Not all Sub-60% Fe Ores are the same: The Link between Processing and Sintering of FMG Ores

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ABSTRACT

Fortescue Metals Group Limited (FMG) operates in the Pilbara region of Western Australia from four mine sites, Cloudbreak and Christmas Creek located in the Chichester Hub together with Kings and Firetail in the Solomon Hub. In May 2018 a new major mine and infrastructure project was approved for construction at Eliwana in the Western Hub.

Firetail and Eliwana, when commissioned, only utilise conventional dry crushing and screening processes to produce ore. The remaining sites have ore processing facilities (OPF's) installed that combine crushing and screening with wet processing. Each OPF not only upgrades the ore but also improves the textural characteristics. The resultant product mineralogy contributes uniquely to the sintering process.

This paper will provide an overview of FMG's wet processing facilities highlighting three pieces of equipment common and critical to their operation. Discussion will also extend to sintering demonstrating the benefits and value that arise when using FMG ore processed through the OPF's.