Exploring radio frequency energy to dry potash and minerals – Phase 2

This IMII project is exploring a potentially novel approach to drying mineral products with radio frequency (RF) energy from a clean tech inverter developed by Acceleware (www.acceleware.com). The concept could see a commercial solution with the capability to reduce facility emissions when compared to technology currently used in the minerals industry.

The results of the Phase I Study were successful, providing a pathway for Phase 2 to develop an initial prototype using a simple dryer system as the medium to showcase the technology. Using the findings and results from Phase 1, the intent of the Phase 2 test dryer will be to operate at 100 kg/hour using wetted potash materials as the test product.

The results of these tests will dictate the next steps on the path to scale for the system. The data collected will be summarized and presented to the IMII and project members as part of this study.

Phase 2 tests could demonstrate that the concept is viable in an operable environment, showing that the system can dry minerals in processing.

Proponent: Acceleware

Project Duration: April to June 2024

Project Cost:

Industry Contribution: \$322,152

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