

Novel Flowsheet Design and Process Modelling

ANSTO's Minerals business unit has specialised knowledge in novel flowsheet design and development, which allows us to provide tailored and innovative solutions in defining and optimising hydrometallurgical processes. This experience has been applied to numerous lithium, uranium, base metals, rare earths and specialty metal projects.

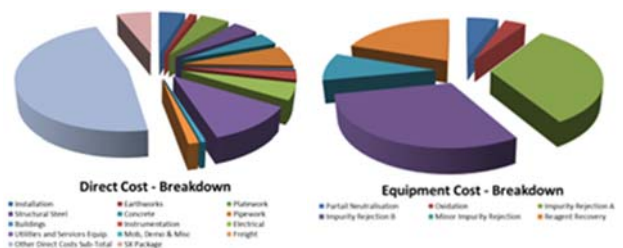
We have a proven track record of applying our technical expertise to particularly challenging ores with complex mineralogy, and to multi-commodity resources where circuit interdependence can be high and difficult to manage.

Our process development work is often supported by the generation of detailed mass and energy balance models using Ideas™ (Limn™ and METSIM packages also considered). We have developed in-house expertise and packages to model solvent extraction and ion exchange circuit performance, and to design circuits for continuous piloting and demonstration plant operation.

Our models include data obtained from literature or other sources, and data generated as part of our process development programs. These models allow us to assess the impact of varying process conditions on circuit performance, as well as to guide process development effort.



ANSTO's Minerals business unit has developed numerous scoping level engineering studies for uranium, rare earths, lithium and other flowsheets. Our involvement continues through to detailed engineering and we work seamlessly with leading engineering firms to support our clients' projects.



About ANSTO's minerals experience

ANSTO has a 40-year track record of providing practical solutions and innovative technology to the mining and minerals processing industries. We have a team of 60+ dedicated professionals and technicians with expertise covering chemical engineering, metallurgy, mineralogy, chemistry, geology and radiation safety working within the Minerals business unit.

We provide process development services, technical review and consulting services, as well as collaborative and contract research on uranium, rare earth and specialty metals processing, radioactivity control and management, novel flowsheet design and modelling, and scoping level engineering / cost estimates.

Contact

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