























KOCH



FULLER®







Cone Crushers

Gyratory Crushers

Low-Speed Sizers









Ball Mills







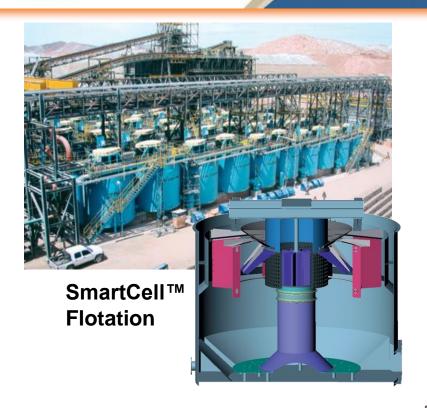
Hydrocyclones

Spiral Classifiers







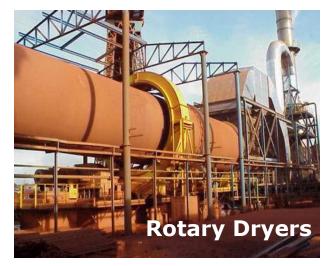






FFE Xcell™ Flotation Cells









Gas Suspension Calciners

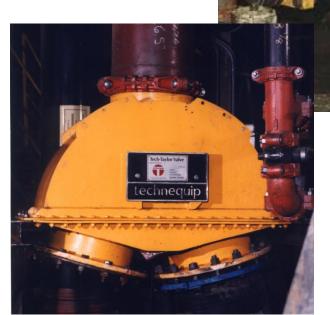






Diaphragm Pumps





Valves



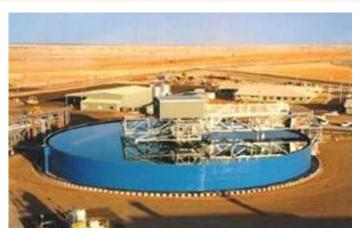
Sedimentation



Tailings Thickeners



Paste Thickening



Traction Thickeners



E-Cat® Clarifier Thickeners



FLSmIDTH Fimco and Dorr-Oliver Thickeners

World leader in thickener design and installation for big plants



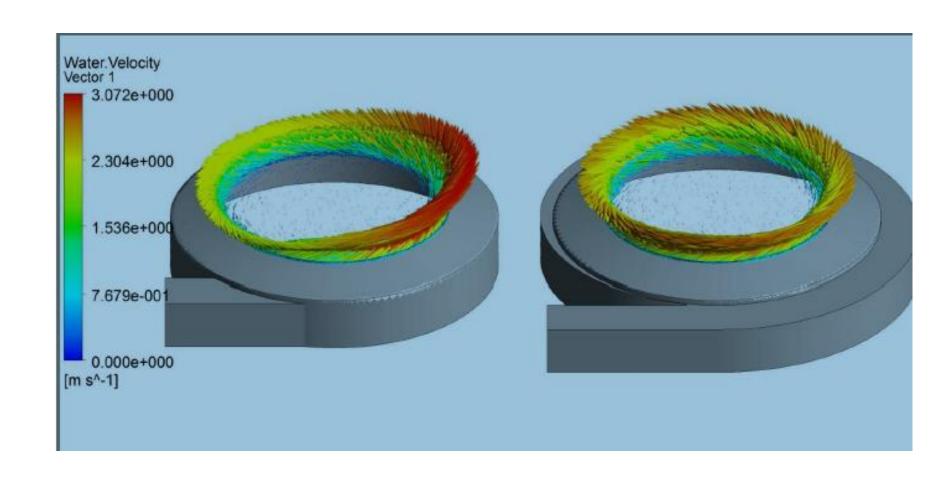
125m Traction Thickener – Collahuasi, Chile



