



**MORE
INTO
LESS**



ORWAK COMPACT 3105

Has a special mode for extra successful compaction of soft plastic. When run on low pressure, the press plate stops in the down position and keeps the plastic under pressure for 30 seconds to squeeze out the air from the voluminous plastic.

Press force	Dimensions (HxWxD)	Transport height	Bale size	Bale weight (cardboard/plastic)	Cycle time
1,5 ton	1990x866x680 mm	1990 mm	700x500x600 mm	up to 40 kg/50 kg	27 s



ORWAK COMPACT 3110

The small but tough and versatile baler is ideal for both cardboard and plastic.

Press force	Dimensions (HxWxD)	Transport height	Bale size	Bale weight (cardboard/plastic)	Cycle time
4 ton	1990x866x680 mm	1990 mm	700x500x600 mm	up to 50 kg/70 kg	33 s

ORWAK COMPACT 3115

Offers a cross-binding function that gives a tight grip of the bale and is helpful when compacting soft plastic or small material fractions.

Press force	Dimensions (HxWxD)	Transport height	Bale size	Bale weight (cardboard/plastic)	Cycle time
6 ton	1990x940x790 mm	1990 mm	800x600x600 mm	up to 60 kg/80 kg	33 s



ORWAK 3210

Extremely fast with a cycle time of only 13 sec. Two bales from Orwak 3210 fit perfectly on one Euro pallet.

Press force	Dimensions (HxWxD)	Transport height	Bale size	Bale weight (cardboard/plastic)	Cycle time
12 ton	2150x1081x843 mm	2150 mm*	800x600x700 mm	up to 80 kg/100 kg	13 s

* 1785 mm stripped version.

**ORWAK COMPACT IS
OPTIMIZED FOR:**

PAPER

+ Cardboard
+ Shredded paper
+ Paper bags

PLASTIC

+ Plastic foil, plastic
bags, plastic straps

METAL

+ Steel straps

ORWAK POWER

STRONGER, FASTER, SMARTER!

ORWAK POWER is a family of four dynamic high capacity balers that offer strong and powerful compaction of large volumes of waste into very dense bales.

ORWAK POWER is fueled by our Black Star Technology, an innovative hydraulic concept providing more strength and greater durability. The new concept has also enabled a more compact machine design due to the placement of the cylinders at the bottom instead of the top of the baler. This

makes the balers easier to transport and install in locations where the ceiling height is limited.

The POWER-balers are also faster, ready when you are, and they come with a PCB that provides many opportunities to stay in control and keep track of your compaction system and recycling.



BLACK STAR TECHNOLOGY



FEATURES:

- + Innovative low-built design
- + Slight spherical press-chamber shape for optimal pressure distribution during compaction.
- + The chambers are welded according to the ISO 3834 welding certificate, more commonly used in the automobile and heavy steel construction industries.
- + Autostart, and gas-spring driven shutter that goes up in less than 2 seconds (3420, 3620 & 3820).
- + 3320 comes with a regular pendulum door
- + A PCB with capacity for data storage, technical machine monitoring and is prepared for internal and external communication.
- + A user-friendly panel with bale, material selector, service and temperature indicators

BENEFITS:

- + Less down-time, more efficiency thanks to Black Star Technology
- + A long service-life
- + Easy transportation
- + Rich placement opportunities
- + Ability to keep track of performance
- + Safe working conditions due to fulfilled safety level D



ORWAK POWER 3320

It has the lowest installation height and produces the lightest bales in the ORWAK POWER-family and it is ideal for environments with reduced ceiling height.

Press force	Dimensions (HxWxD)	Transport height	Bale size	Bale weight (cardboard/plastic)	Cycle time
18,5 ton	1980x1775x998 mm	1980 mm	1200x800x1150 mm	up to 200 kg/200 kg	26 s



ORWAK POWER 3420

A versatile baler for large volumes of cardboard and plastic. It is very fast with a cycle time of only 24 seconds!

Press force	Dimensions (HxWxD)	Transport height	Bale size	Bale weight (cardboard/plastic)	Cycle time
26 ton	2380x1775x995 mm	1980 mm	1200x800x1150 mm	up to 400 kg/450 kg	24 s

ORWAK POWER 3620

This is the real heavy-duty model for large volumes of cardboard boxes. With 52 ton press force, it provides effective compaction of the material into dense bales with ideal dimensions for optimal transport logistics.

