

# AJMM

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## ALL SYSTEMS 'GO' IN RAIL



# IsaMill for small scale operations

**S**INCE the introduction of IsaMill™ technology to the mineral processing scene in the early 90's, one of the key drivers for the technology has been to make the technology bigger to treat larger tonnages. This led to the development of the M3000, and then the M10,000 IsaMill.

However while this has fulfilled the needs of the top end of the market, the smaller producer hasn't had the opportunity to use the energy efficient technology in their grinding circuits.

This has now changed with the introduction of the small capacity IsaMills, the M500 and the M250. The M500 unit is powered by a 200 kW motor, while the M250 is powered by a 132 kW motor, with both units using direct drives instead of gearboxes as is the case with the larger models. The power intensity of the mills is still the highest available on the market, with over 400kW/m<sup>3</sup>.

The small scale mills still have the same attrition grinding mechanism as the larger mills, using a grinding chamber filled with grinding media, with disc rotating at high velocity through it, to create a high intensity grinding action. They also have the same separation device as the larger IsaMills, that allow the undersize product out of the mill while still keeping the oversize particles and media in the mill. However the small size of the units make them ideal for treating



SMALL SCALE M500 ISAMILL TAKING UP AN AREA OF LESS THAN 10 SQUARE METRES IS IDEAL FOR RETROFITTING INTO EXISTING CONCENTRATORS, OR GREENFIELD OPERATIONS

the small tonnages that smaller producers operate at, in particular high value minerals such as gold and nickel.

The M250 and M500 both operate with ceramic media, although they can be operated with competent sand media, which enables the grinding to take place in inert grinding conditions, enhancing down stream leaching or flotation circuits. The physical size of the mills make them ideal for retrofitting into plants, with the M500 taking up an area of 10 square metres, and the M250 less than half of this, including motors.

Steve Smith, global IsaMill marketing manager said, "The development of the M500 and M250 IsaMills have complemented our existing range of milling technology.

"A key part of the market is the smaller operations who operate on tight budgets but still need small scale efficient grinding mills. We think we can also accommodate these operations now." □

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