



Developing profitable customers



**THE NEW ORKEL DENS-X COMPACTOR
BALING 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 MANUFACTURER OF THESE MACHINES, FOR WHICH WE EARNED AN INTERNATIONAL INNOVATION PRIZE, «NEUHEIT INNOVATION», AT AGRITECHNICA.



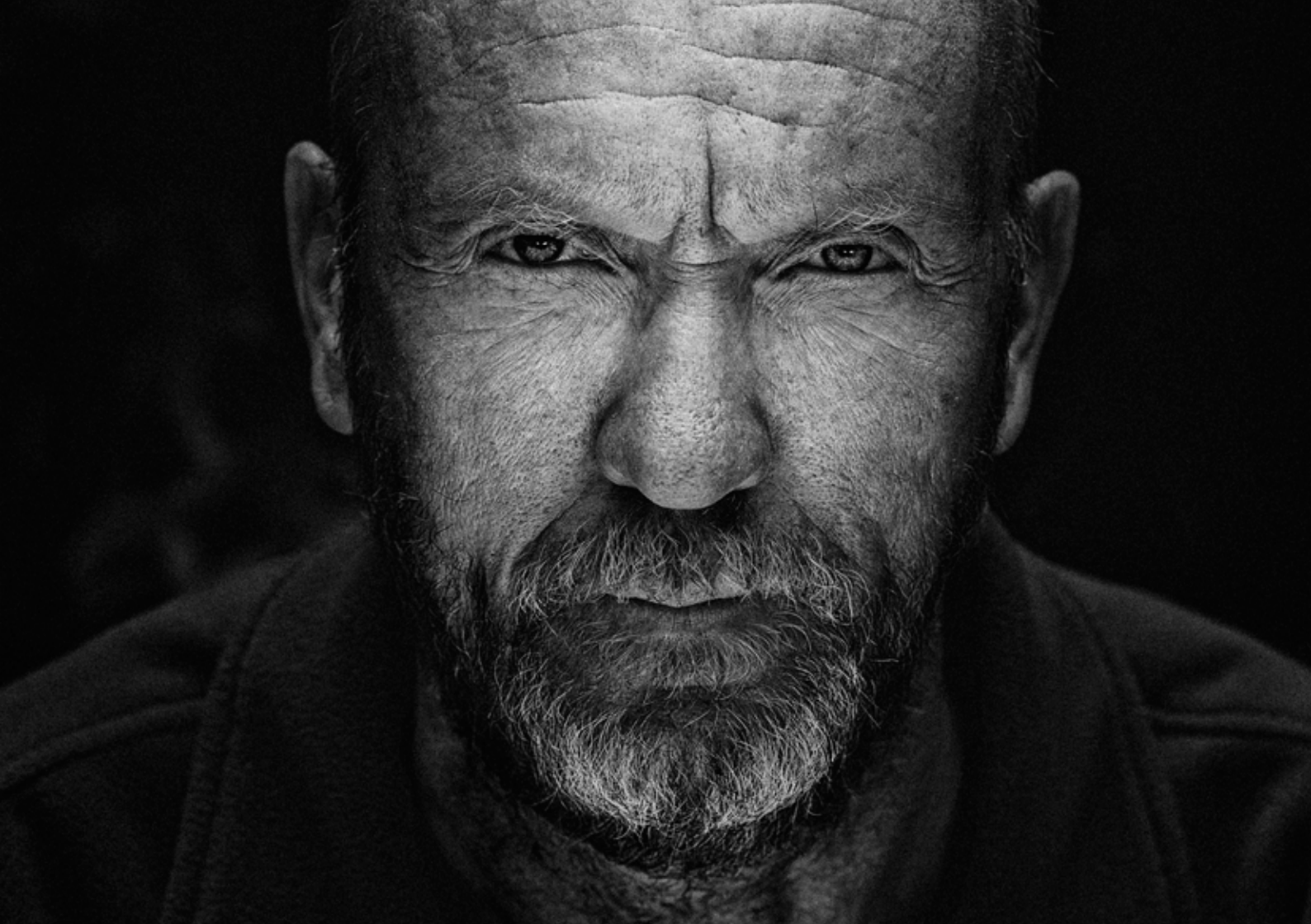
PROFITABLE MACHINERY MADE OF NEW IDEAS AND SOLID CRAFTSMANSHIP

Orkel is an innovative market leader in the development of new products. Our team of highly skilled engineering professionals are working relentlessly to create cutting edge agricultural and industrial machinery and to improve our existing product range.

With the new Orkel Dens-X Compactor we are proud to present a compactor of outstanding capacity, durability and user friendliness, enabling our customers to meet the challenges of the future.

LEIF HAUGUM

Head of Development



TAKING BALING TO NEW HEIGHTS

ORKEL ROUND BALES:

*SUPERIOR DENSITY
HIGHER FORAGE QUALITY
IMPROVED ANIMAL PERFORMANCE*

ORKEL DENS-X COMPACTOR:

*HIGH CAPACITY
RAPID RIG AND WRAP
USER FRIENDLY*



DENS-X
COMPACTOR

Orkel

NEW, INNOVATIVE TECHNOLOGY

**MAKES THE NEW DENS-X
COMPACTOR IDEAL FOR BALING
TOP-QUALITY BALES.**

GENERATION X

The Dens-X is the new generation of Orkel Compactors with higher capacity and smarter solutions of the feed hopper, a new brilliant control system and a unique weighing system. The innovative new feed hopper is a patent pending solution with high capacity. It enables fast unloading from trailers and has a specially designed system to move the material efficiently to the elevator.

BALE ANYTHING

The Orkel Dens-X Compactor transforms bulk material such as biomass and fine particle materials into easy-to-handle high density round bales.

