

## Product datasheet

# FLS Tower Mill

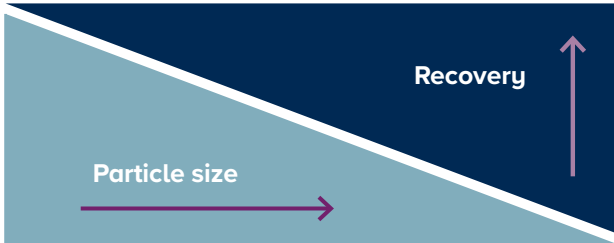
## A vertical leap in fine grinding

The FLS Tower Mill (FTM) reduces energy and media consumption, while minimising water usage in secondary and tertiary wet grinding of minerals.

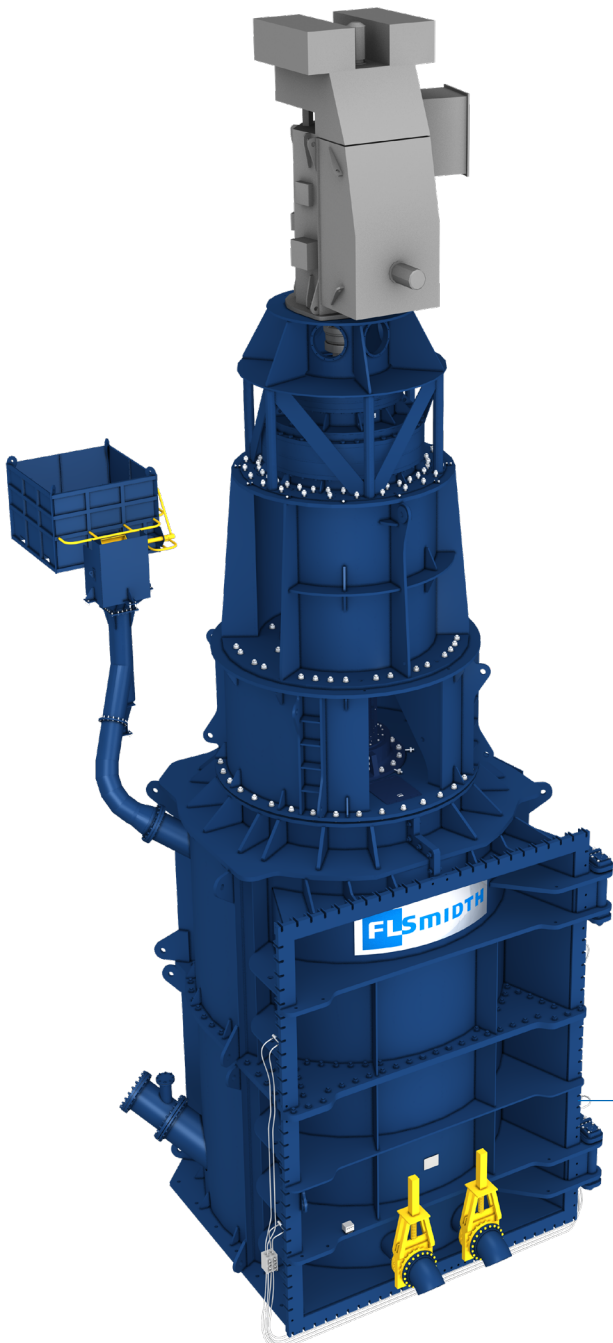
The tower mill is a robust, proven technology invented in the 1950's and supported by hundreds of installations in mineral concentrators worldwide. The major design feature of the tower mill is a central agitator screw, the only moving machine component in contact with the slurry and steel media, which allows size reduction by attrition. This arrangement reduces energy consumption in fine grinding of minerals by 25% to 50% when compared to traditional horizontal ball mills for the same feed and product size.

# FLS

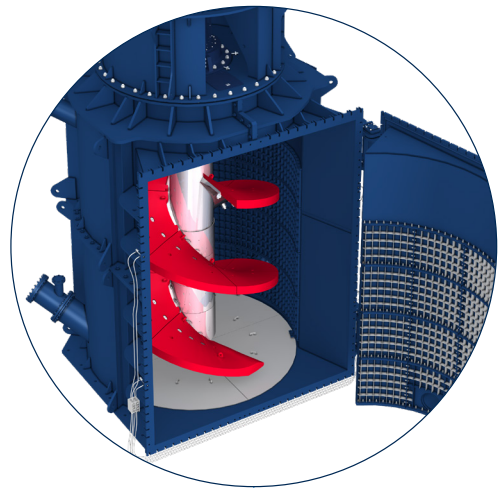
# Introducing our newest agitated steel media mill for fine grinding



- Bottom feed arrangement provides maximum grinding efficiency
- Intelligent operations management software maximises circuit performance
- Direct-on-Line, Variable Speed Drive, or Resister Starter can be coupled with premium efficiency motors to provide optimal operation and reliability
- Material breakage is done by attrition, not by impact
- Simple, modular component structure allows rapid installation



The double helix screw provides efficient energy transfer to the spherical steel media. This causes immediate size reduction to the material particles suspended in the slurry before exiting the mill at the top.



# Advanced digitalization for optimal performance and safety



7 units FTM-1500 in Benxi Mining Co's Magnetite concentrator (China)

F80 = 74 microns  
P80 = 21 microns

Contact FLS for your customised fine grinding solutions and optimisation.

- Remotely operated hydraulic cylinders allow emptying of mill without personnel in harm's way, reducing injury risk
- Intelligent operations management software maximizes circuit performance
- Condition monitoring of drive motor, gear reducer and driveshaft provide stable operation and predict maintenance in advance
- LoadIQ sensors detect media and screw wear to optimize throughput
- Simple, modular component structure allows rapid installation

## Application

Energy-efficient wet grinding of metallic ores and minerals from a feed particle size 80%-passing (F80) of maximum 3mm and producing a product particle size of 80%-passing (P80) 20 microns or smaller

**FLSmidth A/S**  
2500 Valby  
Denmark  
Tel. +45 3618 1000  
info@flsmidth.com

[www.flsmidth.com](http://www.flsmidth.com)

**FLSmidth Inc.**  
Salt Lake City Operations  
Midvale, UT 84047-5559  
USA  
Tel. +1 801 871 7000

[info.sl.c@flsmidth.com](mailto:info.sl.c@flsmidth.com)

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