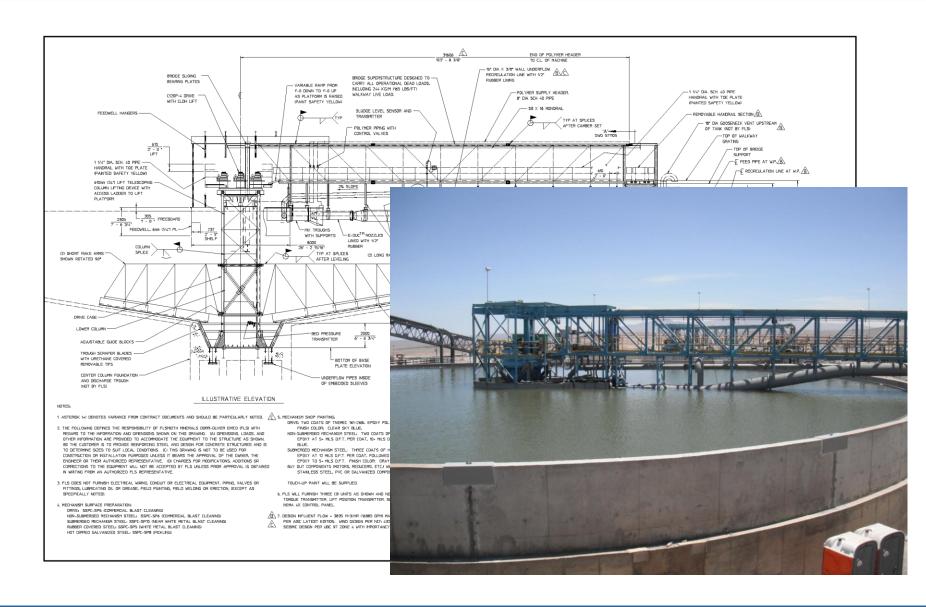
lution - Proven Performance for High Capacity Minerals Thickeners







