

GTK Mineral Processing - GTK Mintec



GTK Mintec Organization

Administration

- Laboratory Management
- Accounting
- Desk Services
- IT Support

Laboratory Group

- Mineralogy
- Process Research

Pilot Group

- Pilot and Minipilot Research
- Physical Separation

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- Analysis Services



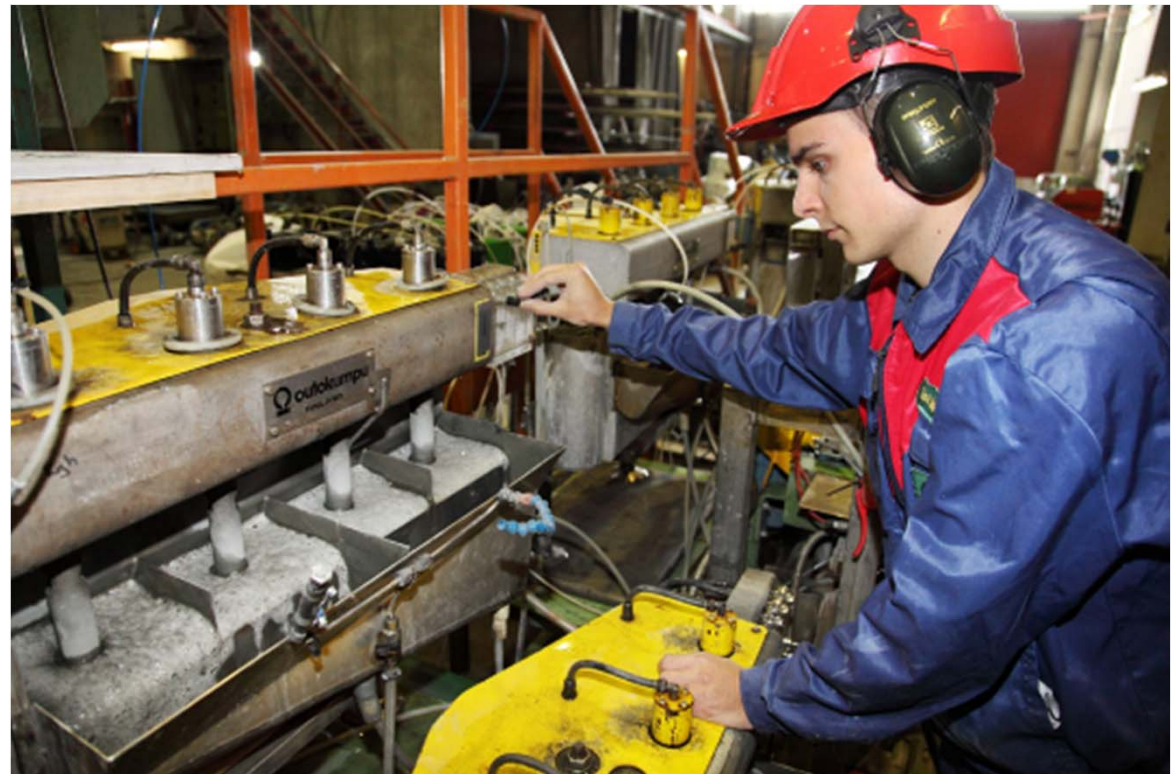
Mineral Processing on Bench Scale

- Comminution and classification
- Flotation
- Hydrometallurgy
- Magnetic separation
- Gravity separation
- Dewatering



Mini Pilot

- First study in a continuous process after bench scale results
- Sample size 400 – 2,000 kg drill cores, ore sample etc.
- Sample pre-crushed to feed size of 3 - 6 mm
- Facility is designed and constructed in a sea container
- Feed capacity 10 - 50 kg/h



Pilot Plant

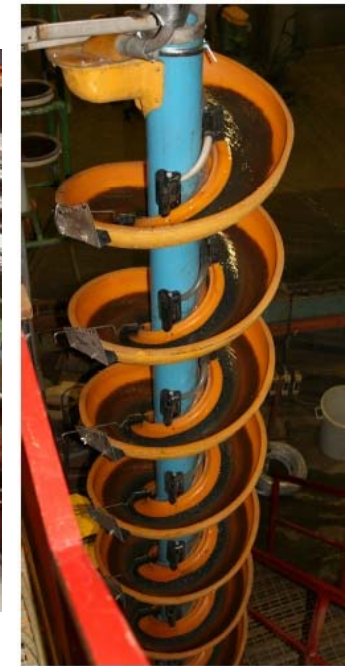
- Processes can easily be adapted to capacity ranges from 0.5 tph up to 5 tph.
- Sample sizes typically from 50 to 300 tonnes
- Plant automation and process control of a high level, together with automatic sampling systems, ensure the highest quality results



Pilot Plant

Objectives of Studies

- To conduct testwork for feasibility studies of new ore deposits
- To conduct process development for existing plants
- To develop comminution and beneficiation methods, and equipment for industry
- To generate process information for plant design
- Bankable feasibility studies



Process Development for New Orebodies



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- Process development for feasibility studies and plant design
- Examples
 - CuNi, Cu and Ni ores
 - PGM ores
 - Au Ores
 - CuMo ores
 - PbZnAg ores
 - Nb ores
 - Iron ores
 - Ilmenite ores
 - Phosphate ores
 - Calcite, Talc ores
 - Chromite ores
 - Kimberlites



Thank You for Your Attention!

