

INTEGRATED SOLUTIONS

Our approach

Integrated tailings solutions consider the whole mining and processing operation to identify opportunities at and upstream of the tailings facility that reduce overall risk and cost for the whole mining operation. Examples of opportunities include changing tailings from waste to usable product, minimising tailings production volume, limiting the harmful potential of the produced tailings and achieving efficient storage options by integrating the tailings storage within the mine plan.

A cross-discipline approach is required to truly utilise and benefit from integrated solutions. It requires effective coordination of several project areas including processing, material handling, mine planning and non-processing infrastructure. Our knowledge of mining and processing goes well beyond the tailings storage facility design, which allows us to effectively coordinate and communicate with other disciplines in the project team. We have meaningful cross-discipline discussions and challenge the selected technologies and equipment to reduce the overall project cost. Further, we can communicate findings with relevant stakeholders, both internal and external to the project.

We understand that no single tailings technology is superior to others, and that each project is unique. We challenge traditional methods and assess alternatives. We seek to understand the ore processing or product refinery details.

This all translates to the ability to determine the suitability of different management strategies and deposition technologies from traditional wet tailings storages to paste facilities and drystacking to co-disposal within or outside the mined voids.

Our experience

Through our project experience and industry research and development we understand the benefits, drawbacks, risks and suitable application of traditional and emerging tailings technologies. Further, our research into soil microstructure gives us a unique insight into tailings behaviour for various conditions and technologies.

We have experience in delivering trade-off studies that compare options to assist with the selection of the preferred strategy by considering not just the financial and risk impacts on tailings management, but your whole operation.

Our tailings technology experience includes:

- Thickened and paste tailings
- Perimeter, central and in-pit deposition
- Tailings filtration and dry stacking
- Tailings co-disposal

Our approach to integrated solutions has achieved significant cost savings for our clients on several projects.

Contact us

Contact HATS Consulting to discuss how we can provide integrated solutions for your operations.

Please contact Jiri Herza, Director and Principal Consultant | jiri.herza@hatsconsult.com