FLSMIDTH



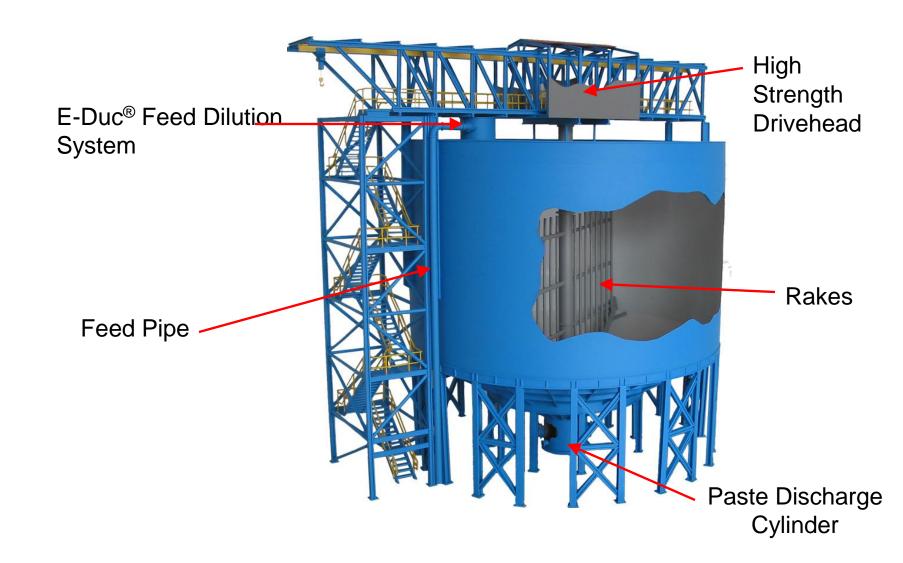


Andina 43 m HDT

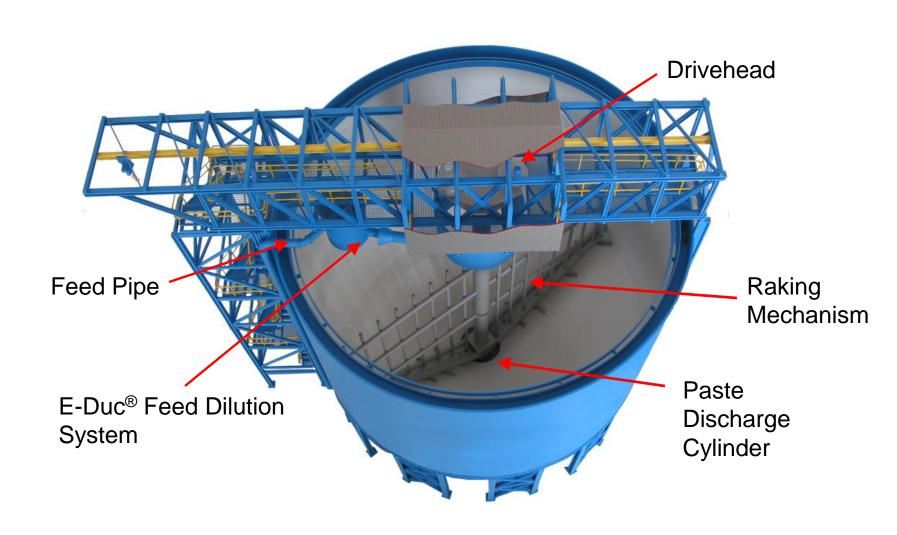
25,000 tpd, 68 wt% underflow







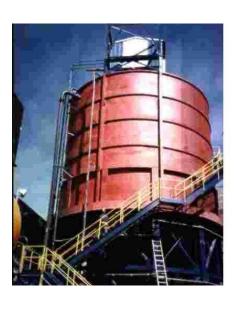






























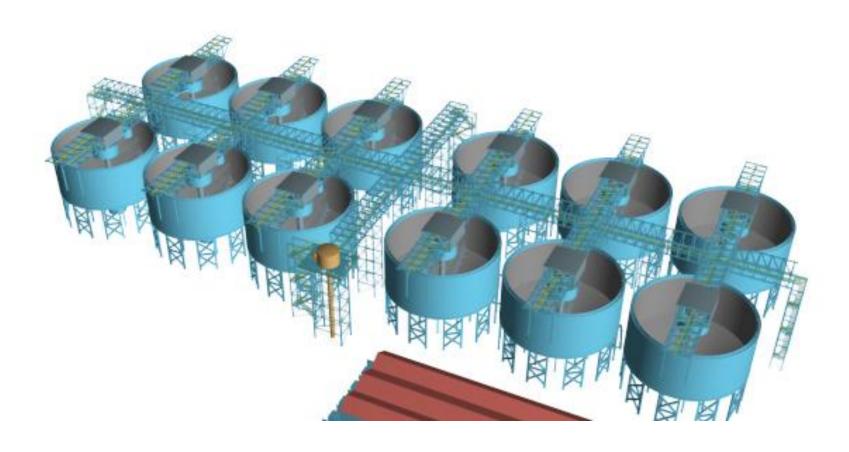












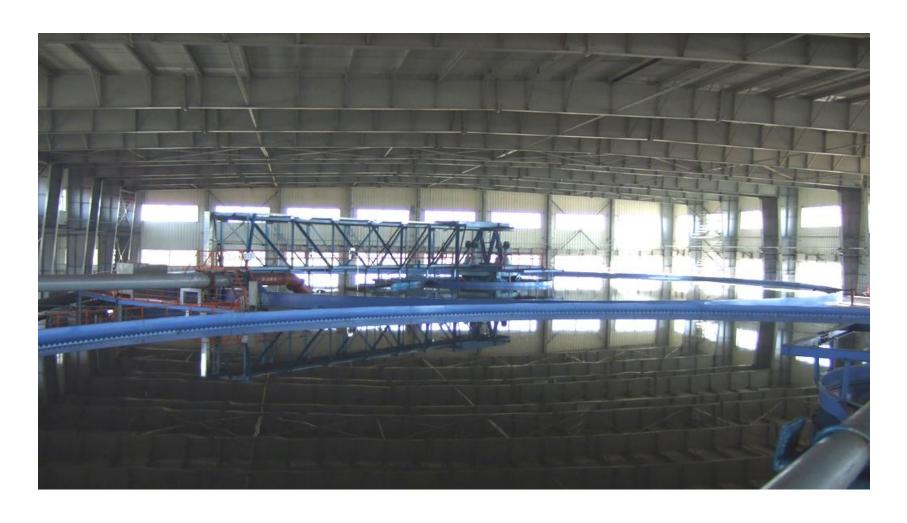
(12) 24 m DCTs in construction at SCM 96,000 tpd



40m Deep Cone Paste Thickener In-Ground Installation Two units- China Project, Copper Tails 17,700 tpd each 65-67 wt% underflow K = 275Access to **Pump Room** Steel Wall Through To Tailings Deposition Site Steel or Concrete Discharge Cylinder



