

# Making sure



# Less is more

# Orwak is compaction and baling





Orwak is a world leader in compaction, baling and briquetting solutions for solid waste material at source. Ever since the early 1970s, we have concentrated on doing what we do best: designing, developing and manufacturing high-performance systems that have set the standard for cost-effective solid waste recycling or disposal.

We are a Swedish company with representatives located around the world. Orwak is wholly owned by the Norwegian company Tomra, a leading global provider of advanced solutions enabling recovery and recycling of used materials.

### Promoting environmental care

Our company is truly dedicated to environmental care. It is the reason we exist. In a world of commerce that generates mountains of waste material, our compaction and baling solutions represent an indispensable link at the very beginning of the waste management chain.

With environmental issues now at the top of the agenda in many countries worldwide, Orwak's business mission is assuming greater importance with each passing day. That's why we strive to ensure that our systems more than satisfy the expectations of our customers in achieving their waste management goals, as well as minimizing their impact on the environment.

### Staying on top

Above all, Orwak is a market-driven company. This means listening to the waste handling needs of customers in different market segments and to trends taking place within the waste management industry. We also evaluate feedback received from our own personnel and customers on the performance of our installed systems. All this information is vital to defining our R&D activities.

Another key factor in staying on top is our central manufacturing. Because everything is under one roof, excellent communication and access to all production resources allow development to go hand-in-hand with production improvements to satisfy market demands.

### Much more than compaction

Compaction achieves much more than mere size reduction. The superior design and construction of Orwak systems contribute to maximizing the overall profitability of an organization. How this is done is presented on the following pages.

We are sure that by the time you have turned the last page, you will understand the vital role that Orwak compaction, baling and briquetting solutions play in making companies more profitable and in taking care of the natural environment.





# More profitable waste management

When it comes to solid waste handling and recycling, Orwak has the right compaction solutions that can help you achieve your waste management goals in the most profitable way. We are able to do this because we shape our activities from a customer perspective. Understanding your application needs and desire to maximize revenues drive the design, development and support of our extensive range of waste compactors and balers for recyclable materials.

## Accumulated added value

This is why we look beyond waste volume reduction to see the accumulated added value that results from correct solid waste handling at source. Compaction doesn't just produce less volume of waste, it yields a number of other reductions – less transport costs, less disposal, less handling, less clutter, less risk, etc., that give you a corresponding number of financial and other benefits.

## Ten major effects

In fact, we have defined ten major effects to consider and evaluate when helping our customers to get the best out of waste compaction. These are discussed in this brochure as well as how they lead to more productive operations when you take advantage of Orwak waste handling solutions.

Orwak is “making sure less is more” so that you can take control over your waste management activities at source to achieve the best total economy.



# Ten times less is ten times more

Orwak compaction and baling solutions make a significant contribution to efficient waste management, sustainable business practices, the wellbeing of employees, and compliance with environmental regulations. The benefits gained in each of these areas ultimately translate into financial rewards that make compaction at source a very worthwhile investment.

