



Developing profitable customers



**THE ORKEL Hi-X COMPACTOR**  
**WASTE COMPACTION WITH HIGH DENSITY**  
**AND HIGH QUALITY**



## **HISTORY OF QUALITY**

**WE ARE PROUD TO BE THE FIRST COMPANY IN THE WORLD TO PUT SMALL PARTICLES INTO BALES. WE ARE THEREFORE THE MOST EXPERIENCED PRODUCER OF THESE MACHINES, FOR WHICH WE EARNED AN INTERNATIONAL INNOVATION PRIZE, «NEUHEIT INNOVATION 2003».**









**SAW DUST**



**SRF**



**RDF**



**MIXED SOLID WASTE**



**PLASTIC**



**COMPOST**





# «THE ORKEL COMPACTORS ARE IMPORTANT FOR US IN ORDER TO ACHIEVE BETTER LOGISTICS, SAVED TRANSPORT COSTS AND EASY MARKET ACCESS»

TOM JOHNSON, CEO EASTERN SHORE FOREST PRODUCTS, USA

## EASY HANDLING

The Orkel Hi-X compactor transforms bulk material into easy-to-handle round bales, using nothing but compaction and polyethylene film wrapping. This makes removing the wrap both easy and problem free, as there are no metal bands or net to get stuck in machinery components.

## EFFICIENT LOGISTICS

Baling is a clean and efficient way to handle bulk material. The Hi-X reduces the volume of almost any bulk material up to three times, which gives you the ability to store more in less space and to fit more material in each trailer.

The Orkel bale size is optimized for loading of bales into lorries, containers [44 units in 40ft container], ships or similar. Transport with no odor or loss problems.

## CLEAN AND SIMPLIFIED STORAGE

Air and waterproof film prevent spillage and damage caused by moisture or leakage. Odor problems are minimized. Thereby the possibility to store bales in open air makes storage houses and landfills unnecessary.



Storage in bales is clean

## PRESERVING OUTSTANDING QUALITY

Orkel bales conserve the content well, keeping a high stability. This is due to the tight wrapping, together with the fact that oxygen is removed from the material during the compaction process.

**No oxygen is left in the material, no oxygen gets in.**



Orkel RDF bales ready for transport





Hi-X  
COMPACTOR

Orkel



# TAKING BALING TO NEW HEIGHTS

## TAILOR MADE TO MEET YOUR NEEDS

Depending on your material and operation conditions, the Hi-X compactor is offered in different variations. The standard Hi-X compactor is delivered with a F10 feed hopper, suitable for fine materials such as RDF. For very fine materials and high efficiency, the Hi-X is delivered with the F25 feed hopper known from our Dens-X compactor.

For rougher materials such as MSW, the Hi-X evo is the perfect choice. The feed hopper is specially designed for bigger fragments as well as the chamber opening is bigger to avoid blockages.

## ORKEL TOUCH CONTROL SYSTEM

- Intuitive touch screen
- Robust and reliable
- Water and dust resistant
- Factory presets for different materials
- Customise your own presets
- Easy and fast operation of the machine
- Control and overview of the operation
- Integrated weighing system [optional]

## BUILT TO LAST

The Hi-X compactor is an improvement of our best compactors. The unique design of technical details like auto greasing of bushings and auto oiling of chains, makes the compactor exceptionally durable. The results are low maintenance and life cycle costs, which gives major advantages for your production.



The Orkel Hi-X evo

## GLOBAL SUPPORT

Your Orkel compactor is delivered with factory warranty. Orkel certified technicians, located all over the world, will be present to help you start up your new compactor. The aftersales team will offer you technical support and make sure you keep your wheels turning.

## «OUR CUSTOMERS ASK FOR ORKEL BALES»

PETER MILLS, OPERATIONS DIRECTOR AT NEW EARTH SOLUTIONS, UK



Orkel touch control system

# HOW IT WORKS

## 1. TRANSPORT TO CHAMBER

Bulk material is loaded either from a factory conveyor belt, front-end loader or directly offloaded from a lorry. The material is transported from the feeding table by an elevator into a compression chamber using a robust chained conveyor system with steel carriers.

