# 4-202

# Krebs Spiral Concentrators for Mineral Applications

The Krebs Spiral is the most technologically advanced spiral on the market. Spiral concentrators use specific gravity to separate mineral particles simply, efficiently, and cost effectively. Krebs offers a comprehensive range of Spiral units for the minerals, coal, environmental, and related industries.

Some of the features and benefits of the Krebs Mineral Spirals are as follows:

High capacity system

**I**SMIDTH

- O Single, double, and triple start configurations
- Low operational costs
- Minimum supervision & maintenance
- Optimum equipment availability
- Efficient under variable conditions
- Wear and corrosion resistant construction
- O Unique, compact, modular design
- Technical support from FLSmidth Krebs

Krebs Mineral Spirals are supplied in complete modular design including, support framework, pulp distribution system, product launders and all the internal piping components. Installations may be custom made to your exact application requirements.

The Krebs Mineral Spiral concentrator is primarily designed to treat pulp streams with a heavy mineral content in the range up to 35% by weight. It comprises of a backfed feed box, single section helix and a product box. All splitters are located in the product box to divide the stream into concentrate, middlings and tailings with a further option to produce a fourth water peel fraction. This multi-purpose spiral is extremely tolerant of changing feed conditions so few operational adjustments are necessary making it an ideal unit for rougher, scavenger and retreat duties.

The Krebs Mineral Spiral concentrator is primarily designed to treat pulp streams with a medium heavy mineral content in the range up to 15-80% by weight. It comprises of a backfed feed box, single section helix and a product box. Finger cutters on the helix divert separated minerals into channel areas. Splitters in the product box divide the main trough discharge into concentrate, middlings and tailings with a further option to produce a fourth water peel fraction. The Krebs Mineral Spiral requires little attention during operation and is frequently used where high percentages of dense material is in the feed stage.



Krebs Mineral Spiral Concentrator

#### LM Series Design Data:

Capacity up to 2TPH/start
Feed pulp density up to 45% solids w/w
Concentrate removal up to 0.7TPH/start
3, 5, 7 turn models
Available in Simplex, Duplex, and Triplex units

## MM Series Design Data:

Capacity up to 2TPH/start
Feed pulp density up to 45% solids w/w
Concentrate removal up to 0.5TPH/start
5 or 7 turn model
Available in Simplex, Duplex, and Triplex units

## **Applications**

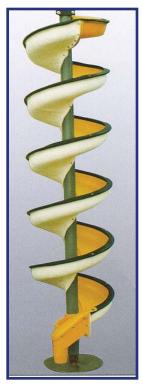
Mineral Sand	Tin Ore
Glass Sand	Tungsten Ore
Garnet	Chromite Ore
Alluvial Ore	Base Metal Ore
Oxidized Ore	Metal Slags
Barytes	Mica
Gold Ore	Soil Cleaning
Iron Ore	Tantalum Ore



## BULLETIN

Excelling in separation solutions since 1952

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Krebs has Mineral Spirals readily available for testing. Call for more details!



Tin/Tantalum Recovery Plant

## **Research and Development**

Krebs continues to pursue an extensive research and development program with the emphasis on customer interaction. Development of new spiral designs include variation of pitch, profile, length, diameter, and materials of construction. On-going research projects have resulted in the patented design and manufacture of spirals that overcome specific separation problems.

## **Customer Service**

At FLSmidth Krebs, we take pride in the service and support we offer our customers in technical assistance, parts inventory, and product quality. We are dedicated to delivering the highest quality equipment backed by the highest level of technical service and support.



Krebs' engineering staff specialize in all types of separation and classification processes in a wide range of industries. You can depend on Krebs to provide responsive service and expertise when you need it.

### Call for More Details . . .

For more details on how Krebs Mineral Spirals can meet your separation needs, visit our web site at www. krebs.com or contact us at:

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