Press force	Dimensions (HxWxD)	Transport height	Bale size	Bale weight (cardboard)	Cycle time
52 ton	2481x1900x1030 mm	1980 mm	1200x800x1140 mm	up to 450 kg	46 s



ORWAK POWER 3820

3820 has an extra generous loading gate for large boxes up to 1500 mm wide.

Press force	Dimensions (HxWxD)	Transport height	Bale size	Bale weight (cardboard)	Cycle time
26 ton	2576x2075x996 mm	1980 mm	1500x800x1140 mm	up to 500 kg	24 s

ORWAK POWER IS OPTIMIZED FOR:

PAPER
+ Cardboard
+ Shredded paper

PLASTIC
+ Plastic foil,
plastic bags



ORWAK MULTI

ONE MACHINE, MANY TYPES OF WASTE



ORWAK MULTI is a range of top-loaded multi-chamber balers designed to facilitate sorting and compacting different types of material at source. The installation can easily be extended with additional chambers to grow in pace with your business and the multi-chamber solution can even form a mini-recycling station.

ORWAK MULTI 5070

Effective multi-chamber compaction in little space.

Press force	Dimensions (HxWxD)	Transport height	Bale size	Bale weight (cardboard/plastic)	Cycle time
3 ton	2160x1740x880 mm	2160 mm	700x500x700 mm	up to 50 kg/80 kg	36 s



ORWAK MULTI 5070-COMBI

Model 5070-COMBI gives you the opportunity to combine baling and in-bin compaction in the same machine. The bin chamber is designed for standard four-wheeled bins up to 660 l. The standard version comes with one baling chamber and one bin chamber but additional chambers can be added to the system.



Press force	Dimensions (HxWxD)	Transport height	Bale size	Bale weight (cardboard/plastic)	Cycle time
3 ton	2265x2550x920 mm	2265 mm	700x500x700 mm	up to 50 kg/80 kg	36 s



FEATURES:

- + Duo chambers as standard
- + Easy to add additional chambers
- + The top section slides effortlessly from one chamber to the next
- + Bale trolley included (5070 & 5070-COMBI)

BENEFITS:

- + Simple material loading is convenient and time-saving
- + Sorting and compaction of several waste types at source
- + The freedom to increase capacity by adding additional chambers at any time

ORWAK MULTI IS OPTIMIZED FOR:

PAPER

- + Cardboard
- + Shredded paper
- + Paper bags

PLASTIC

- + Plastic foil,
- + Plastic bags,
- + plastic straps

METAL

- + Steel straps

OTHER

- + Bagged general waste (5070-COMBI only)
- + PET, plastic jugs, food and paint cans (5070-HDC + 9020 only)

ORWAK MULTI 5070-HDC

This heavy duty version of the standard 5070 is robust and versatile. It is prepared for cross-binding of the bales and deals with tough material like PET bottles, plastic jugs, food and paint cans.

Press force	Dimensions (HxWxD)	Transport height	Bale size	Bale weight (cardboard/plastic)	Cycle time
10 ton	2220x1740x830 mm	2220 mm	700x500x700 mm	up to 80 kg/100 kg	20 s



ORWAK MULTI 9020

High capacity version where the chambers allow for a lot of material.

Press force	Dimensions (HxWxD)	Transport height	Bale size	Bale weight (cardboard/plastic)	Cycle time
20 ton	2470x2480x1135 mm	2360 mm*	1100x700x800 mm	up to 200 kg/300 kg	35 s

* 1900 mm stripped version.

ORWAK FLEX

DESIGNED TO STAND OUT BUT FIT YOUR NEEDS

A collection of special applications to meet special needs in waste handling and compaction. Compact mixed waste in a bag or bagged waste in a wheelie bin? Or are you searching for a combi-unit that is able to make bales and compact waste in bags? Or do you have hazardous waste, to be handled with care, and that requires compaction in a steel drum for safety reasons? Our product family ORWAK FLEX delivers the solutions you need!



