Hawsons IRON
WORLD'S BEST IRON ORE PRODUCT

Process flow chart and metallurgical test work update

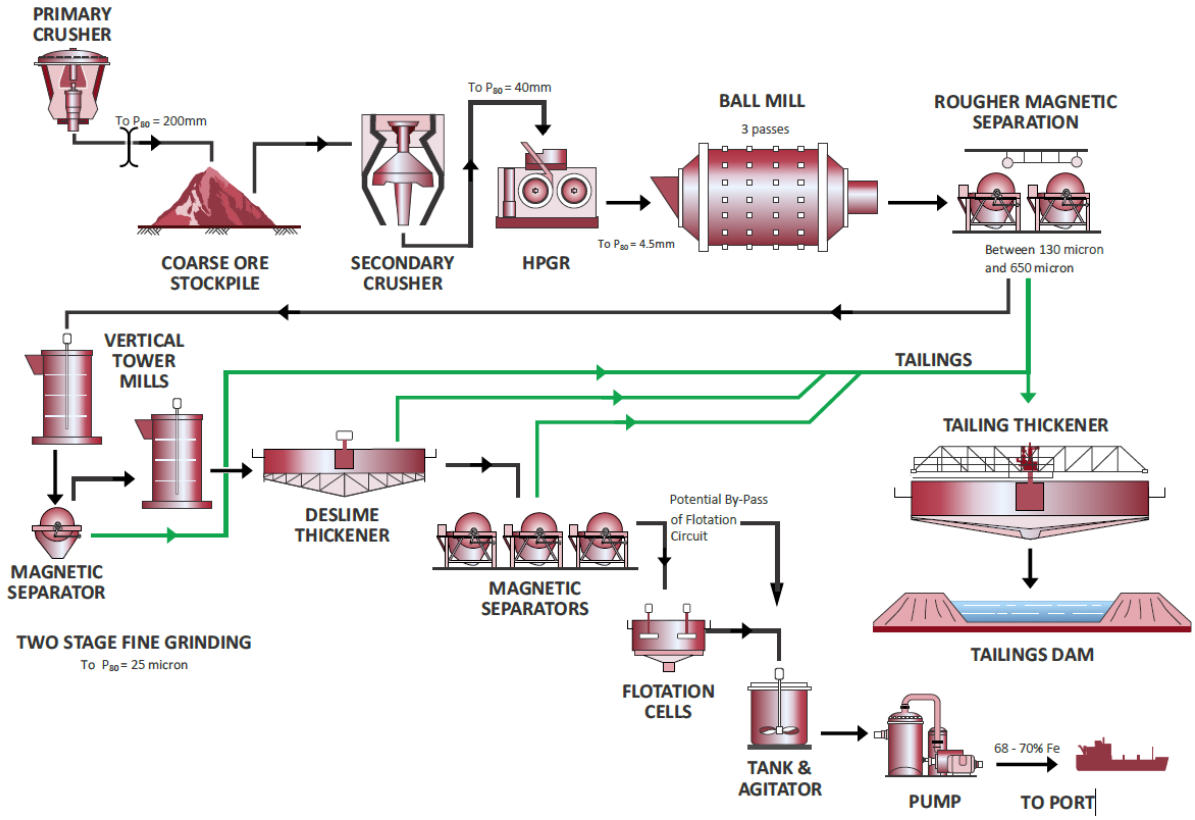
Key points

- **Mineral process flow chart selected and pilot plant metallurgical test work completed**
- **Key equipment requirements verified using a virtual pilot plant test work approach**
- **Economic benefits of a final-stage flotation circuit to be further evaluated**
- **Selected process will deliver high-grade concentrate for 'Green Steel' supply chain**

Hawsons Iron Ltd (**Hawsons** or the **Company**) advises that the mineral process flow chart for the Hawsons Iron Project has been selected following completion of laboratory test works on ore samples to verify key equipment sizing, mass balance and final product specifications.

Managing Director Mr Bryan Granzien said completion of the process flow sheet (Figure 1) and test work (Table 1) was delayed but necessary in considering different equipment technologies, the availability of all required pilot plant equipment and bottlenecks in test processing. This is another important milestone completed and necessary for subsequent BFS activities.