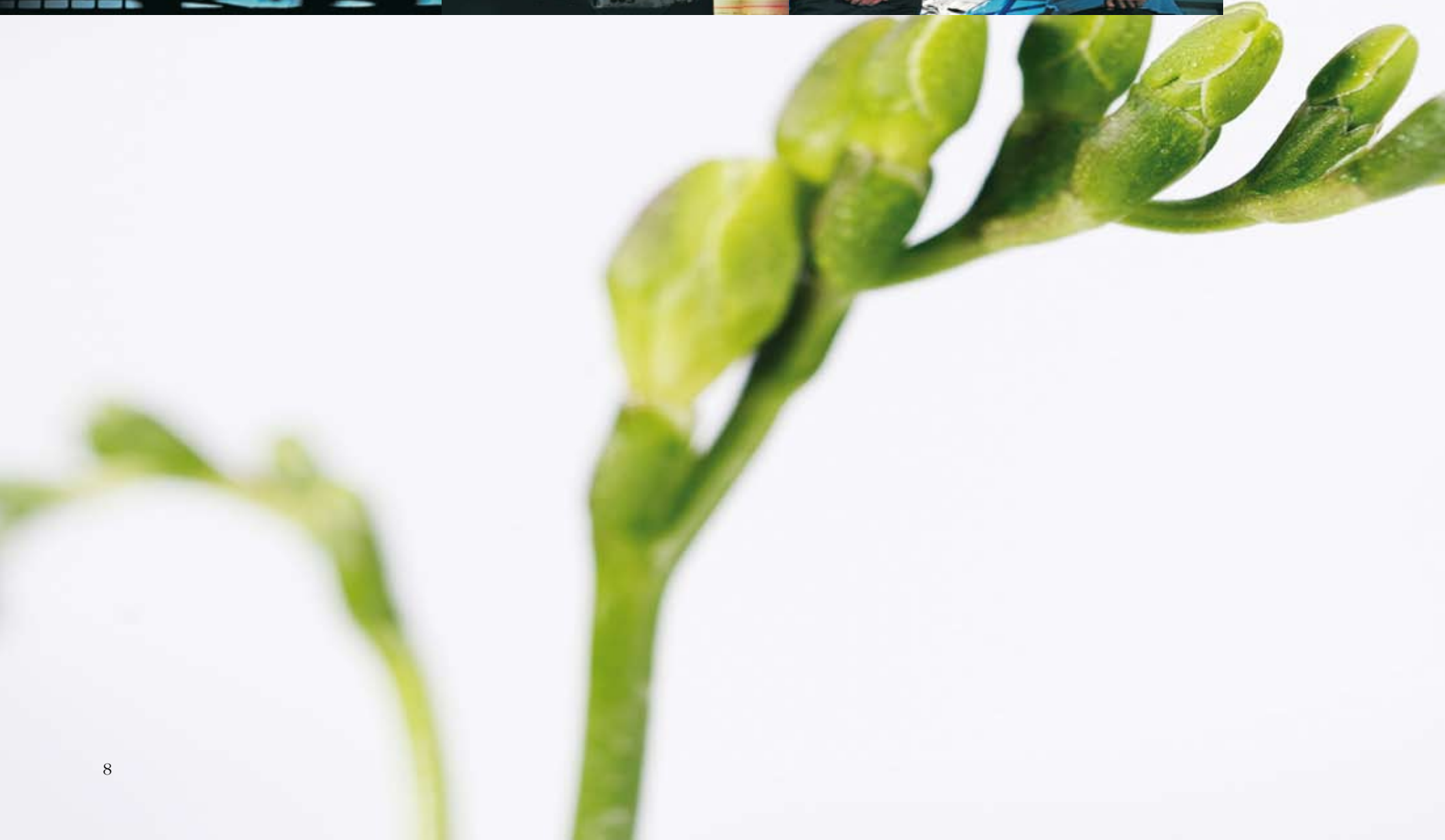
On the following pages you will see how Orwak's ten times less gives you ten times more, as shown opposite, in order to realize your waste management goals in the most profitable way.


Less transport  
Less disposal  
Less handling  
Less clutter  
Less risk  
Less time  
Less mess  
Less trouble  
Less energy  
Less pollution

More money  
More income  
More efficiency  
More space  
More security  
More productivity  
More hygiene  
More satisfaction  
More savings  
More cleanliness

# Less is More







## Less transport More money

When loose waste – such as empty cardboard boxes, other types of packaging, metal cans and various plastic bags – is transported for recycling or disposal such as landfill, the load usually contains more than 75 % air. Therefore, over time, huge sums of money are paid to transport mostly air from one location to another!

### Reduced transport costs

Compaction, quite simply, gets rid of the air from waste to save you a great deal of money through:

- Less fuel and labor costs required when fewer container pickups are needed to remove highly compacted waste.
- The greater value of highly compacted recyclable waste.
- Reduced fees for waste removal.

Thus less transport makes Orwak compaction and baling systems an attractive investment that not only saves you a lot of money, but also offers rapid system payback.

## Less disposal More income

Waste disposal like landfill is expensive and generates no income. Not only do you have to pay disposal fees, but also the cost of labor, energy and other elements that make up the true cost of waste disposal.

### Compaction means income

Recycling, on the other hand, generates significant income for you. And this is exactly what Orwak compaction solutions promote through:

- Yielding a higher quality of compacted waste product. Preparing waste free from unwanted material for an optimal recycling process reduces the disposal of valuable raw material.
- Producing baled waste that recycling companies readily accept because of its high density and ease of handling.
- Providing recycling companies with the source of their profit.

Many governments are phasing out or minimizing landfill sites and other types of disposal, and under EU law, retailers have to recycle specified high percentages of different packaging materials. Therefore purchasing an Orwak waste compaction solution provides you with an opportunity to increase income.



## Less handling More efficiency

Handling loose waste material within a building can be quite labor-intensive, especially if high volumes of waste are generated at different locations. Moreover, if personnel are removed from production or service activities to perform many waste handling tasks, this has a negative impact on productivity.

### Numerous cost-savings

Orwak compaction and baling solutions make organizations more efficient through a number of cost-saving measures, including:

- Much less handling in the workplace involved with high-density waste compared with that needed to remove widespread loose waste.
- Reduced or redirected labor involved with waste handling.
- The need for fewer bags and waste receptacles.

The dramatically reduced waste handling resulting from the use of Orwak systems makes your organization more profitable through greater efficiency.

