

### Vertimill® screw liners

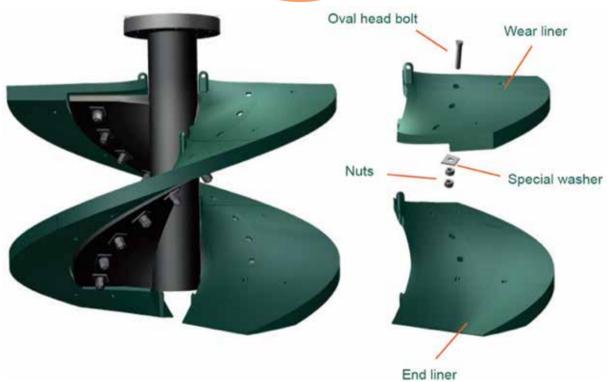
Metso Vertimills® are available in many different sizes and for different applications.

Metso offers a complete range of screw liners that have been specially developed for the intensity of mineral processing applications. We recommend that only Metso original parts are used to ensure high grinding efficiency, a good fit and predictable service intervals.

#### Wear and end liners

The screw is protected by cast liners in carefully selected wear resistant alloys. There are two types of screw liners, the liners at the bottom of each helix which are called end liners and the rest which are called wear liners.





# Vertimill® liner lifting tool

Metso Vertimill® screw liners can be fitted with unique lifting fixtures to maintain a solid hold and stable center of gravity for ease of transport.

Liner lifting holes are used for a safe two point attachment to the tool during installation and removal. Using a forklift or crane, maneuvering the heavy liners has never been easier.

#### Utilizing the liner lifting tool results in the following advantages:

Simple one point pickup

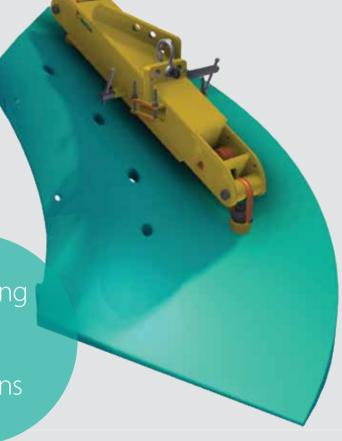
Stable center of gravity regardless of wear pattern

Improves safety

Pick up with either a fork truck or crane - No extravagant lifting mechanisms

Safe lifting for all

situations





#### Lifting tools are available on:

VTM-800-WB

VTM-1000-WB

VTM-1250-WB

VTM-1500-WB

VTM-3000-WB

VTM-4500-C

### Vertimill® screw transport system



The Vertimill® screw transport system is used for installation and removal of the Vertimill® screw. Two heavy duty beams with a transport cart are included to move the screw into the mill for coupling to the drive shaft.

Small hand jacks are included to raise the screw for attachment. Available on Vertimills® starting at VTM-150 and above.

#### **Benefits**

- · Simplifies installation and removal of the screw
- Improves safety of the operation
- Heavy duty design
- Simple assembly and use
- Single tool can be shared between multiple mills



### Vertimill® Media bins

The Vertimill® contains tons of media which is required to be emptied during maintenance intervals. Media bins provide an elegant solution to handle the media and transport it. Media bins are available in 5, 10, and 20 ton sizes.

#### **Benefits**

- Simple, heavy duty design
- Engineered to fit under the Vertimill
- Multiple, heavy duty crane lifting points
- Easy to use ball discharge mechanism



## Separating tank and recycle pump

The Vertimill® separating tank and recycle pump provides a solution to enhance process control. The separating tank accepts the mill discharge in a tangential fashion to provide a coarse classification effect. A dart valve(s) is then controlled by the tank level. The bottom portion of the tank recycles this coarse material back to the bottom of the mill where it is reprocessed. This results in two benefits, process control by changing the recycle pump flowrate to adjust the uprising velocity through the mill and also a reduction in screw liner wear. Available on all Vertimill® sizes.



- Increased process control Recycle pump speed can be varied to sharpen product size distribution
- Enhanced operational control
- Reduction in screw liner wear is typically realized
- · Circuit efficiency improvement is typical



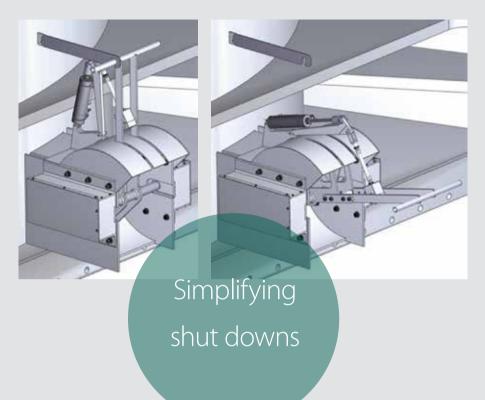


### Automatic media discharger

The automatic media discharger is a pneumatically actuated device that releases media from the Vertimill during a maintenance interval at the push of a button. This stream lines the process and enhances safety. The valve can be opened from 0-100% to regulate the media flow. With remote control and the ability to manually control the valve if required, this is a simple and effective retrofit.

#### **Benefits**

- Improves safety of operation
- Minimizes man power requirements - Now a one man job
- Anti-jamming mechanism ensures door will close
- Increases operational flexibility



### Vertimill® screw maintenance stairs

The Vertimill® screw access stairs provide a way to safely access the upper Vertimill screw liners. This item provides a safe an economical solution for performing maintenance on your Vertimill®. The stairs are mounted to bolt holes in the lower liners for a stable fit. Available on VTM-3000 and 4500.

#### **Benefits**

- Simple heavy duty construction
- Improves safety of maintenance procedures



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