## 2. COMPRESSION

Two specially designed belts inside the chamber prevent spillage while the material is compressed. Hardox steel plates on both sides of the chamber prevent wear and tear. High quality automatically lubricated bushings prevent dust and moisture damage. Easy replacement and maintenance.

## 3. WIDE FILM WRAPPING

The bale is wrapped in wide film to allow it to maintain its shape and density. An air pressure cleaning system ensures high quality operation at all times.

## 4. WRAPPING

A predefined number of film layers seals the material in a compact bale on the wrapping table, maximizing the storage and handling potential.





# TECHNICAL DETAILS

## ORKEL Hi-X COMPACTOR

The Orkel Hi-X compactor is operated using hydraulics, with power being supplied by either a tractor or an electric motor (Orkel Powerpack PP55). The Hi-X compactor is available with the F25 feed hopper.

### SPECIFICATIONS

Required power	>120 hp tractor or > Orkel PowerPack 55 kW
Total weight	from 9960 kg*
Bale volume	1.25 m <sup>3</sup>
Bale size	115 cm diameter x 120 cm width
Bale weight	500 - 1200 kg**
Bales per hour	Up to 55**
Chamber rollers	17 rollers
Roller support system	Bushings, auto greased
Film roll holders	Up to 15 rolls
Hydraulic brakes	Max. 40 km/h
Airbrakes with ABS	Max. 80 km/t <i>[option]</i>
Drive system	Hydraulic and hydrostatic for full flexibility
Control system	7" water and dust resistant touch screen

\* Depending on model and specifications

\*\* Depending on the material



Visit our website [www.orkel.com](http://www.orkel.com) for more information about the Orkel Hi-X compactor and optional equipment like weighing system, Powerpack PP550 and bale handling tools.

## DIMENSIONS (in mm)



### Hi-X

Operation	Length	10770	Transport	Length	8740
	Width	3710		Width	2550
	Height	3900		Height	4100



### Hi-X<sup>evo</sup>

Operation	Length	10880	On-site transport	Length	11190
	Width	3710		Width	2670
	Height	4110		Height	4110





KOMATSU

Orkel

Orkel



# TRANSFORMING A LANDFILL INTO A CLEAN WASTE STORAGE

**«THE DAILY OPERATION  
IS EFFICIENT AND THE  
SUPPORT FROM ORKEL  
HAS BEEN GREAT»**

JEFFREY HUANG, MANAGER AT TSUN LANDFILL

## THE CHALLENGE

Using landfills has been the usual way to store waste in Taiwan, as well as many other countries, but there are some serious issues with storing the waste like this.

As waste is stored over time, harmful toxins are released and seep into the soil and ground water. This does harm to the environment and eventually pose threats to public health. Cities and neighbourhoods experience odor from the landfills. Birds, rats and other animals scatter waste and spread diseases. Unfortunately, the waste easily ends up in the ocean and nature by wind or animals.

More than 10 years ago, Taiwan's government decided that landfills should be eliminated due to the environmental damage it causes. The waste is instead sent to incinerators for energy production. Due to regular maintenance of the incinerators and increasing amounts of waste, the waste management companies had to look for other solutions. One company, TSUN HUNG ENVIRONMENTAL CO., LTD., quickly found the solution.

## THE SOLUTION

Mr. Yu Chen-Fu, manager of the landfill operations at TSUN, explains that the challenge was what to do with the enormous amounts of waste.



Storage over time with bales

“We considered several solutions and decided to purchase an Orkel Hi-X waste compactor after getting in touch with Orkel in Norway.”

Mr. Yu continues: “We purchased one Hi-X compactor back in 2017. Now, we have upgraded to three. Since then we have baled more than 50.000 tons of waste. The daily operation is efficient due to the Orkel compactor technology.

We experience great support from the Orkel team. Waste keeps coming to our landfill every day, and now we are able to handle it efficiently by storing it in clean single unit packages without harming the environment.

Baling waste in Orkel round bales enables easy and cost-efficient transport, and it gives us time to sort out the waste challenges without having the waste and the odor all over.”





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