FEATURES:

- + Versatile
- + Top-loaded
- + Simple to use
- + Small foot-print
- + Adaptable

BENEFITS:

- + Special solutions for special needs

Model	Press force	Dimensions (HxWxD)	Transport height	Bale size	Bale weight (cardboard/plastic):	Cycle time
5010-E	3 ton	2140x910x1110 mm	2140 mm	700x500x700 mm	up to 50 kg/80 kg	36 s
5030	3 ton	1940 (2660 mm in emptying position)x760x1045 mm	1940 mm	-	-	36 s
5030-NHD	3 ton	2165x850x1290mm	2165 mm	-	-	36 s
5031	3 ton	1940 (2660 mm in emptying position)x785x1005 mm	1940 mm	700x500x500 mm	up to 200 kg/300 kg	36 s

ORWAK FLEX 4110

An in-bin compactor that suits standard bins from 660 to 1100 liters.

- + Ideal for bagged general waste
- + Top loading with a generous loading aperture.
- + Based on an easy wheel-in, wheel-out operation.
- + Clever lifting device protects the bin wheels during compaction.
- + Safety and quality are our hallmarks, and the compactor provides maximum personal safety both for the operator and those in the immediate vicinity.



ORWAK FLEX 5030 NDH

Special version for safe compaction of hazardous waste (glass/cans/tins containing residual paint oil or chemicals) directly into drums.

- + Small foot-print
- + Sturdy design
- + Simple and safe transportation and disposal of chemical waste
- + A steel pallet is included for stable placement of the drum inside the compactor.



ORWAK FLEX 5010-E

A small but tough baler that requires little space. Feeding material into this top-loading baler is fast and convenient.

- + Impressive compaction ratio thanks to high pressure on a small surface.
- + Versatile application areas.



ORWAK FLEX 5030 THE NEW CLASSIC

This versatile, sturdy and easy-to-use in- bag compactor is ideal for mixed dry to partly wet waste.

- + Small foot-print
- + Hygienic handling of mixed waste.
- + Compaction ratio of up to 10:1
- + The bag is protected from damage during compaction by a steel drum.
- + Portable and easy to clean
- + Durable finish; critical parts of stainless steel



ORWAK FLEX 5031

Make a standard bale, compact waste in a bag and/or contain the bale in a plastic bag! The choice is yours! The same unit can do all those things for you.

- + Small foot-print
- + Compaction ratio of up to 10:1
- + Portable and easy to clean



ORWAK FLEX IS OPTIMIZED FOR:

PAPER

- + Cardboard
- + Shredded paper (5010-E & 5031)
- + Paper bags

PLASTIC

- + Plastic foil
- + plastic bags
- + plastic straps

METAL

- + Steel straps (5010-E)
- + Food and paint cans (5030)

OTHER

- + Bagged general waste (4110)
- + General semi-dry waste (5030 & 5031)
- + Hazardous waste (5030-NHD)

BRICKMAN

AUTOMATIC SOLUTION GENERATES COMPACT BRIQUETTES



FEATURES:

- + Automatic operation
- + Special versions designed for different types of material
- + Critical parts of stainless steel on Brickman 300 Liquid for filled PET bottles and alu cans
- + Provides a compaction ratio up to 20:1
- + Optional photocells can automate the start function.
- + Material infeed and briquette outfeed are easy to integrate in system solutions.
- + Can be ordered with a number of accessories; different chute options, start systems, sound absorption plates as well as heating and cooling devices.

BENEFITS:

- + Time saving: The high degree of automation means more productive use of time.
- + Unique compaction capacity: Highly compacted waste saves space and external transport movements.
- + Great logistics: Minimizes internal transportation as Brickman is designed to be placed indoors for compaction at source.
- + Safe and comfortable working environment



Fully automated Brickman briquette presses turn large amounts of waste into small briquettes for recycling. They rapidly minimize the volume of waste in a cost-effective way, diminishes the need for internal transportation and helps you keep aisles, passageways and other spaces free from clutter.

Thanks to the compact design and low sound emission, Brickman can be placed indoors close to the source of waste. Brickman offers time-saving and comfortable waste handling as the press can be fed while running, there is no shutter to open when loading the material and the ready briquettes require no binding.

BRICKMAN 300

This model comes in several versions specialized in different types of waste such as cardboard and paper, shredded paper, off cuts from the graphic industry, plastic bottles and aluminum cans as well as beverage containers containing liquid.

Dimensions (HxWxD)	Hopper	Briquette size	Press force
2270x3700 (3040 BM 300 Cardboard) x1440 mm	0.75 m ³	80x80x100-300 mm	25 t



BRICKMAN 900K

It has the capacity to process up to 750 kg material per hour and is ideal for large amounts of cardboard and empty PET bottles.