## Less clutter More space

Blocked floorspace is more than just an eyesore, it causes frustration and wastes time by preventing free access to many areas of the workplace. This, in turn, increases the risk of industrial accidents and promotes inefficiency.

### Keeping it clear

Removing clutter caused by waste buildup to create more space in the workplace is an important benefit of compaction and baling. This, in turn, can lead to:

- Installation of more income-generating production units or services.
- Unhindered and rapid movement around the workplace.
- Finding tools and other items more easily.
- Less waste storage space.
- Space released by fewer forklift trucks needed to transfer compact waste.
- More space immediately outside premises.

Therefore the space freed by Orwak compaction and baling solutions can be used to increase revenues and to achieve greater efficiency through the smoother flow of people and materials around the workplace.





## Less risk More security

Both large and small companies have a responsibility to ensure good working practices and a safe environment for staff. They must also implement measures to prevent goods from being stolen or tampered with. It is therefore essential to cut risks in the workplace to a minimum.

### A more secure environment

Waste management is a necessary part of risk management. And compaction and baling offer you several ways of making the workplace a more secure environment for employees. Volume reduction helps to minimize risks by:

- Reducing the possibility of fire through removing combustible loose waste.
- Keeping floors free from waste materials that might cause a person to slip, trip or fall.
- Preventing illegal entry by minimizing the opening of outer doors.
- Facilitating the overnight storage of waste inside thus avoiding the dangers of darkness to staff.
- Producing compact waste that cannot be used to hide stolen goods.
- Cutting forklift use and the associated potential for injury.

As damaged property, stolen goods and personal injury threaten good economy, Orwak waste handling solutions also help you maintain financial security.

## Less time More productivity

“Time is money” is a key market driver in developing systems and routines that cut the time needed to perform tasks. Even a small amount of time saved each day translates into a significant contribution to improved business economy over the long term, thereby helping to sharpen your competitive edge.


### Promoting productivity

Orwak compaction and baling systems contribute to saving time and promoting productivity in your workplace by means of:

- Less time spent by personnel on cutting and folding boxes, and other waste handling tasks.
- The capacity to handle high volumes of waste.
- Clear passages and walkways allowing quicker access to different areas of the workplace.
- Less time in dealing with any complaints arising from accumulating waste.
- Less time involved in complying with strict waste management legislation.

Minimal waste handling also means your staff can spend more time on core activities by being released from tedious tasks – yet another contribution to higher productivity.





## Less mess More hygiene

Solid waste material that has not been taken care of correctly is a potential health hazard. Semi-wet organic waste degrades quickly and becomes offensive, and both residual food and accumulated waste attract animals.

### Promoting better hygiene

Keeping work areas free from mess is important to promoting better hygiene. Orwak waste compaction solutions play an important role in this by:

- Preventing pest infestation by producing highly compact bales.
- Enabling bagged waste to be stored inside buildings thus stopping it from being ripped open by animals.
- Compacted waste that minimizes the release of unhealthy airborne particles.
- Sealed bags that prevent the release of unpleasant odors.
- Machines that are easy to clean and maintain.

Hygienic practices lead to improved health and a more pleasant working environment. These are further benefits you gain from investing in Orwak waste compaction solutions.

## Less trouble More satisfaction

Trouble at work has many causes. Disputes arising from a poor work environment, work-related stress, and striving to comply with numerous regulations are three common sources. Keeping trouble at bay is essential for creating a harmonious working atmosphere that maintains a high level of efficiency and job satisfaction.

### Towards more harmony

Orwak solid waste compaction helps you to create greater satisfaction in the workplace by encouraging:

- A cleaner working environment.
- Reduced health and safety risks.
- More efficient work practices.
- Removing clutter that annoys staff, shoppers, visitors or customers.
- Orderly routines that lead to higher staff morale.
- Making it easier to comply with waste handling regulations.

Minimizing various sources of trouble to achieve greater satisfaction in your workplace is all in a day's work for Orwak compaction and baling solutions.



# Less energy More savings

With energy bills now claiming an even greater share of operational costs, managers are seeking every means possible to cut this increasing expenditure. And just like time, continual small savings in energy can add up to a considerable reduction in outgoings over a year.

## Reducing fuel and utilities

Depending on the workplace, waste volume reduction offers you a number of ways of using less energy to reduce costs. The major ones are:

- Fewer container pickups cut fuel consumption.
- Businesses that operate forklift trucks to transfer baled waste internally will use less electricity or propane.
- Inline production applications where rejects, offcuts and trimmings are channeled directly into a baler can reduce the use of forklifts trucks.
- In certain industries, like transport and distribution, heating/cooling energy can be saved by not opening outside doors so frequently in order to transfer waste.

