



**Mineral
Technologies**

A Downer Company

MD Spirals

Designed and manufactured by Mineral Technologies, MD spirals are the spiral of choice for fine mineral separation.

Equipment Range

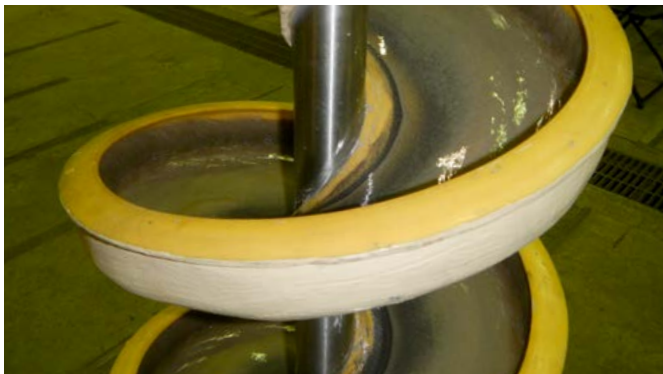
- **MG Series** - for feed material generally containing up to 25% heavy mineral (up to 40% in some applications)
- **HG Series** - for high grade feed material generally greater than 25% and as high as 90% heavy mineral
- **VHG Model** - for feeds with very high levels of heavy mineral
- **FM Series** - for feed material in the range of 30 to 150 microns
- **WW Series** - utilises wash water addition for enhanced grade control in specific applications (e.g. iron ore)
- **HC Series** - super-high capacity spirals specifically designed for more economical and compact plants. The facility to add wash-water is available on some models



Jacinth-Ambrosia, Australia 2006

Features

- High quality, polyurethane lined fibreglass reinforced spirals
- Replaceable modular cast polyurethane feed boxes for positive feedline connection and longer spiral service life
- Splitters designed for ease of operation regardless of spiral size and number of splitters
- Concentrate diverters to improve concentrate grade
- Repulping devices to further enhance recovery of product
- Cast polyurethane product collector boxes ensuring long life and non-splash collection
- Integrated engaged launder systems
- Accurate top or bottom entry feed distribution systems for improved recoveries
- Simplicity of process circuits for reduced capital cost



Benefits

- Spiral configurations in single, twin, triple and quad troughs per column to suit capacity requirements
- Spiral banks up to 48 starts to maximise capacity and minimise floor space requirements
- Low capital cost installations
- Minimal maintenance requirements
- Low operating cost and long operating life
- Consistently high separation efficiency with minimal operator attention
- Comprehensive process engineering support

Applications

- Rutile, ilmenite and zircon concentration
- Iron ore, chromite and manganese beneficiation
- Tin, tantalum and tungsten ore concentration
- Gold, native copper and base metal recovery
- Silica sands processing
- Pumice sand separation
- Titano-magnetite concentration
- Garnet, kyanite, sillimanite and andalusite recovery