Dimensions (HxWxD)	Hopper	Briquette size	Press force
2470x5710x2430 mm	2 m ³	200x200x100-300 mm	25 t



BRICKMAN 1200K



It has the capacity to process up to 1100 kg material per hour and is ideal for very large amounts of cardboard and empty PET bottles.

Dimensions (HxWxD)	Hopper	Briquette size	Press force
2470x5710x2430 mm	2 m ³	200x200x100-300 mm	25 t

**BRICKMAN IS
OPTIMIZED FOR:**

CARDBOARD & PAPER

+ BM 300 Cardboard
+ BM 900K
+ BM 1200K

SHREDDED PAPER

+ BM 300 Alu can & shredded paper

DRY ALU CANS

+ BM 300 Alu can & shredded paper
+ BM 900K
+ BM 1200K

DRY PET & PLASTIC

+ BM 300 Plastic
+ BM 900K
+ BM 1200K

FILLED ALU CANS & PET BOTTLES

+ BM 300 Liquid

ORWAK HORIZONTAL

AUTOMATIC SOLUTION FOR CONTINUOUS OUTPUT OF MILL-SIZE BALES



Fully automated horizontal balers meet the challenges presented by centralized large-scale waste handling in many businesses and organizations, which produce huge volumes of paper-based and plastic wrapping waste for recycling. They quickly minimize the waste material in a cost-effective way to help you improve internal logistics. The continuous baling allows multi-shift operation and a bale counter keeps track of the throughput. The mill-size bales can be sold directly to paper and plastic processing industries.

FEATURES:

- + Photo cell start, automatic operation and automatic bale tying
- + Can also be run in manual mode
- + Material selector and bale counter
- + Large infeed
- + A wide choice of feed systems: manual, bin, air-transportation and conveyor belt
- + Production capacity of 1-6 ton cardboard per hour
- + 2150 SAT comes with a narrower channel as a special application for small pieces paper off-cuts. This solution is developed for bookbinders, printers and other industries producing paper-based off-cuts.
- + Can be ordered with optional oil heater/oil cooler

BENEFITS:

- + Effective large-scale waste handling due to the high degree of automation
- + Easier internal and external waste transportation
- + Good control over the throughput
- + Increased income when delivering bales directly to the recycling industry
- + Safe and comfortable working environment



**ORWAK HORIZONTAL
IS OPTIMIZED FOR:**

PAPER
+ Paper, cardboard and soft plastic

Model	Dimensions (HxWxD)	Recommended production (Cardboard)	Bale size	Bale weight (cardboard/plastic):	Cycle time
Orwak 2130 AT, 4/6.2 kW*	5776x3801x2370 mm	1 t/h	30 tonnes	1100x800 mm	333 kg/m ³
Orwak 2140 AT, 11 kW	6311x3749x1962 mm	3 t/h	40 tonnes	1100x800 mm	375 kg/m ³
Orwak 2140 AT, 18 kW	7200x3900x2500 mm	4 t/h	40 tonnes	1100x800 mm	375 kg/m ³
Orwak 2150 AT, 18 kW	7146x3749x2479 mm	3 t/h	50 tonnes	1100x800 mm	417 kg/m ³
Orwak 2150 AT, 22 kW	7200x3900x2000 mm	5 t/h	50 tonnes	1100x800 mm	417 kg/m ³
Orwak 2150 SAT, 22 kW	6400x3900x2000 mm	3 t/h	50 tonnes	800x800 mm	379 kg/m ³
Orwak 2150 AT, 30kW	7200x3900x2000 mm	6 t/h	60 tonnes	1100x800 mm	520 kg/m ³

* = 6.2 kW with bin skip

TOP PERFORMANCE, THANKS TO TOMRA TECHNOLOGY

State-of-the-art technology is vital, but we don't stop there. Our mechanics, construction, and safety features are constantly being refined and improved to provide you with the best possible service.

MECHANICS - ISO 3834 STANDARD

Our machines are designed based on a material-optimized construction to distribute the load in the best possible way. The quality of the steel we use in our machines is carefully tested to endure high pressure and long-term wear without losing its original shape or qualities. And welding of the chambers is performed according to the ISO 3834 standard. Flux-cored arc welding is used, which results in a minimum of slag inclusions and grants for a perfect bonding of the metal components. This welding method doesn't require any pre-heating treatment that could result in material deviations or deformation. Furthermore, this process is spatter-free, providing a clean and even surface for the coating.

