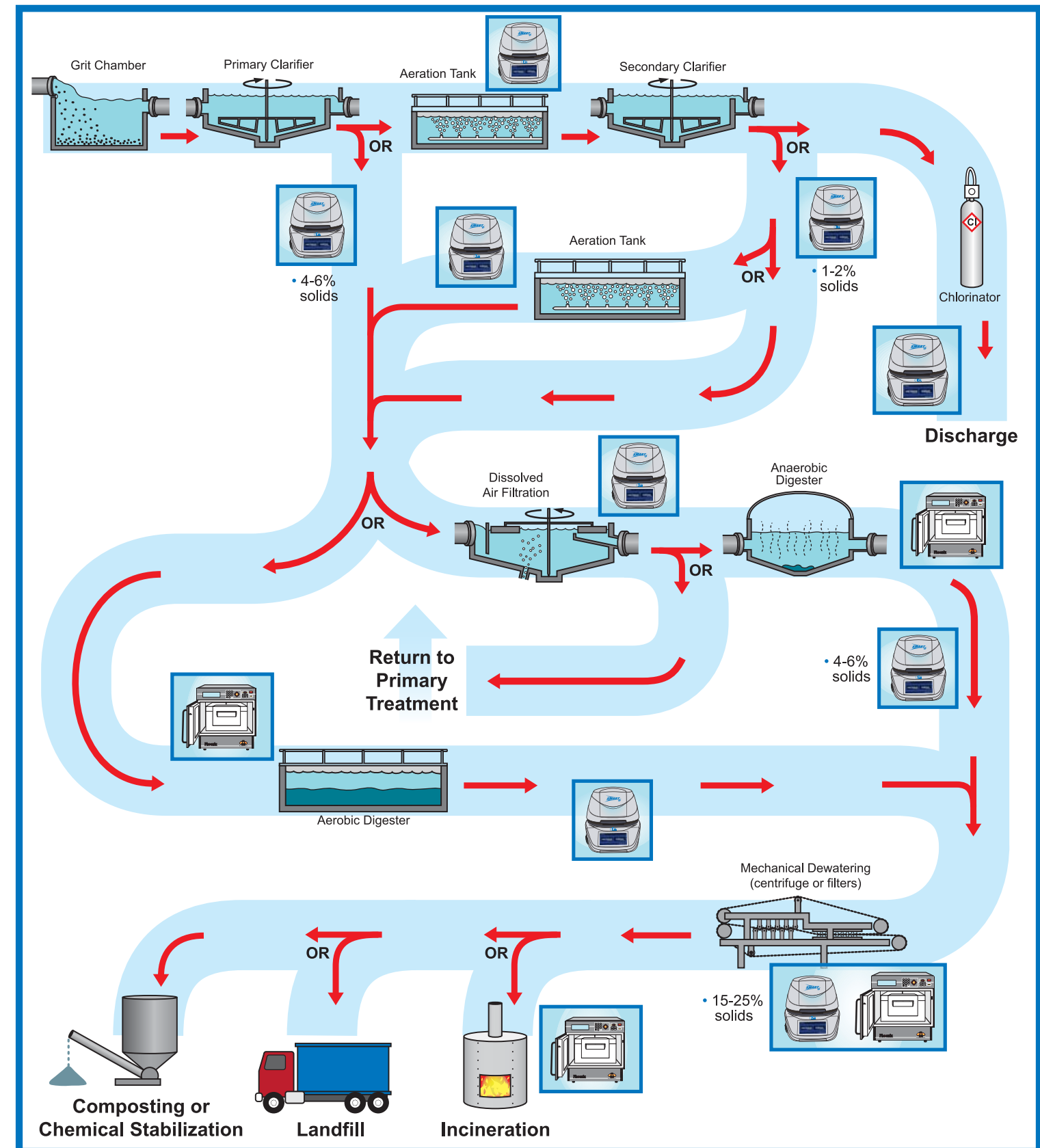
The compact SMART 6 provides accurate solids analysis in under 3 minutes. This versatile and easy-to-use system can measure effluent solids as low as 500 ppm and sludge up to 60% solids. Having the ability to rapidly determine the cake solids during dewatering, enables quick equipment adjustments to reduce polymer costs. For example, if the lowest polymer cost per dry ton of solids is achieved at a target value of 20% solids, operators can perform hourly solids tests and reduce the polymer feed every time the cake is greater than 20%. Even a modest 10% reduction in polymer use could save thousands of dollars per year.

Where does CEM Analysis Fit in the Wastewater Treatment Process?

SMART 6
Microwave Moisture/Solids Analyzer



Phoenix
Microwave Muffle Furnace



The SMART 6, in combination with the Phoenix can be used for volatile solids/suspended solids analysis, with results in less than 20 minutes.

Increase Operational Efficiency with Rapid Volatile Solids Analysis.

Phoenix Microwave Muffle Furnace

Optimize Operation with Improved Testing Capabilities.

The Phoenix™ Microwave Muffle Furnace is an innovative heating technique for rapidly determining volatile solids in the waste treatment plant. What previously took operators hours can now be accomplished in minutes with this 1200°C ASTM conforming muffle furnace. The Phoenix performs many high temperature applications, up to 10 times faster than traditional methods. Most volatile solids analyses can be performed in 10-15 minutes, versus hours using standard methods.

Volatile solids analysis can provide the information needed to optimize operation of the wastewater facility. Having test results within minutes transforms the exercise from mundane record keeping to active process control.

Optimize Waste Feed Rates of Incinerators.

A rapid microwave method can determine the ash content of waste samples in minutes. This rapid testing method allows waste characterization information to be utilized for optimal waste feed rates. Adjustments can be made to the waste feed rates to **reduce fuel consumption costs and control variances in emission levels.**