As our sources of energy are becoming limited and energy prices are ever increasing, investing in Orwak waste handling solutions is a wise move in your efforts to save money.

# Less pollution More cleanliness

Pollution of the natural environment is detrimental in many ways. Poor air quality can lead to respiratory problems, and windblown waste is not only an eyesore but also clogs drainage systems and poses a health risk. Therefore it is important that organizations help promote a healthy environment for both physical and mental wellbeing.


## A cleaner environment

Compaction and baling play a leading role in maintaining a clean and healthy environment because they result in:

- Less exhaust from less waste handling.
- Less windblown material from waste placed outside premises.
- Less windblown waste released during transportation.
- Less illegal dumping.
- Less blocking of sidewalks by overflowing waste containers.

More cleanliness resulting from Orwak waste handling systems is one more weapon in the fight against polluting the natural environment. The area around your premises becomes tidier to the enjoyment of all involved, and your organization benefits from an improved environmental profile.





# Satisfying different market segments

Because the total range of Orwak products is so comprehensive and allows widespread application, it satisfies the waste handling needs across many market segments such as food retail, non-food retail, hotels and restaurants, offices, industry, healthcare and warehouses and logistic centers.

Attractive and quiet systems are available that are ideal for recyclable materials and waste in, e.g. coffee shops, offices, shops and pharmacies. They are valued wherever good design is appreciated in open work environments near customers as typically found in hotel and restaurant areas, and fast food outlets.

Systems are supplied covering two main applications found in various industries:

Incoming packaging – cardboard, plastic, steel bands, etc.

Offcuts, other residual production material and rejects – print trimmings, metal machining waste, plastics, containers, etc.

Dedicated systems for special tasks are available.

A number of top-loaded balers can be extended to form multichamber systems used wherever different waste materials need to be sorted at source and compacted for recycling or disposal.

Very powerful systems suit high volumes of waste found typically in larger industries, food and nonfood retailers, diverse large wholesalers, big hotels, distribution centers, etc.

A broad range of Orwak systems are used for general applications in organizations like medium to large-scale businesses, food and non-food retailers, medium-size wholesalers, larger educational institutions, hospitals, clinics, ferries and ships, etc.



# The complete solution provider





From pre-sales advice, through purchasing to after-sales system support, we take care of you all the way. After assessing the type and volume of your waste, as well as your internal logistics, we are able to propose the most suitable solution to satisfy your particular needs. We can even train your staff to get the best out of Orwak systems.

In order to be your best possible partner for more cost-effective waste handling, we not only invest in modern technology: our entire staff is continuously trained by our in-house Competence Centre. No effort is spared to maintain our leading position.

Orwak is your complete solution provider.

### Specialist knowledge

Because we carry out our own product research, development and manufacturing, we have built up an enviable bank of specialist knowledge over the years. Areas of expertise cover the properties of waste material, the problems and opportunities found in different application areas, and how Orwak compaction solutions best satisfy the needs of each market segment.

### Safe, easy-to-use systems

An important feature of all Orwak waste handling systems is that they are very safe and easy to operate. Thus both retailer staff and external suppliers become quickly familiar with using an Orwak baler and can rely on its smooth running and safety.

### Tight control of quality

As all the basic components of our systems are centrally manufactured and assembled, we are able to maintain tight control over product specifications and quality. Skilled employees are complemented with the latest design and machining technology to give us an ideal blend of human and technical resources.

### Always near at hand

With its headquarters in Sweden, Orwak has an extensive worldwide network of daughter companies and business representatives. Our global reach enables us to establish a local presence in many countries to carry out marketing activities and maintain effective system service and technical supply.

As a leading player in the waste handling arena, we're here to stay and committed to helping you achieve your waste handling goals in the most profitable way.



# Comprehensive product range

Orwak supplies the most comprehensive range of compaction and baling/briquetting solutions in the marketplace. Therefore we can satisfy virtually all

your needs in waste management, from small-scale applications in shops and offices to heavy-duty tasks in large business facilities.





# Leader in compaction and baling solutions

Orwak is a world leader in compaction and baling solutions for solid waste material at source. We develop, manufacture and market a comprehensive range of waste compactors, baling systems and “Brickman” briquette presses for recyclable materials that make waste management more profitable. This is where Orwak’s unequalled technology,

expertise and service support make all the difference. When you partner with Orwak, you also gain access to the vast experience we have built up since 1971. Orwak is wholly owned by the Norwegian company Tomra, a leading global player in providing integrated solutions for recovering and recycling used packaging.

**AB Orwak**

Box 58, SE-576 22 Sävsjö, Sweden  
Tel: +46 382-157 00, Fax: +46 382-106 07  
E-mail: [info@orwak.se](mailto:info@orwak.se)

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[www.orwak.com](http://www.orwak.com)