We generate and use precision-manufactured components by laser cutting and incorporating the latest bending technology. The finish is done using degreasing, iron phosphate, and PU coating that provides a durable, flexible, and corrosion-resistant surface. Polyurethane paint has excellent performance characteristics: adhesion, hardness, gloss, flexibility, and resistance to abrasion, impact, weathering, acids, and solvents.



HYDRAULICS

We design our hydraulic systems based on regenerative technology that reduces cycle time and minimizes energy consumption. For example, we use a pump in our balers that provides an even flow and results in low sound emission. Additionally, the hydraulics are electronically controlled—to avoid excessive wear-and-tear, the system only applies force when truly necessary.





SAFETY

Safety—not only for the operator but for everyone in the vicinity of our machines—is of the utmost importance. So our machines feature built-in self-monitoring safety systems, two-hand maneuvering, monitored and coded safety switches, and “latch-and-wheel” door locks on all large balers for safe door opening when compacting expanding materials.

AUTOSTART

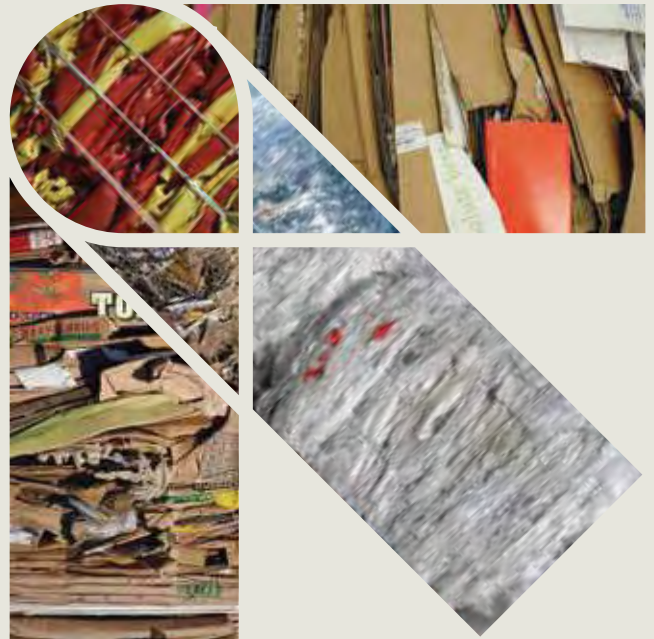
For fast and convenient loading of large volumes of material, the largest balers in our product range all have a sliding door that opens automatically after each press cycle. They’re also equipped with an autostart function, which allows the machine to start compacting the material as soon as the door closes.

SAY HELLO TO TOM

The newest addition to our product range, TOM, is the waste-management system for public spaces. TOM is equipped with radar and a motion sensor, so it detects when someone approaches and automatically opens its shutter for hygienic and absolutely hands-free disposal of litter. TOM is also programmed for a self-adjusting setup. Thanks to its built-in sensor, it can differentiate between a low- or high-traffic period and adjust its operating mode accordingly. In low-traffic periods (30 minutes or more without anyone approaching), TOM goes into sleep mode, keeping the waste under pressure to achieve an even higher compaction ratio.



SOLUTIONS FOR MOST TYPES OF WASTE



TOMRA Compaction designs, develops and produces an extensive range of baler and compactor solutions for effective compaction of many different types of waste to help you achieve your waste handling goals.

A WIDE VARIETY OF WASTE MATERIALS CAN BE COMPACTED INCLUDING THE FOLLOWING TYPES:

- + Shredded paper
- + Rejects such as print trimmings
- + Paper and plastic bags
- + Bagged mixed waste
- + Plastic bottles and film
- + PET bottles
- + Aluminum cans
- + Diverse plastic containers
- + Steel and plastic bands
- + Metal drums
- + Production offcuts
- + Rejected cartons of beverages
- + Hazardous waste such as glass jars and cans/tins containing, e.g. oil, paint and other types of residual liquid chemicals.

MORE PROFITABLE WASTE MANAGEMENT





You are a Resource Revolutionary.

TOMRA is a world leader in compaction and baling solutions for solid waste materials at the source. We offer a comprehensive range of baling systems, briquette presses, and mobile and stationary compactors for recyclable materials that help make waste management more efficient and more profitable.

More into less, purpose into progress, TOMRA transforms the way the world obtains, uses, and reuses its resources.



YIANNI®
hospitality concepts

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