



TOMRA creates the first RVM utilizing laser and fiber optics and introduces SW-based "self-programming" (microprocessor) making it easy to include new bottles in the deposit system for all markets.

The first thermal printer was introduced.

First fully-automated crate recognition based on a TOMRA-developed ultrasonic sound measuring system.

TOMRA starts compacting the collected material. The first plastic compactor was introduced in the late 80s.

TOMRA introduces TIBS (TOMRA Integrated Business System), automating data clearing and thus eliminating the need for in-store data retrieval.

Dial-up modem for data transferal was introduced, making data retrieval in field obsolete.

1970



**TOMRA 1A**  
TOMRA's first reverse vending machines with photocell-based recognition. The company TOMRA is founded April 1, 1972.



**TOMRA MultiMat**  
Able to register single bottles and bottles in multipacks. Produced for use in the USA.



**TOMRA Junior**  
Simpler and more economical model than the TOMRA 1A, making it more price competitive.



**TOMRA SP (Self Programmable)** – the first fully automated bottle machine. SP was standardized for serial-production, i.e. the same hardware could be introduced in all markets. It could be programmed by store personnel to recognize new bottle types. SP identified both deposit and non-deposit bottles, returning the non-deposit ones back to the consumer. It also featured a full bottle detector ensuring that only empty bottles were refunded.



**TOMRA CRM**  
First system developed for automating the return of bottles in crates. This semi-automated machine was designed to be self-programmable at a later stage.



**TOMRA RBA12 (Kombi)**  
Equipped to suit small, medium and large stores. Able to be expanded into five different models. Accepted crates and glass bottles.

The T-400-series is launched. TOMRA's first fully-automated combi-machine accepting single containers and crates in one unit. The T-400 carries the unique laser-based crate recognition system (CRS), greatly raising recognition accuracy and speed.

TOMRA develops MS 879 Cross Scanner in cooperation with Metrolagic. MS 879 is a barcode laser scanner with a broad reading zone, reading barcodes independent of orientation, and it's still the industry leader today.

1980



**TOMRA CRA**  
With this automated crate machine TOMRA gets its first breakthrough in Germany.



**TOMRA CAN-CAN**  
Can-Can – the first dedicated can machine with integrated compaction, developed for the Swedish market where deposits were introduced March 1983.



**TOMRA 300**  
TOMRA's first machine that could handle all types of plastic bottles, glass bottles and crates in the same unit. Developed in connection with introduction of the light-weight plastic bottle in Norway.



**COUPONS**  
TOMRA was the first supplier that could deliver coupons with barcodes.



**TOMRA 10 CAN-CAN**  
Reverse vending machine for the collection of aluminum and steel cans. Featured a new compacting system, material recognition, dimension registration and reading of barcodes.



**TOMRA 200 compact**  
A small machine suited for areas where space was limited. Developed to handle the return of both plastic and glass bottles.

**Electronic receipt**  
Generates unique receipts that are sent electronically to the store's checkout system. When the customer redeems the receipt, the cash register system checks that the receipt is valid.

1990



**TOMRA 20 Plastic**  
Accepted non-refillable (one-way) plastic bottles. The machine had the capability for electronic data transfer for the calculation of deposit payments.



**TOMRA 30 Glass**  
Accepted non-refillable glass bottles. Identified containers with a barcode reader. Non-accepted bottles were returned through a separate opening. Primary market: USA.



**TOMRA 400 COMBI**  
Developed to handle glass bottles, plastic bottles and crates in the same unit. The bottle and crate unit could operate simultaneously.



**TOMRA 210 COMPACT**  
A table-mounted low-cost model. T-210 is launched meeting the needs of kiosks and gas stations.



**TOMRA 12 Can Piccolo**  
Machine made for handling metal cans. Flexible – it could fit everywhere. Introduced in Sweden, but never serial-produced.



**Tx2 (T-22, T-32, T-42)**  
TOMRA introduces the Tx2 - a series of stand-alone models with efficient integrated compaction for non-refillable containers.



**TOMRA 410 MULTI**  
Combined machine for handling refillable beverage containers and crates. Simultaneous operation of bottle and crate units.



