

Downstream Value Adding of Western Australian Iron Ores

By

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ABSTRACT

Western Australian iron ore was originally exported as Direct Shipping Ore, or DSO, primarily from Mt Tom Price, Mt Newman. It was at these sites that the earliest beneficiation plants were established, by Pilbara Iron and BHP respectively.

FMG also does some beneficiation of iron ores, improving iron grades through de-slime processes. Two pellet plants- one in Dampier and the other in Cape Lambert- operated within Western Australia for a number of years, but closed during the oil crisis of the 1980's.

Rio Tinto oversaw the HIs melt process in Kwinana for a number of years, but ceased operation in 2011.

Two magnetite processing operations- one, the Sino Iron Project, in Cape Preston, and the other in Karara, in the mid-west- have both struggled to achieve design specifications for a number of years. The Roy Hill Project, recently undertaken by the Hancock Prospecting Group, also includes some beneficiation.

This paper examines the future for downstream processing opportunities for iron ore within Western Australia, and whether, technically or commercially, there exists an opportunity for value adding. The Pilbara contains vast resources of low grade iron ores and significant resources of natural gas. Currently, iron ore unit prices are low, and, based upon current export volumes, are predicted to remain low for the foreseeable future.