

# MD – Coal Spiral Separators



## Equipment Range

Designed and manufactured by Mineral Technologies, MD spirals are the leading spiral of choice for fine coal separation. With three spirals in the range, most Australian coal washeries employ one or more banks of our signature LD7 and LD7RC spirals. In the USA, 1,000 coal spiral starts are installed across the region treating in excess of 8,000,000 tonnes of coal annually.

## LC3 Coal Spiral

The LC3 is a revolutionary new low cut-point spiral that has the following proven benefits at industry accepted feed rates:

- producing a low cut-point of 1.4 to 1.5RD;
- producing a superior product yield at conventional 1.7 to 1.8RD cut-points;
- less build-up than conventional spirals; and
- improved beneficiation of ultrafine material.

The LC3 is available in 4 and 8 turn models, and has the same footprint as the LD7 and LD7RC spirals.

## LD7 Coal Spiral

The general purpose LD7 supersedes the LD4E, which for more than a decade, was highly successful in coal plants around the world. Available in three- and four-turn configurations, the LD7 features an improved tramp oversize handling capability and its reduced height meets most plant space requirements. The LD7 has been designed to be easily retrofitted into existing LD4E installations providing height savings.

## LD7RC Coal Spiral

The LD7RC is a Combined Rougher/Cleaner Spiral featuring seven-turns consisting of three rougher turns and four cleaner turns. It offers reduced overall height when compared with standard 2-stage systems. This spiral is particularly effective on feeds with high levels of near-gravity material and other difficult coal separations. The unique patented rougher/cleaner transition stage ensures thorough repulping of the slurry for maximum separation. This system operates within the trough, saving space/height and dispenses with separate inter-stage components.

## Benefits

- Spiral configurations in single, twin and triple troughs per column to suit capacity requirements
- High capacity 12 x 3 start spiral modules can process in excess of 150 tonnes per hour
- Low capital and operating costs
- Minimal maintenance requirements with long operating life expectancy
- Consistent separation efficiency with minimal operator attention
- Comprehensive process engineering support

## Applications

- Supplementation of coal washing jigs by treating the fraction finer than 2.0mm
- Replacement of coarse flotation by treating the fraction coarser than 0.1mm
- Supplementation of heavy media circuits by treating the fraction finer than 1.0mm
- Re-treatment of 2.0 x 0.1mm material from slurry ponds, gob piles and coal preparation plant waste streams