DEEP CONE PASTE THICKENERS 40m - CU TAILINGS









Pneumapress [®] **Filters**





Shriver ® Filter Presses



AFP™ Filter Presses





Drum Filters



Disc Filters



Pan Filters



Horizontal Belt Filters



SOD Filters



Claridisc Filters



Tailings Filtration Products









Paste Backfill Disc Filter

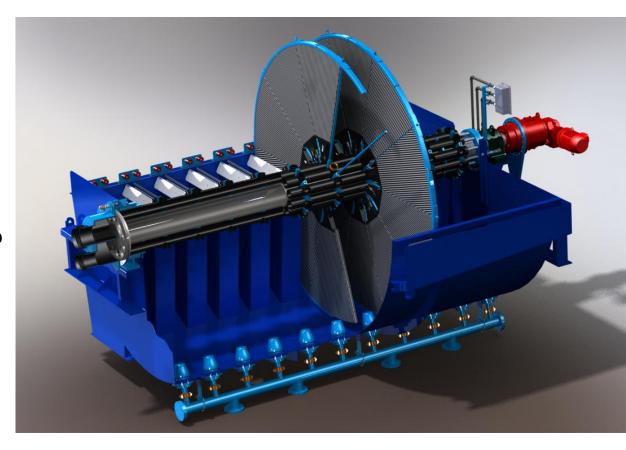
- Used on Finer Material
- 0.25 0.5 mt/hr/m²
- 75 150 mt/hr per filter
- Feed 60 wt%
- Cake Moisture 15-30 wt%





Gold Backfill Project

- Gold Production
- 0.36 mt/hr/m²
- 60 mt/hr per filter
- Feed 65 wt%
- Cake Moisture 15 wt%





Putting it Together - PGM Backfill

- Paste Thickener
 - 12 m diameter
 - Flotation tails125 mt/hr
 - 25 30 wt% feed
 - 65 68 wt% uf
- Horizontal Belt Filter
 - 72 m² area
 - 72 wt% solids







Surface Dry Cake Deposition

- Water Recovery
- Environmental Permit Requirements
- Flowsheet optimization
 - Filter
 - Thickener
 - Mobile Staker

- Rosemont
- Gindalbie
- CL Mining
- Moly Mines
- Coal Refuse
- Fly Ash







- Used on Coarse Material
- 1 -4 mt/hr/m²
- 250 1000 mt/hr per filter
- Feed 60 wt%
- Cake Moisture 15 20 wt%







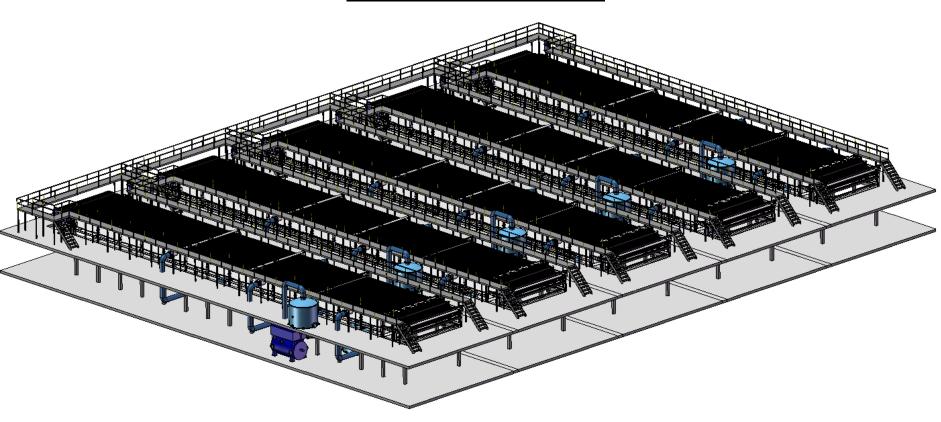
- Fly Ash
- 1.0 mt/hr/m2
- Feed Solids 40 wt%
- Cake Moisture 25 wt%
- Cake Staked in Lifts and Capped