**Tx2 (T-62)**  
TOMRA succeeds in the US market with the T-62, a new model introduced within the popular Tx2 series.



**TOMRA 310 COMBI**  
Accepted all types of refillable bottles and crates. T-310 Combi could read "hidden" deposit marks.



**TOMRA 14**  
A free-standing machine with laser scanner recognition for handling cans. The machine could be connected to a central computer system via a modem. TOMRA 14 became the replacement machine for TOMRA Can-Can when Sweden introduced barcode-based recognition.



**TOMRA 210 Cabinet**  
Accepted plastic and glass bottles. A sorting gate separated glass bottles onto an accumulation table and plastic bottles into a tub in the lower section of the storage unit.

From vertical to horizontal! The introduction of lightweight plastic containers presented a challenge as they often tipped over when being fed vertically. TOMRA responds to the challenge by starting the development of a technology allowing containers to be fed horizontally, integrating camera-based shape recognition, barcode reading, continuous video monitoring and energy-efficient LED technology.

TOMRA introduces ISDN-based data transferal.

1990



**TOMRA 600**  
Following the introduction of deposit on non-refillables in Norway May 1st, T-600 is launched on TOMRA's 25th anniversary April 1st. T-600 was the world's first RVM with horizontal infeed, and offered a single return point for both refillables and non-refillables. A side cabinet was offered for sorting, cancellation and volume reduction of PET and cans.



**Microilte**  
Machine for handling non-refillable PET bottles and cans. Designed for stores with low volumes of container returns. Features a barcode reader for fast and accurate container identification.



**TOMRA Solo**  
Machine for handling non-refillable PET bottles. Designed for stores with low volumes of container returns. Could also be configured to accept refillable PET bottles.



**TOMRA Duo**  
Machine for handling non-refillable PET bottles and cans. Included a metal detector for distinguishing between steel and aluminum cans. The machine is equipped with a fast, graphical printer.



**TOMRA 610**  
"High-speed" crate recognition introduced. An optional bar code reader recognizes containers which use this form of identification.



**TOMRA 500**  
Handles refillable plastic and glass bottles as well as crates. Based 100% on Hilton Technology.

# 50 years of Leading the Resource Revolution

Transforming society's habits to keep valuable resources in a constant loop of use and reuse.



Lets keep plastic bottles in the Clean Loop and out of our streets, oceans and landfills



TOMRA develops the Bottle Material Sensor (BMS) technology capable of detecting different types of plastics. It is applied in RVMs in Japan and California. BMS is still unique in the industry.

**TOMRA Sure Return Technology**  
Sure Return Recognition technology provides continuous video surveillance of inserted items, ensuring correct deposit refunds, the best protection against fraud, and the market's fastest return process for your customers.

TOMRA introduces TCP/IP, LAN and support for wireless communication for efficient data transferring.

## 2000





2000	2001	2001	2001	2001	2002	2002	2003	2004	2004	2005
										
<b>TOMRA TRIO</b> Handling refillable glass and PET bottles in locations which require a compact solution. Sorts containers upright onto one of three levels in a removable storage trolley.	<b>TOMRA BRAVO</b> Handling non-refillable PET bottles and cans. Sorts up to five separate bins according to color or material type.	<b>TOMRA Duo/Quattro</b> Handling non-refillable PET bottles and cans (optional side cabinet for glass bottles).	<b>TOMRA Tempo</b> Handling non-refillable PET bottles, glass and cans.	<b>T-83 HcP</b> The first InPac™ series for non-refillables, with integrated compactor featuring a high compaction ratio. Carries TOMRA Sure Return™—the world's first single-chamber recognition technology, reading shape and barcode in one chamber.	<b>T-710</b> World's first single-chamber recognition front end for both refillables and non-refillables is launched. The Sure Return Technology™ allows much more compact footprint and sets a new industrial standard for processing speed.	<b>ProPac™</b> ProPac™ is introduced as the first "boxmat" compaction unit giving a whole new flexibility in installation layouts.	<b>T-83 HcP Dual</b> Optimized for reception of high volumes of up to two fractions of non-refillable beverage containers. Its high drop point and compaction rate allow the use of tall bins, enhancing accumulation capacity.	<b>TOMRA 205</b> Freestanding container return system.	<b>T-605</b> Economical return solution for all container types & crates.	<b>TOMRA UNO</b> UNO is launched as a basic plug & play all-container machine with integrated accumulation, with unified camera recognition for both barcode and shape recognition.

