



HG11 Spiral Separator

Overview

Developed from the HG7, this latest spiral model in the HG range offers further operational improvement.

Features

- Trough profiles vary over the spiral length for improved performance
- Number of turns – 7
- Number of starts – single, twin and triple
- No wash water required
- Individual auxiliary splitters on the fourth and sixth turn can discharge up to 0.5 t/h of high grade concentrate into the central column of the spiral, producing a separate high quality product, which discharges through the column base plug.
- Vertical pivot splitters at the base of the spiral trough with the concentrate splitter mounted upstream of the middlings splitter for greater flexibility and selectivity
- Highly wear resistant PU feed box and product box
- Adjustable deflectors to improve concentrate grades prior to each extraction point

Design Data

Head Feed (per start)

Capacity:	1.6 to 2.8 t/h per start (higher depending on application)
Pulp Density:	30 to 60% solids (typically 30 to 45% solids)
Size Range:	0.03 – 2.0mm (0.04 to 0.7mm for optimal separation. Material coarser than 0.7mm has been found to increase wear rates in some cases)
Pulp Volume:	Recommended max 5.0 m ³ /h

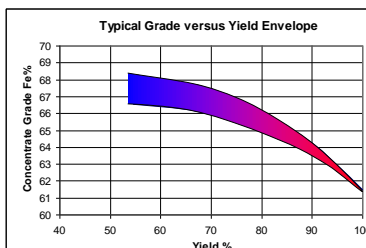
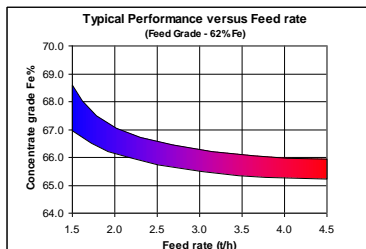
Application

Derived from the HG7 series spirals, the HG11 spiral has achieved a wide acceptance among operators due to its relative simplicity and a profile which accepts a broad range of feed conditions with minimum requirement for splitter alteration. These self compensating attributes coupled with non critical flow characteristics result in the HG11s deployment for primary and fluctuating grade cleaner applications in the 10 to 40% heavy mineral feed grade range.

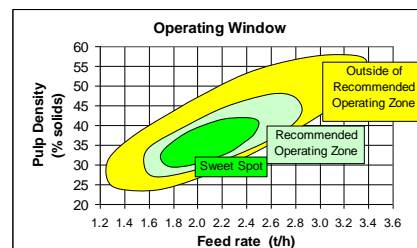
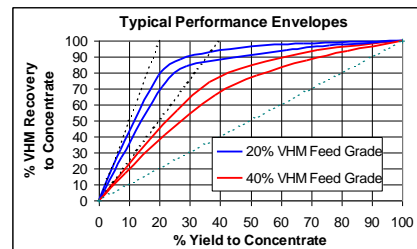
Specific Applications include:

- Iron Ore
- Mineral Sands
- Tin
- Ilmenite (hard rock)
- Titano magnetite

Fe Ore – Rougher Spirals



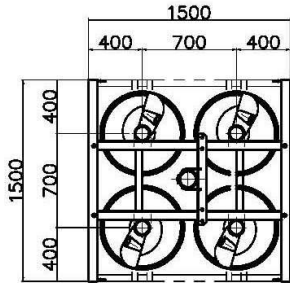
Mineral Sands – Cleaner Spirals



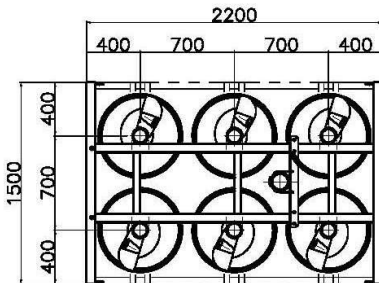


HG11 SPIRALS

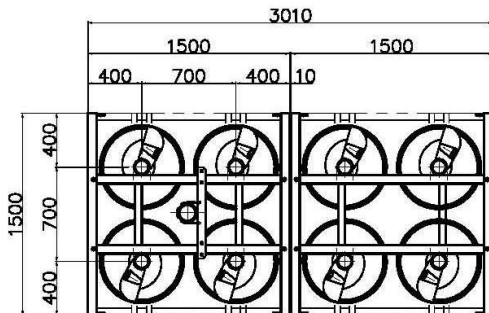
*SPIRAL AVAILABLE IN SINGLE / TWIN / TRIPLE CONFIGURATIONS
*DISTRIBUTOR AVAILABLE AS MK9 OR MK7 T.E. OR B.E.



