
GLOSSARY OF TECHNICAL TERMS

The glossary contains certain definitions and other terms related to our business and used in this prospectus. The terms and their meanings may not correspond to the standard industry meaning or usage of these terms.

“°”	degrees
“ball mill”	a rotating cylindrical mill that uses heavy iron balls to grind ore into fine particle powder
“beneficiation”	a process to upgrade the mineralised content of an ore or of ore concentrates typically through flotation, gravity or magnetic separation
“Bt”	billion tonne(s)
“coarse iron powder”	powder with a coarse particle size whose main mineral content is iron
“concentrates”	a powdery product containing an upgraded mineral content resulting from initial processing of mined ore to remove some waste materials. Concentrates are an intermediary product, which would still be subject to further processing, such as smelting, to effect recovery of metal
“crude steel”	steel in the first solid state after melting, suitable for further processing or for sale
“cut-off grade”	the threshold above which material is selectively mined or queried
“deposit”	a body of mineralisation containing a sufficient average grade of metal or metals to warrant further exploration and/or development expenditure. A deposit may not have a realistic expectation of being mined, therefore it may not be classified as a resource or a reserve
“drilling”	in mineral exploration, boring a hole to recover core or rock chip samples to obtain geological information as well as for use as samples for grade determination and other analyses
“exploration”	activity to prove the location, volume and quality of an ore body

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“Fe”	the symbol for the chemical element of iron
“gangue”	waste rock
“grade”	the concentration, commonly expressed as percentage or grams per tonne, of useful elements, minerals or their components in any ore or concentrates
“ilmenite”	a weak magnetic titanium-iron oxide mineral that is a crystalline iron titanium oxide (FeTiO ₃)
“indicated resource”	mineral resource that has been sampled by drill holes or other sampling procedures at locations too widely spaced to ensure continuity, but close enough to give a reasonable indication of continuity and where geoscientific data are known with a reasonable level of reliability, as defined by the JORC Code
“inferred resource”	mineral resource that has geoscientific evidence from drill holes or other sampling procedures such that continuity cannot be predicted with confidence and where geoscientific data may not be known with a reasonable level of reliability, as defined by the JORC Code
“in-situ”	in its natural position
“iron”	a silvery-white, lustrous, malleable, ductile, magnetic or magnetisable, metallic element occurring abundantly in combined forms, notably in hematite, limonite, magnetite, and taconite, and alloyed for use in a wide range of important structural materials
“iron concentrates”	concentrates whose main mineral content (by value) is iron
“iron ore”	compounds of iron and oxygen (iron oxides) mixed with impurities (gangue) and a mineral that yields metallic iron when heated in the presence of a reductant
“iron pellet”	a round hardened clump of iron-rich material suitable for application in blast furnaces
“JORC”	the Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy

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“JORC Code”	the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves prepared by the JORC, Australian Institute of Geoscientists and Minerals Council of Australia in September 1999 and revised in December 2004, a widely used and internationally recognised code setting out the minimum standards, recommendations and guidelines for public reporting of exploration results, mineral resources and ore reserves
“km”	kilometer(s)
“Kt”	thousand tonne(s)
“Ktpa”	Kt per annum
“kwh”	kilowatt hours
“m”	meter(s)
“magnetic separation”	a mineral concentrating process to separate magnetic minerals from non-magnetic materials in ground ore
“magnetite”	a ferrimagnetic mineral with chemical formula Fe_3O_4 , one of several iron oxides and the common chemical name of which is ferrous-ferric oxide
“measured resource”	mineral resource that has been intersected and tested by drill holes or other sampling procedures at locations close enough to confirm continuity and where geoscientific data are reliably known, as defined by the JORC Code
“mFe”	iron in magnetite
“mine life”	the number of years that a mine is expected to continue operations based on the current mine plan
“mineral deposits”	a natural occurrence of a useful mineral on sufficient degree of concentration and size to suggest it may be economically extracted
“mineral resource”	an identified in-situ mineral occurrence from which valuable or useful minerals may be recovered

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“mineral resource(s)” or “resource(s)”	a concentration or occurrence of material of intrinsic economic interest in or on the earth’s crust in such form, quality and quantity that there are reasonable prospects for eventual economic extraction, as defined in the JORC Code. The location, quantity, grade, geological characteristics and continuity of a mineral resource are known, estimated or interpreted from specific geological evidence and knowledge
“mining rights”	the rights to mine mineral resources and obtain mineral products in areas where mining activities are licensed
“Mt”	million tonnes
“Mtpa”	Mt per annum
“Oe”	oersted, the unit of magnetizing field in the centimeter-gram-second system, also known as magnetic field strength or intensity
“operating cost”	the threshold cost below which mining a block would be un-economic
“ore”	mineral bearing rock which can be mined and treated profitably under current or immediately foreseeable economic conditions
“ore body”	natural mineral accumulations which can be extracted for use under existing economic conditions and using existing extraction techniques
“ore processing” or “processing”	the process which in general refers to the extraction of usable portions of ores by using physical and chemical methods

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“ore reserve(s)” or “reserve(s)”	the economically mineable part of a measured and/or indicated mineral resource, as defined by the JORC Code. It includes diluting materials and allowances for losses which may occur when the material is mined. Appropriate assessments and studies have been carried out, and include consideration of and modification by realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors. These assessments demonstrate at the time of reporting that extraction could reasonably be justified. Ore reserves are subdivided into proved and probable
“ore resource(s)” or “resource(s)”	a concentration or occurrence of iron ore of intrinsic economic interest in or on the Earth’s crust in such form, quality and quantity that there are reasonable prospects for eventual economic extraction
“probable reserves”	the economically mineable part of an indicated, and in some circumstances, a measured mineral resource, as defined by the JORC Code. It includes diluting materials and allowances for losses which may occur when the material is mined
“proved reserves”	the economically mineable part of a measured mineral resource, as defined by the JORC Code. It includes diluting materials and allowances for losses which may occur when the material is mined
“recovery rate”	the percentage of valuable mineral resource that is able to be recovered from mining and processing activities
“recovery ratio”	proportion of mineral or metal recovered from the ore
“rehabilitation”	the return of disturbed land to a stable, productive and self sustaining condition, after taking into account beneficial uses of the site and surrounding land
“Run-of-Mine” or “ROM”	the ore delivered from the mine that reports to the processing plant
“SG”	specific gravity (unit tonnes per cubic metre)
“short-hole shrinkage stoping”	underground mining method in which blasted ore is left in the stope for support purposes until it is to be mined

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“sinter” or “sintering”	a heat treatment for mineral powder that applies a temperature below the melting point, the purpose of which is to combine the component particles in order to increase size and strength
“tail” or “tailing”	waste materials that are produced after processing of ore for extracting target minerals
“TFe”	total iron
“titanium”	a light, strong, lustrous, corrosion-resistant transition metal with a white-silvery-metallic color
“titanium concentrates”	concentrates whose main content (by value) is titanium dioxide
“TiO ₂ ”	titanium dioxide
“tpa”	tonne(s) per annum