**Security Mark Reader**  
TOMRA develops the first UV-based Security Mark Reader, setting a new standard for fraud protection. With this follows the next successful breakthrough in Germany.







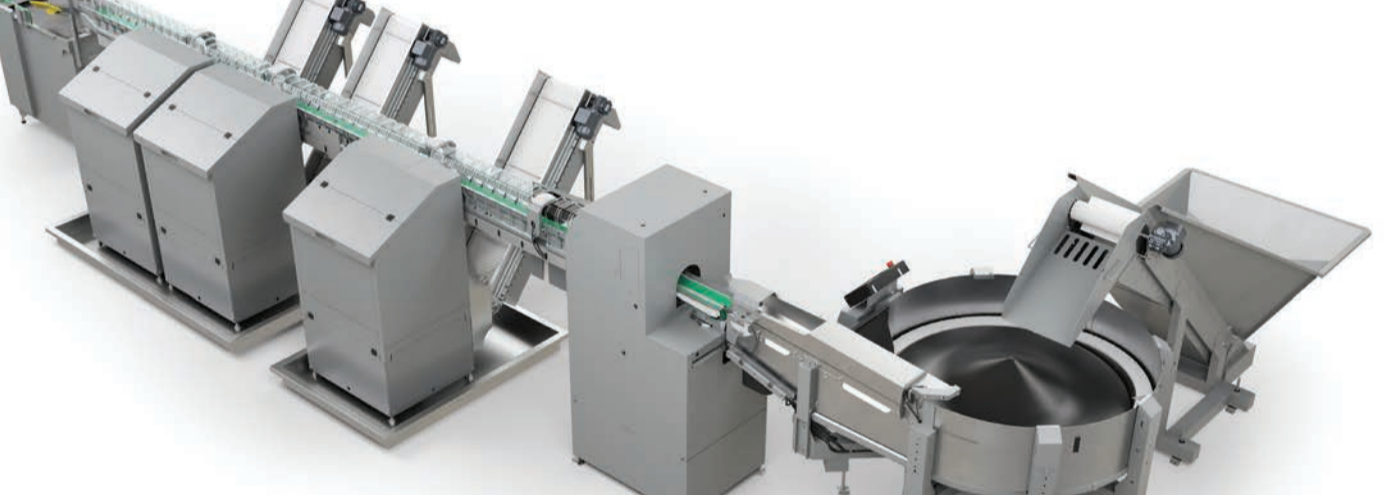
**Diffraction Optical Element (DOE)**  
TOMRA develops new technology for recognition of various material streams, plastic detection was a key element.

**TOMRA True Vision Technology**  
TOMRA creates the multi-camera crate recognition technology, True Vision, and introduces it in the new flagship model T-820. True Vision solves well-known industry recognition challenges and raises precision to a new level.





