Optimal maintenance scheduling for Alcoa digester banks





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Virtual - Researchers Catch-up

Digester banks are critical-path assets used in the Bayer process, a chemical refinement process that converts bauxite ore into alumina.

Due to complicated maintenance and operational requirements, scheduling the maintenance for fleets of digester banks can be extremely challenging. Because of such, schedulers often resort to over maintaining or using outdated legacy rules. In partnership with Alcoa, Sandy has developed an optimisation tool that can assist in the long-term maintenance scheduling for fleets of digester banks.

This presentation details the digester bank scheduling problem and the optimisation tool designed to assist in decision making. Finally, Sandy explains the expected benefits and outcomes of the project.