**TOMRA Mining breaks new ground with unique XRT ore sorting solution for fine particles**

TOMRA Mining has launched a new ejection module for its proven COM Tertiary XRT sorter specifically developed for sorting small particle sizes. The COM Tertiary XRT Fines sorter, featuring the new TS100C module and the recently introduced image processing unit, is capable of sorting particle sizes down to 4mm in high-capacity applications with much higher energy efficiency, delivering a high-quality product at low operating costs. Field tests have shown that it can deliver a 70% reduction in energy use on a production scale.

**Sorting small particle sizes to add value to the process**

The new high resolution TS100C ejection module features a new type of ejector that is four times faster. Together with the new high performance image processing unit, it delivers higher precision in sorting small particle sizes at high throughputs. The mechanical design of the sorter has also been improved by the introduction of a new splitter plate and more precise calibration equipment to ensure the greater precision in the alignment between detection and ejection systems required for fine particles.

The fast and highly precise ejection module uses significantly less compressed air to eject the particles and reduces the energy consumption dramatically. Extensive test work was conducted at the TOMRA Test Center, both with artificial material mixtures and real-world sample material. The tests showed a spectacular reduction in air consumption compared to industry standards, as well as an improvement in product purity of around 15%. With the consequent cut in operating costs, sorting small particle sizes down to 4mm with the COM Tertiary XRT Fines sorter is not only viable, but adds value to the process.

“We are receiving a rapidly growing number of requests from customers to sort smaller particles,” comments Ines Hartwig, Director Product Management at TOMRA Mining. “One of the biggest drivers of cost in sensor-based sorting is the energy used for the compressed air for the ejectors. The new TS100C ejection module successfully addresses this issue and provides an effective solution to this increasing demand. It is a groundbreaking invention to create more higher-value product and reduce product loss.”

**Tried and tested in industrial production**

To gain field experience on the new ejection module, TOMRA partnered with a customer who has been running a COM Tertiary XRT to produce high-grade magnesite for more than two years. The sorter removes up to 50% low-grade and waste material from the raw magnesite feed, with particle sizes ranging from 10 to 35mm at about 20t/h.

“After conducting the test work with the TS100C ejection module at the TOMRA Test Center, we were confident that it would be very beneficial for this customer,” explains Ines Hartwig. “We showed them the test results and outlined the benefits we expected the module to deliver. As soon as they saw the possible reduction in compressed air use and the consequent cost savings, they were very interested in doing the field trial!”

The customer completed several trials, carefully documenting the energy savings and sorting efficiencies. The results were remarkable: a 70% reduction in air consumption with an increase in product recovery with a lower mass pull to waste by producing the same product quality, and a capacity increase ranging from 20 to 30t/h with comparable results.

**Experience small particle size sorting first-hand**

The COM Tertiary XRT Fines sorter featuring the new TS100C ejection module has been installed at the TOMRA Test Center in Wedel, Germany and is ready to run tests for customers on material samples from their mines. Mining operators can view the tests online or experience them first-hand at the Test Center.

**About TOMRA Mining**

TOMRA Mining designs and manufactures sensor-based sorting technologies for the global mineral processing and mining industries.

As the world market leader in sensor-based ore sorting, TOMRA is responsible for developing and engineering cutting-edge technology made to withstand harsh mining environments. TOMRA maintains its rigorous focus on quality and future-oriented thinking with technology tailor-made for mining.

**About TOMRA**

TOMRA was founded on an innovation in 1972 that began with the design, manufacturing and sale of reverse vending machines (RVMs) for automated collection of used beverage containers. Today TOMRA provides technology-led solutions that enable the circular economy with advanced collection and sorting systems that optimize resource recovery and minimize waste in the food, recycling and mining industries, and is committed to building a more sustainable future.

TOMRA has ~100,000 installations in over 80 markets worldwide and had total revenues of ~10.9 billion NOK in 2021. The Group employs ~4,600 globally and is publicly listed on the Oslo Stock Exchange (OSE: TOM). For further information about TOMRA, please see [www.tomra.com](http://www.tomra.com)

For more information on TOMRA Mining visit [www.tomra.com/mining](http://www.tomra.com/mining) or follow us on [LinkedIn](https://www.linkedin.com/company/tomra-sorting-mining/), [Twitter](https://twitter.com/TOMRAMining) or [Facebook](https://www.facebook.com/TOMRA.Sorting.Mining).

**Media Contacts:**

Nuria Martí Kai Bartram

Director Global Sales Director

Alarcon & Harris PR TOMRA Mining

Phone: +34 91 415 30 20 Phone: +49 2630 9150 156

Email: [nmarti@alarconyharris.com](mailto:nmarti@alarconyharris.com) Email:  [TM-info@tomra.com](mailto:TM-info@tomra.com)

Web: [www.alarconyharris.com](https://eur02.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.alarconyharris.com%2F&data=05%7C01%7Ckai.bartram%40tomra.com%7Cdeed011a80374e54580308db0f5ba403%7C4308d118edd143008a37cfeba8ad5898%7C0%7C0%7C638120658486954640%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000%7C%7C%7C&sdata=qaMlNoutnXYEb0P%2Flv5XO52LT%2BXruyDnvdBweeMatJk%3D&reserved=0) Web : [www.tomra.com/mining](https://eur02.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.tomra.com%2Fmining&data=05%7C01%7Ckai.bartram%40tomra.com%7Cdeed011a80374e54580308db0f5ba403%7C4308d118edd143008a37cfeba8ad5898%7C0%7C0%7C638120658486954640%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000%7C%7C%7C&sdata=wrkr7OoeX%2B9uw5v0E%2BheZSVzuEA4TDjMwqejkOdfIuU%3D&reserved=0)