## 2000

2006	2006	2006	2007	2009	2009	2009	2009	
								
<b>T-63 SINGLE</b> A compact InPac™ solution for up to two fractions, for low to medium volumes of non-refillable containers.	<b>T-63 DUAL</b> Built-in sorting and combi compactor for non-refillable PET and/or cans. Freestanding or through wall.	<b>MasterPac</b> MasterPac is introduced, raising sorting efficiency and speed significantly as it parallel-sorts different fractions simultaneously.	<b>ARC</b> TOMRA develops the ARC, Automated Recycling Centre, and a line of new technologies for recognition of other material streams.	<b>CITY</b> City was developed especially for urban settings in non-deposit markets, providing a new platform for using various reward incentives for recycling.	<b>T-820</b> Front-end machine optimized for handling medium to high volumes of empty beverage containers: PET, glass and cans.	<b>T-63 TRISORT</b> Optimized handling of cans, glass and plastic integrated in one machine. Freestanding and perfect for stores with limited space and medium volumes.	<b>T-53</b> Free-standing machine with integrated sorting and efficient compaction of non-refillable beverage containers. The robust design allows for placing also in locations like store fronts and outdoor enclosures.	
<b>TOMRA Plus and TOMRA Trac</b> TOMRA develops software products that provide direct and real-time connection to TOMRA reverse vending installations. These products allow for optimizing in-store operational processes like emptying routines and cleaning frequencies—consequently improving the consumer's experience.			<b>TOMRA ReAct</b> TOMRA introduces a software platform enabling identification of unique users and connecting their container recycling data to their social media and digital life. TOMRA ReAct creates value through consumer engagement.		<b>TOMRA Flow Technology</b> TOMRA changes the industry again. With TOMRA Flow Technology, we introduce ground-breaking innovations in camera technology, optical and electronics design. TOMRA Flow Technology™ is the world's first 360 degree instant recognition system offering a unique level of operational efficiency and the possibility of handling all sorts of container shapes.		<b>Voucher Control</b> Validates each voucher with TOMRA's Voucher Control service.	

## 2010

2010	2012	2012	2013	2013	2014	2015	2015
							
<b>T-705</b> For stores in need of a reliable and easy to operate return solution with basic automated functions.	<b>UNO Promo</b> UNO Promo has a large touch screen suitable for promotions and incentive-driven recycling programs, and targets customers in need of basic solutions for automated container collection.	<b>MultiPac</b> A backroom solution with non-stop operation and unique user interface, saving time and money for the stores. MultiPac™ wins the Red Dot award for outstanding product design in 2012.	<b>TOMRA T9</b> The first of a new generation: T-9 with TOMRA Flow Technology is faster, cleaner and can take multiformed containers.	<b>TOMRA T9 with EasyPac</b> Highly efficient backroom solution. Smart modular design allows great layout flexibility to fit any backroom.	<b>TOMRA T90</b> TOMRA introduces the first InPac machine with TOMRA Flow Technology.	<b>TOMRA E1</b> High-volume, modular counting and sorting systems for beverage wholesalers, logistic centers, system operators, bottle depots, redemption centers and industrial facilities.	
<b>myTOMRA</b> Accept, compact and store plastic bottles, cans or glass bottles in one standalone machine. These create a tailored experience for the consumers, and reward good recycling habits.		<b>Voucher Control in CLOUD</b> When the voucher is redeemed at the POS, it is controlled against the TOMRA server to verify its authenticity.		<b>From single-feed to multi-feed</b> TOMRA introduces the first "drop and go" RVM in its history.		<b>TOMRA Collection Developer Portal and TOMRA APIs</b> The TOMRA Collection Developer Portal provides the necessary documentation to our API offering that connects to our reverse vending machines. TOMRA's collection of APIs provides optimized operators and a streamlined in-app experience for our customers through a single, safe source.	

## 2010

2016	2017	2017	2019
			
<b>TOMRA T70 Single</b> Accept, compact and store plastic bottles, cans or glass bottles in one standalone machine.	<b>TOMRA T70 Dual</b> Accept, compact and store plastic bottles, cans, or a mix in one standalone machine. Choose to install it free-standing or wall mounted; front or rear-loading.	<b>TOMRA T70 TriSort</b> Maximum flexibility and high-volume capacity in the smallest footprint, only 2m². Accept, compact and store three types of recyclables, including refillables.	<b>H-30</b> Especially developed for the Asian market. Ready to recycle just about anywhere, whether it is indoors or semi-outdoors.
<b>TOMRA R1</b> Able to accept over 100 cans and plastic bottles at once, it makes recycling easy and quick. High-volume storage.			

## 2020

2020	2020	2022
		
<b>TOMRA S1 Rugged</b> Standalone machine specially designed for semi-outdoors use in metropolitan areas.	<b>TOMRA M7</b> Designed to stand alone outdoors.	<b>TOMRA M1</b> The smallest solution in the market that can recognize, sort and store glass, plastic and aluminum containers. Designed to fit right in with the store's shelves.



**CLEAN LOOP RECYCLING**

Let's put recycling to work for you