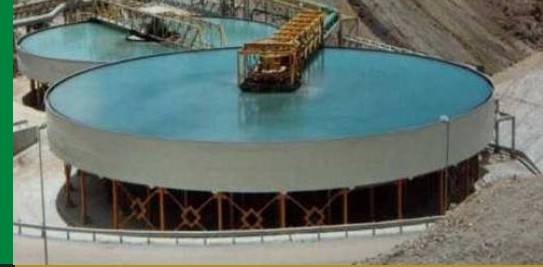




# PASTE THICKENERS



[www.delkorglobal.com](http://www.delkorglobal.com)

Sedimentation

The Delkor Paste Thickener takes all the knowledge and experience of over 30 years providing thickeners for the mining industry and applies it to the extreme mechanical and process requirements needed when dealing with high rheology underflows.

With years of bench scale and site pilot testing thickener experience, Delkor is able to accurately and quickly ascertain the type of thickener as well as the diameter and number required for a particular application.

With hundreds of thickeners sold globally, Delkor designs of tanks, bridges, feedwells, drives and raking systems are well proven and accepted. The use of FEA design packages and site analysis of equipment allows us to accurately design for the high stresses and difficulties associated with the production of paste.

### Benefits

- Site Pilot testing
- High Viscosity Product
- Shear Thinning System Available
- Fully Automated Control
- Sizes up to 40m Diameter and Beyond
- Drive Designs  $\geq$  14MNm of Torque
- De-watering Pickets
- Thixotropic Rake arms and Blades
- FEA Design Capabilities
- Compacted Bed Monitoring.
- High Efficiency Feedwell Design
- Global Network of Process & Support Personnel

### General operation of a Paste Thickener

#### The Paste Thickener functions on the following principles:

- The inlet feed is diluted to its optimum flocculation level.
- Stability of High Compacted zone.
- Rakes push the compressed material to the centre for withdrawal. The rakes also aid in the dewatering of the material.
- The clarified liquor discharges into a circumferential launder at the top of the tank.

#### Control philosophy

The typical control of a Paste thickener is as follows:

- Underflow density to control underflow slurry withdrawal. Bed mass pressure (optional)
- Flocculant dosing is controlled by means of a bed level detection device
- Torque is monitored using hydraulic pressure
- Overflow clarity is measured using a turbidity device as an option.

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# PASTE THICKENERS APPLICATIONS



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Sedimentation

Conventional, High Rate, High Density, Ultrasep and Paste Thickeners treat a variety of materials in a number of different industries.

## Mineral Processing

- Material
  - Gold
  - Silver
  - Platinum Group
  - Diamond
  - Base Metals
  - Copper
  - Iron
  - Coal
  - Nickel
  - Mineral Sands
  - Uranium
  - Aluminium/Bauxite
- Application
  - Grinding
  - Leach
  - Concentrate
  - Tailings
  - Counter Current Decantation (CCD)
  - Paste Backfill
  - Clarification
  - HDS (High Density Slurry)

## Water Treatment and Waste Water

- Sewage Treatment
- De-salination
- Water purification

## Chemical / Industrial

- Refineries
- Smelters
- Cement Industry

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- High Rate Thickeners
- High Density Thickeners
- **Paste Thickeners**
- Ultrasep Thickeners
- Conventional Thickeners