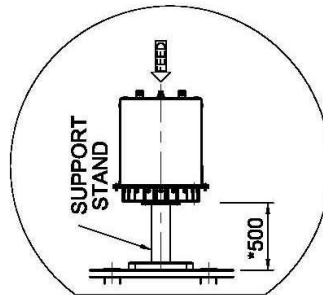
**DOUBLE ROW SPIRAL BANK
BANK OF 4**



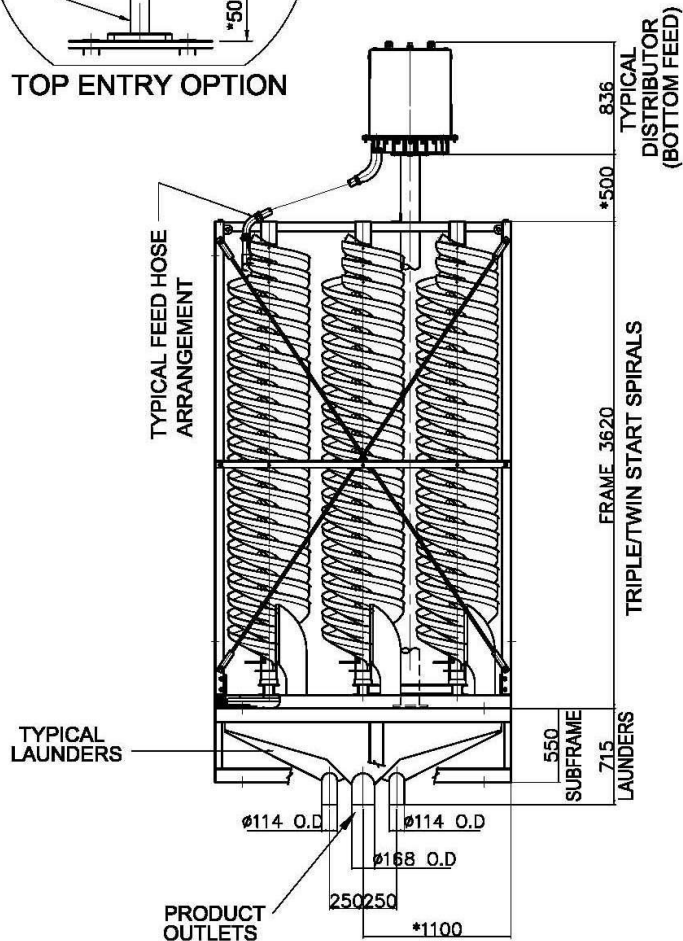
**DOUBLE ROW SPIRAL BANK
BANK OF 6
(REFER TYPICAL ELEVATION)**



**DOUBLE ROW SPIRAL BANK
BANK OF 8 (4+4)**



TOP ENTRY OPTION



**TYPICAL ELEVATION -
BOTTOM ENTRY**

*NOTE: LAUNDER/ FEED PIPE/ DISTRIBUTOR/ SUPPORT STAND DIMENSIONS, SPECIFICATIONS & LOCATIONS MAY VARY TO SUIT SPIRAL BANK COMBINATIONS - TRIPLE START SPIRALS DRAWN FOR ILLUSTRATION PURPOSES ONLY

ESTIMATED MASS (tonnes)						Mineral Technologies Mineral Technologies Pty. Ltd. - ABN 52 105 309 260 11 ELYSIUM RD., CARRARA, QLD. 4211, AUSTRALIA. Ph: +61 7 55691300 P.O. Box 2569 Nerang MDC, Qld. Australia, 4211 Fax: +61 7 55253810 www.mineraltechnologies.com Info@mineraltechnologies.com
SPIRAL BANK	4x2	6x2	8x2	10x2	12x2	
TWIN START	1.05	1.45	2.05	2.50	2.90	
TRIPLE START	1.17	1.65	2.30	2.90	3.30	
FOR CERTIFIED DRAWINGS SUITABLE FOR ENGINEERING DESIGN PURPOSES PLEASE REFER TO MINERAL TECHNOLOGIES						

NOTE: MINERAL TECHNOLOGIES RESERVES THE RIGHT TO ALTER SPECIFICATIONS WITHOUT PRIOR NOTICE

HG11-108

26.06.14

Rev 0