



Application:

Overload Clutches for Wastewater Applications

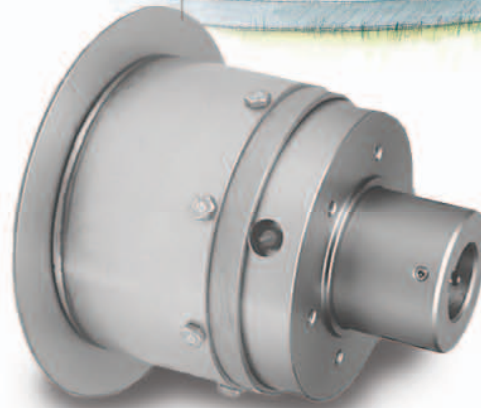
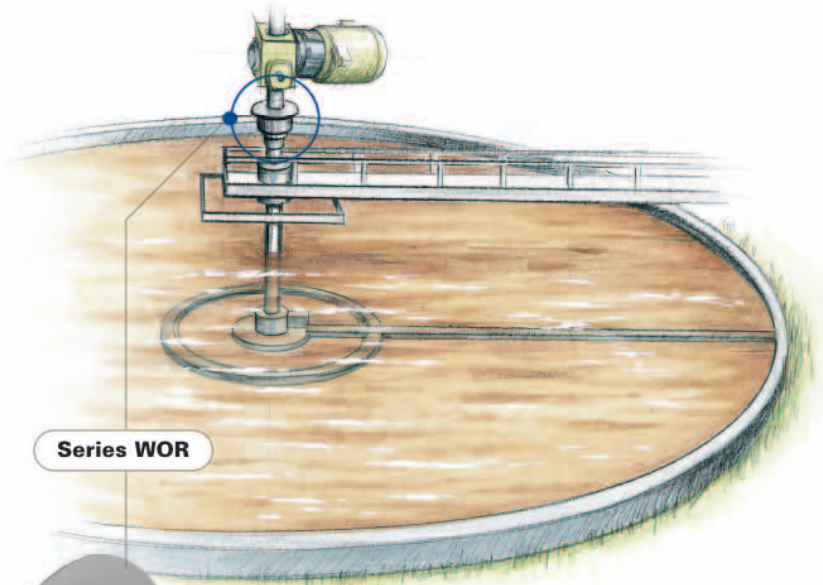
Problem:

The drive on wastewater applications rotate at very slow speed (usually less than 1 RPM) and consequently produce massive amounts of unnecessary torque. This torque can destroy drive components, increase maintenance costs and create unplanned downtime if a jam were to occur.

Solution:

Centric model WOR clutches are designed to release the excess torque without breaking drive components or creating an undesirable repair situation. WOR clutches are stainless and nickel plated to withstand these tough wastewater processing applications.

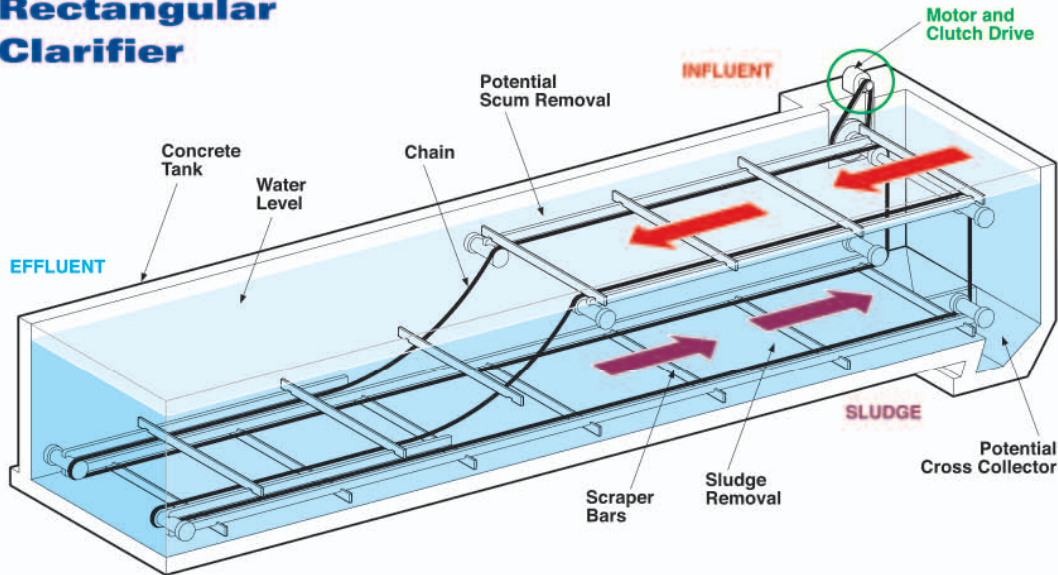
Product Solutions for Water Treatment



Model WOR overload clutches are designed for use on clarifiers, scrapers, bar screens, cross collectors or settling tanks.

- Stainless steel and nickel plated for superior corrosion resistance
- Available in automatic or manual reset styles
- Torque range from 850 to 30,000 in. lbs.
- Jaw style adapter is available or an H78 plastic sprocket can be supplied mounted to the clutch
- Adjustable torque setting with a limit switch plate notifies operator if a jam occurs

Rectangular Clarifier



Rectangular or circular clarifiers are frequently used as a primary step in wastewater processing and will remove 20% to 60% of the solids. These clarifiers are essentially large tanks of dirty water that typically have a flocculant added to help the heavy solids settle to the bottom of the tank or float to the top. At the bottom of rectangular clarifiers you will normally have a scraper system that is chain driven and removes the sludge for further processing. The circular clarifiers will similarly have a rake or scraper arrangement at the bottom to remove the sludge, and a skimmer at the top to remove the scum.

The scrapers and skimmers rotate at very slow speeds and will frequently use an overload clutch to prevent excessive torque from damaging the drive mechanism. Although the raw wastewater stream is screened to remove larger particles, the clarifier scraper system can still get jammed causing an undesirable repair situation.

Application Data

Features

The following information is required when specifying a Model WOR clutch:

Torque Setting or Range: _____ (in. lbs.)

Shaft Size: _____ (inches)

Sprocket type/size/teeth: _____

Ways to determine the torque set level:

- Locate the set point or range from installed clutch
- Obtain torque information from the system drawings
- Obtain information from previous purchase orders
- Obtain chain tension capacity and translate into torque

Note: Do not base the torque set level off the available torque. Due to the very slow RPM (typically less than 1 RPM) the available torque is generally much higher than the chain or drive can handle.

Visit www.centricclutch.com for more information
For application assistance call 704-688-7324