Copper Moly Tailings Project

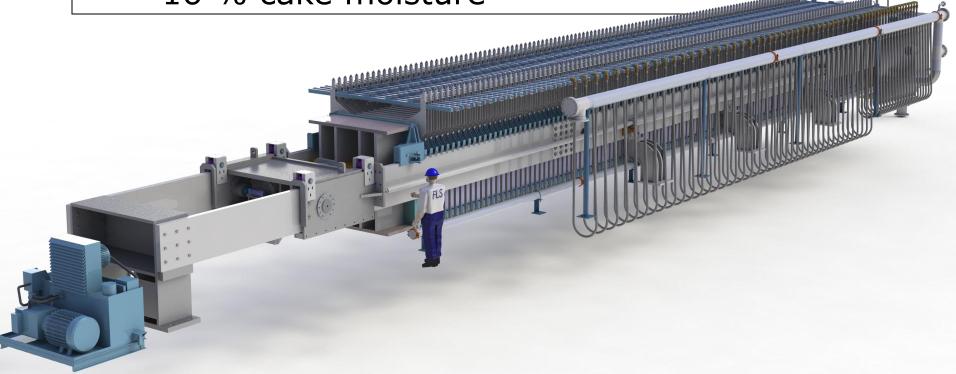
6.5M273 Filters





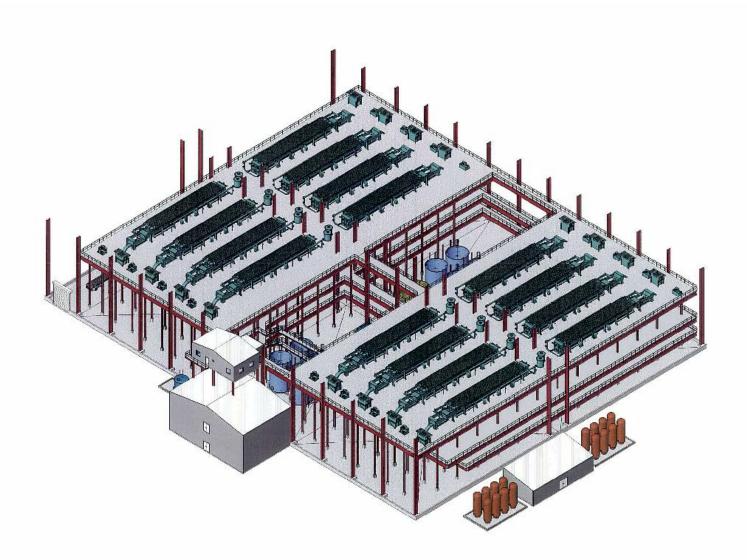


- Largest Minerals Filter Press
 - (14) 2x2 AFP Filters
 - 100,000 mt per day
 - 65 % feed solids
 - 16 % cake moisture



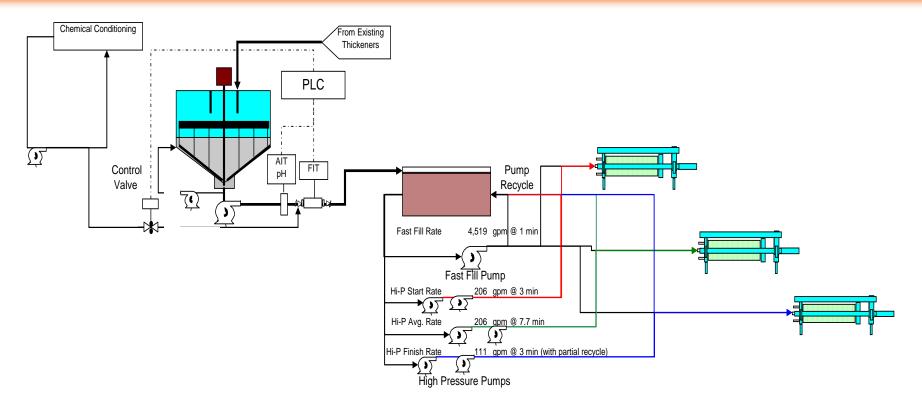


Copper Tailings Filtration





Coal Refuse Dewatering System Mach Mining



- Paste Thickener
 - 200 t/hr
 - 20 m Diameter
 - 30 wt% feed solids
 - 50 wt% u/f solids

- 2x2 Filter Press
 - 67 t/hr/filter
 - 120 Chambers
 - 15 Bar operating pressure
 - 70 75 wt% cake