Figure 1. Hawsons Iron Project - Process Flow Chart



"The selected process will enable the Company to produce a high-grade concentrate inclusive of a flotation circuit, however, our technical analysis confirms that we would still be able to produce a premium-grade product without this additional stage of processing," Mr Granzien said.

“Consequently, the Company will evaluate the beneficial economic value of including the flotation stage against the pricing differentials in the final concentrate specifications we could take to market.”

Mr Granzien said specialists with the requisite expertise had been engaged to deliver a cost-effective, laboratory-based testing program to determine and verify the process flow sheet.

“Reputable organisations ALS and Bureau Veritas carried out the metallurgical test work, effectively producing a virtual pilot plant testing regime which enabled us to avoid the capital costs and mine site approval requirements for construction of a physical plant onsite,” he said.

The test work was completed using laboratory test equipment and included the following tests:

- Bond Crushing Work index to enable sizing of the primary and secondary crushers;
- High Pressure Grinding Rolls (HPGR) testing to select optimum settings, measure HPGR product size and enable sizing of the HPGR equipment;
- Ball Mill Grindability test work at different closing screen sizes to enable sizing of the ball mill;
- Dry Cobbing Assessment;
- Grind liberation assessment to enable mass balance calculations at the magnetic separation stages and Flotation test work at various final grind sizes to enable prediction of final iron and silica content.

Preliminary results from the laboratory test work confirmed that HPGR technology is suitable for processing Hawsons Iron Ore. The first stage of magnetic separation will be optimal at a top size of 1mm with approximately 38 per cent non-magnetic rejection. Dry Cobbing provided limited benefit and was therefore not incorporated.

Due to the fine-grained nature of the ore a final grind size at P80 of 25 microns is required to produce a high-grade magnetite concentrate and achievable through two stages of fine grinding.

Further test work provided a Crushing Work Index (CWI) and measured Ball Mill Grindability (BMG) as shown in the table below:

Table 1. Hawsons Test Results Crushing and Grindability

Hawsons Iron Ltd	CWI	BMG
Statistics	kWh/t	kWh/t
Average	11.6	6.4
Standard Deviation	4.4	1.8
Minimum	6.4	4.7
Maximum	19.3	9.1
CWI (Crushing Work Index) BMG (Ball Mill Grindability)		

Mr Granzien said the process to produce Hawsons Supergrade® had been selected and validated with all major equipment sized.

“Importantly, all this work confirms our ability to produce the necessary high-grade concentrate required to support ‘Green Steel’ production,” he said.

Released by authority of the Board
Hawsons Iron Limited
09 November 2022

For further information:

Investor Relations contact:
Mr Greg Khan, CFO and Company Secretary
E: greg.khan@hawsons.com.au
P: +61 (0)474 550 720

About Hawsons Iron Ltd
Hawsons Iron Ltd (ASX: HIO) is an iron ore developer and producer listed on the Australian Securities Exchange. The company is focused on developing its flagship Hawsons Iron Project near Broken Hill into a premium provider of high-quality iron ore products for the global steel industry.

The Hawsons Iron Project is situated 60km southwest of Broken Hill, New South Wales, Australia in the emerging Braemar Iron Province. Prefeasibility Study (PFS) results for the Project, which was completed in 2017, showed that it is capable of producing the world’s highest-grade iron product (70% Fe), making it among the world’s leading undeveloped high-quality iron ore concentrate and pellet feed projects. Leading research firm Wood Mackenzie in Q2 FY 2019 rated the project one of the world's best high-grade iron ore development projects, excluding replacement or expansion projects owned by the established miners.

For more information go to https://hawsons.com.au
Follow Hawsons on Twitter: https://www.twitter.com/HawsonsIron
Follow Hawsons on LinkedIn: https://www.linkedin.com/company/hawsonsiron/
Follow Hawsons on Facebook: https://www.facebook.com/HawsonsIron
To access the Hawsons Iron electronic media kit, click on this link:

ENDS-