The Rotating Drum Thickener (RDT) is an innovative ‘sludge thickening’ machine that improves the dewatering capabilities of slurries/sludges with low solids concentration, typically 0.35%DS to >1%DS.

The RDT uses the principal of gravity drainage through a porous filter fabric. Feed slurry is conditioned with polymer through a mixer and flocculator before entry into the drum. Water is sprayed from the spray bar nozzles, continuously cleaning the filter fabric to prevent it from ‘blinding’. Positive displacement of the feed slurry, created by a spiral flight, moves the slurry across the filter fabric. Slurry is turned over and moved across the freshly cleaned filter fabric by the flight, improving drainage efficiency and raising solids concentration. In addition the spiral flight helps the thickened sludge to discharge at a consistent rate which can be a significant process advantage.

KEY ADVANTAGES:
- Adaptable to variable slurry feed characteristics
- Simple to maintain with low maintenance costs
- Low capital cost
- Gentle flocculation process reduces chemical consumption
- Small footprint
- Low energy consumption
- Self cleaning continuous operation
- Corrosion resistant materials used throughout
- Easy to install

KEY APPLICATIONS:
- Municipal waste
- Sewage
- Wineries
- Slaughterhouse
- Food & Beverage
- Tanneries
- Metal finishing
- Printers
- Paper & cardboard manufacture
- And many more industrial applications

OPTIONS FOR RDT PACKAGES

The flexible mechanical and control system design allows the RDT to be used as a separate stand-alone process, a primary sludge thickener prior to a dewatering device or seamlessly integrated with the V-Fold® Folding Belt Filter Press control system. The Rotating Drum Thickener was initially designed as a ‘sludge thickening’ machine to integrate with the V-Fold® Folding Belt Filter Press. In many applications combining the two units will significantly improve the V-Folds performance. When installed for this primary thickening function, the RDT can be mounted directly on top of the V-Fold, requiring no additional footprint. Due to all belt presses having solids limitations and hydraulic limitations for the feed slurry, the RDT will thicken hydraulically limited slurries (generally <1%DS) to allow improved dewatering efficiency through a belt press.