



# Mineral Technologies

A Downer Subsidiary

Mineral Sands

Iron Ore

Coal

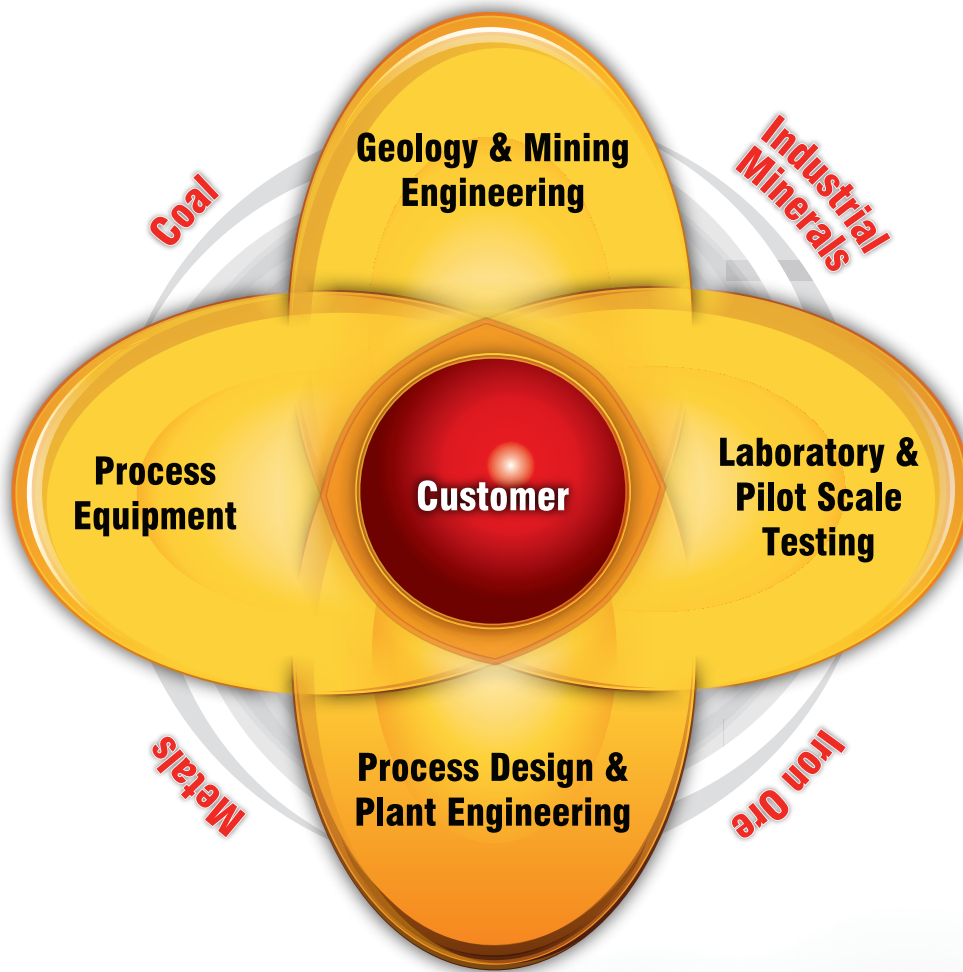
Industrial Minerals

Metals

*Leaders in Mineral Separation*

Expertise. Experience. Superior Technology.

Recognised as a leader in mineral processing solutions worldwide, Mineral Technologies delivers a comprehensive range of integrated equipment and services that cost-effectively transform ore bodies into high grade mineral products.



Extensive Test Laboratory & Process Engineering



Integrated Plant Design



Process Optimisation & Servicing

Services

# Mineral Technologies

Leaders in Mineral Separation

## Core Capabilities

- Mineral testing and process design
- Process plant design
- Process optimisation
- Design, manufacture and supply of mineral processing equipment
- Equipment commissioning and training

## Mineral Testing & Process Design

Mineral Technologies undertakes professional sample and pilot plant test work across a wide range of minerals including: mineral sands, coal, iron ore, chrome, tin, silica sands and industrial minerals.

Our metallurgists are experienced in the complete range of analytical, bench, pilot and industrial-scale testing using wet and dry processing techniques.

Mineral testing services include:

- Mineral characterisation
- Metallurgical separation test work utilising gravity, electrostatic and magnetic equipment
- Bench and pilot scale crushing and grinding
- Density fractionation by heavy liquid separation and pycnometry
- Metallurgical data evaluation
- Preparation of bulk mineral concentrates for market evaluation

## Process Plant Design

Mineral Technologies delivers plant design services for mineral processing operations worldwide.

Underpinning our design expertise is our extensive operational knowledge gained from regular access to processing plants and our broad range of equipment and service offerings. This unique combination enables our engineering teams to deliver plant designs of any size or complexity that go way beyond standard engineering outcomes.

We design a wide range of mineral processing plants including:

- Floating wet concentrators
- Land-based mineral concentrators
- Mineral separation plants
- Plant retrofits and upgrades
- Modular relocatable plants
- Test rigs and pilot plants

## Process Optimisation

Our process optimisation services ensure that mineral processing operations achieve optimal results. Experienced process engineers identify bottlenecks and use detailed process flow analysis to develop circuit modifications that deliver grade and recovery improvements.

## Design, Manufacture & Supply of Mineral Processing Equipment

Our proven technologies and experience enable Mineral Technologies to deliver the world's most technically advanced mineral processing equipment for gravity, electrostatic, magnetic and ultra fine grinding applications.

Our dedicated program of research and development consistently delivers state-of-the-art technology and pioneering breakthroughs including:

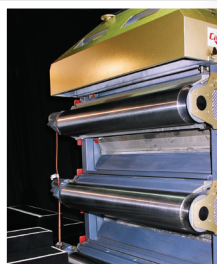
- Use of light weight, durable spiral separators for fine coal beneficiation
- High capacity spirals enabling 40% reduction in plant footprint for the same throughput
- Advances in electrostatic technology that improve separation and significantly reduce circulating loads
- The Kelsey Jig which leads the industry in providing a solution for difficult gravity separations

## Equipment Commissioning & Training

Our teams are highly experienced in commissioning plants and conduct on-site training for operations, engineering and maintenance teams across mineral processing operations worldwide.



Gravity Separators



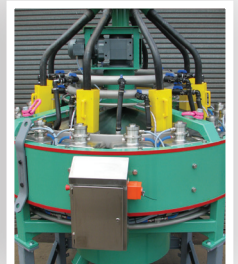
Electrostatic Separators



Ultra Fine Grinding Mill



Centrifugal Jig



Magnetic Separators

## Technology



# Mineral Technologies

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## *Locations*

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