EVOQUA
WATER TECHNOLOGIES

CROWN Disintegration Process

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The Crown Disintegration System Enhances Anaerobic Digester Performance

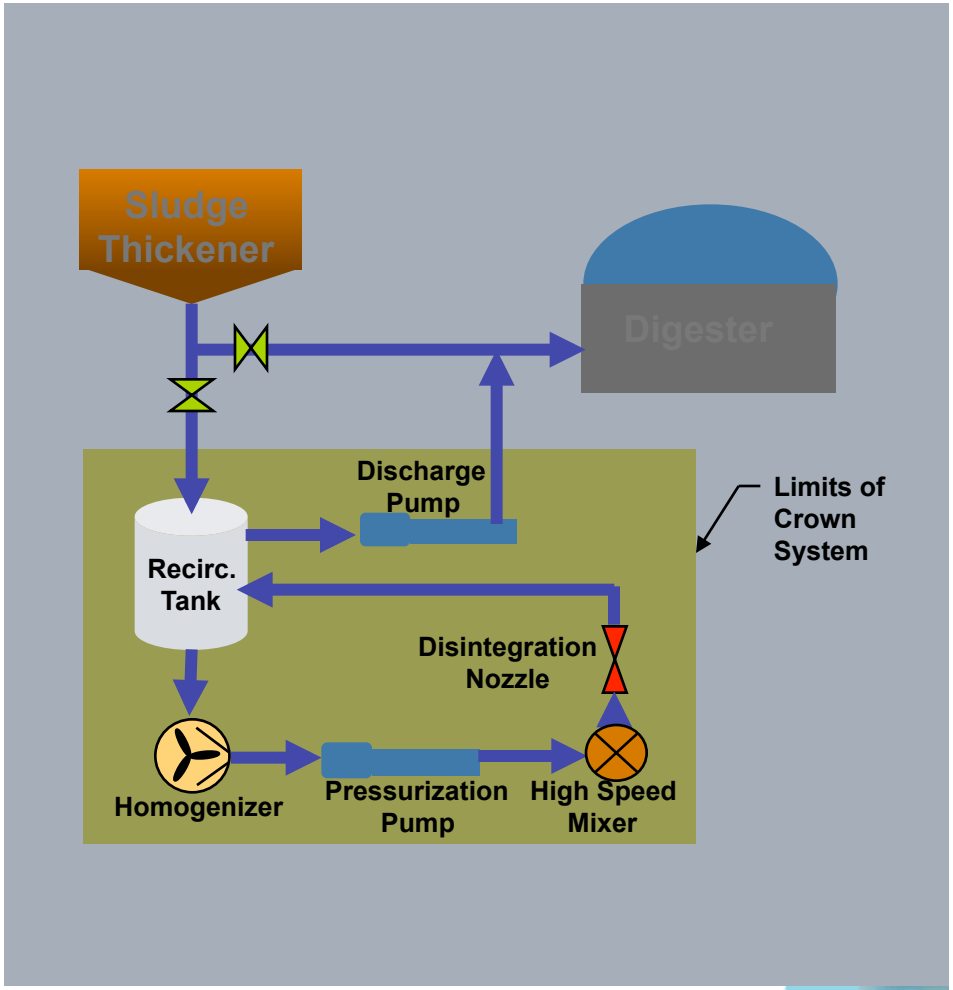
- **Better volatile solids reduction – less solids to haul**
- **Improved gas production – more CoGen potential**
- **Improved dewaterability – less wet mass for disposal**
- **Minimize digester foaming – less O&M issues**

<u>Result:</u> more efficient digester operation with annual savings in power and solids disposal.

Value can be quantified to determine if the process is a good fit.

How Does the Crown Disintegration System Work?

- Mechanical system for shearing floc, rupturing cells, and releasing enzymes to solution
- For best performance, treat a segregated WAS stream after thickening and before digestion
- Steps in the process:
  - Homogenization
  - Pressurization
  - High shear mixing
  - Disintegration nozzle
  - Recirculation
  - Discharge back to digester feed



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Crown Disintegration System

Crown Disintegration System

Economics of the Crown Process Are Impacted by Specific Plant Criteria

- **Target Plant Criteria**
  - **Plant Size > 10 MGD**
  - **Plants with existing or planned anaerobic digestion**
  - **Plants that will be beneficially re-using biogas**
  - **High sludge disposal costs**
  - **High power costs**
  - **Ability to treat separate thickened WAS stream**

Pilot Unit

- **Pilot unit available**
- **Good data collection is critical**
- **Sized for 26 gpm which equals 126,800 gpd flow to digesters**

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