

Press Information

September 24, 2019

CIRCULAR VISIONS, PLASTIC FLAKES AND BIG DATA – TOMRA AT K-SHOW 2019

TOMRA Sorting Recycling will be at the K-Show 2019, presenting its frontrunning position in the circular economy, including innovative sorting equipment like INNOSORT FLAKE and giving a preview of a groundbreaking innovation in the fields of Artificial Intelligence.

For decades, natural resources have been exploited to satisfy civilization's infinite demand for virgin products, leading to resources becoming rare and under unprecedented pressure. Plastic, in particular, is in focus with its usage being questioned. Currently, approximately 40% of plastic packaging is landfilled, 32% ends up as litter and 8 million tons of plastic is swept into the oceans, amounting to a material loss of \$80- to 120-billion annually. Rethinking the way resources are obtained, used and reused is a major cornerstone for overcoming the barrier of limited availability.

Leading the resource revolution and in a unique position to help shape the circular economy, TOMRA proposes stepping back from linear models and aligning with the reuse models of a truly circular economy. Unlike the dominant linear economy in which products are made and thrown away after consumption, the circular economy targets the recovery of materials, which are efficiently brought back into the supply chain for being transformed into new products. Following this concept, resources are kept in the loop while maintaining virgin-like quality and extracting a maximum value from the product. Thus, waste is turned into value.

With the circular economy being a topic of considerable debate, systematic approaches are being taken to stimulate the change. New legislation mandating an improvement of recycling rates, market pulls and consumers demanding more sustainable products prove supportive in transforming theory into practice. Additional solutions are seen in the promotion of plastics collection, in stopping leakage through infrastructure and deposit systems as well as in manufacturing products that are regenerative and restorative by design.

In effect, these would be ideal solutions and processes that can only be realized with all stakeholders participating in the fight for a healthy environment and a sustainable, thriving economy. TOMRA, being a key stakeholder and driver of this transformation to take place, promotes the circular economy by means of advanced collection and sorting systems that optimize resource recovery and minimize waste. Its sensor-based sorting solutions, such as AUTOSORT, AUTOSORT *FLAKE* and new INNOSORT *FLAKE*, are well established solutions leading the sorting and reprocessing process within the plastic value chain.

Volker Rehrmann, Executive Vice-President TOMRA Recycling & Mining and Head of TOMRA Circular Economy, states: "Continuing to use our resources in an unsustainable and inefficient way should no longer be an option. At TOMRA, we take this global problem seriously and continuously develop new sorting solutions. At this year's K-Show we will give an understanding of the circular economy and the role TOMRA and its products play in there."

Sorting small



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Displayed at K-Show, the INNOSORT *FLAKE* is a good example of positively impacting and purifying the recycling process. Available to the North American market in the first quarter of 2020, INNOSORT *FLAKE* has shown to be the ideal dual-sorting solution for plastic recovery facilities in other markets, sorting plastic fractions from 0.08 to 0.47 in (2 to 12 mm) by color and simultaneously by polymer types. Thus, vast proportions of contaminants can be removed, and the potential loss of PET flake material can significantly be reduced.

This all-in-one solution with ultrahigh resolution and specialized sensor configuration offers superior performance with exponential results. It's an economically favorable sorting solution providing a quick return on investment and scalable flexibility.

Sorting smart

Beyond delivering state-of-the-art sorting machines, TOMRA also focuses on developing groundbreaking innovations further advancing the sorting process. Based on the current possibilities to collect and manage large amounts of data and artificial intelligence strongly surfacing, TOMRA is moving forward with the development of a Deep Learning software for sensor-based sorting.

As a subset of machine learning and artificial intelligence, the deep learning software can learn individually from a sizeable amount of collected data, equaling or even outperforming sorting results achieved by humans and common machines. With the combination of deep learning models and TOMRA's innovative sorting solutions, objects that could previously not be separated can now be sorted with high purity levels. Deep Learning is a promising approach for addressing the increasing challenges in waste sorting, such as new waste streams, objects being detected but not successfully ejected or covered by other materials.

Continuous innovation and technological advancements for meeting today's demands in the recovery and recycling process is essential for TOMRA. At K-Show, team TOMRA will be on hand each day to provide the world's broadest spectrum of international trade visitors and decision-makers information on the circular economy concept and the contribution its machines can make in the recycling process.

For more information on new INNOSORT *FLAKE* or the full line of TOMRA sorting equipment, recycling customers can contact team TOMRA representatives in either the East or West Coast offices – Charlotte, NC, (headquarters) at 980-279-8800; West Sacramento, CA at 916-388-3900 – or by visiting www.tomra.com/recycling.

About TOMRA Sorting Recycling

TOMRA Sorting Recycling designs and manufactures sensor-based sorting technologies for the global recycling and waste management industry. Over 6,000 systems have been installed in almost 80 countries worldwide.

Responsible for developing the world's first high capacity near infrared (NIR) sensor for waste sorting applications, TOMRA Sorting Recycling remains an industry pioneer with a dedication to extracting high purity fractions from waste streams that maximize both yield and profits.



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TOMRA Sorting Recycling is part of TOMRA Sorting Solutions which also develops sensor-based systems for sorting, peeling and process analytics for the food, mining and other industries.

TOMRA Sorting is owned by Norwegian company TOMRA Systems ASA, which is listed on the Oslo Stock Exchange. Founded in 1972, TOMRA Systems ASA has a turnover of around €876m and employs ~4,000 globally.

For more information on TOMRA Sorting Recycling visit www.tomra.com/recycling or follow us on LinkedIn, Twitter or Facebook.

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