Our customers use Orkel Compactors to successfully handle a wide range of materials, such as:

- Maize
- Cotton
- Crimped grain
- Chopped grass
- Energy crops
- Grape marc
- Hay
- Linen waste
- Manure
- Sugar pulp
- TMR
- Wood wastes
- Saw dust

TAILOR MADE TO MEET YOUR NEEDS

Orkel takes great pride in offering machines tailor made to meet every specific need. Varieties like different feed hoppers, chamber belts and mobile or stationary versions are among the many customizations we make to optimize the compactor for our customers. We facilitate the adaption to your existing production line and offer completely integrated solutions that fit seamlessly into your existing facilities, conveyor belts, safety systems etc.

**«ORKEL COMPACTORS HAVE
BEEN AN IMPORTANT PART OF
OUR CONTRACTOR BUSINESS
FOR TEN YEARS. WITH THE
NEW ORKEL DENS-X, WE WILL
TAKE ANOTHER BIG LEAP IN
INCREASING OUR CAPACITY»**

**FRANK VERHOEST
BELGIUM**



MAIZE



GRAPE MARC



TMR



MANURE



SAW DUST



HIGH CAPACITY FEED HOPPER

THE ORKEL DENS-X COMPACTOR INCLUDES A NEW, UNIQUE HOPPER SOLUTION WITH SUPERIOR CAPACITY. THIS PATENT PENDING SOLUTION ENABLES EASY ACCESS AND FAST UNLOADING FROM TRAILERS. THE TIPPER FLIP ENSURES MINIMUM SPILLAGE AND EASY RIGGING EVEN ON SOFT SURFACES.

«I CAN SEE THIS MACHINE IS MADE
BY EXPERTS»

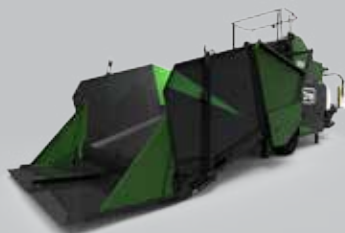
DANIËL DESMETH
CONTRACTOR, BELGIUM

EASY RIG AND WRAP

It takes just a few minutes to rig the compactor and start baling and wrapping. The flexible drawbar makes it quick and easy to move from transport position to baling mode. Using only the tractor hydraulics you can unfold the receiving hopper ready for loading directly from trailers. Quicker and easier than ever.

HIGHLIGHT FEATURES

- Supreme feed hopper size and capacity
- 3,5 m wide in operational mode
- Tipper flip prevents spillage of forage and bulk material
- Full width belts for better material flow
- Flexible drawbar for quick setup



For loading



For loading



Half Folded



For transport



HOW IT WORKS

1. TRANSPORT TO CHAMBER

Material is tipped from a trailer or from a front-end loader to the feed hopper. The material is moved by transport belts in full width to the elevator. A robust chained conveyor system with steel carriers loads the material into the compression chamber.

2. COMPRESSION

Specially designed belts inside the chamber prevent all kinds of spillage, while the design of steel rollers and high pressure chamber makes bales of the highest density.

Automatically lubricated bushings prevent dust and moisture damage and gives long lifetime.

3. WIDE FILM WRAPPING

After compaction the bales are wrapped in wide film or net to allow the bales to maintain their shape and density. Remote control and auto-break enable quick film roll changes.

4. WRAPPING

The chamber is opened and a predefined number of layers of film seals the material in a compact bale on the wrapping table. Finally the bale is rolled to the ground and can be picked up one, two or three at a time, and stacked up to 8 bales in height. 15 film rolls can be stored under the side covers.



ORKEL DENS-X COMPACTOR - TECHNICAL DETAILS

Orkel Dens-X Compactor is operated using hydraulics, with power being supplied by either a tractor or an electric motor [Powerpack PP55].

Required power: >120 HP tractor
or >55 kW electrical
motor

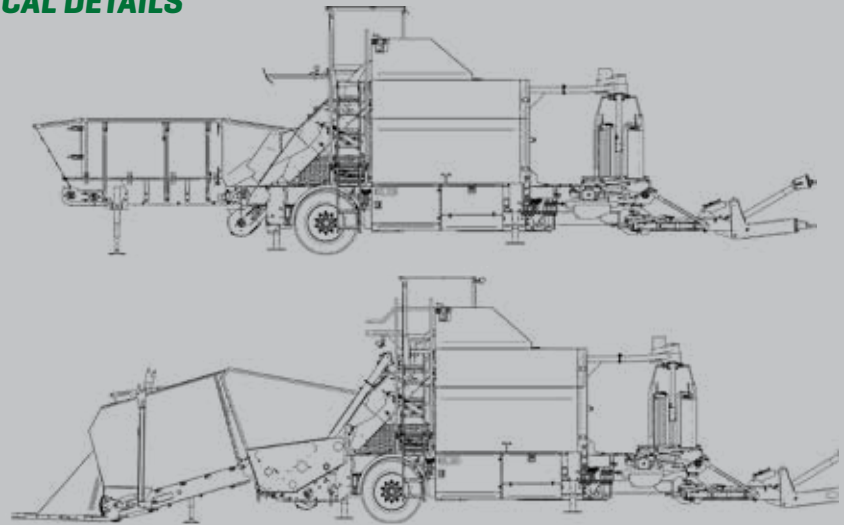
Total weight: 9850-13000 kg,
depending on
specifications

Capacity: Up to 60 bales/hour

Bale volume: 1.25 m³
[115cm x 120cm]

Bale weight: 300-1200 kg

Film roll holder: 15 rolls



GLOBAL 24 HOUR SUPPORT

We know how important it is that your equipment works. Your needs for technical help, maintenance or spare parts are covered by knowledgeable and experienced technical consultants situated in all six continents and more than 40 countries.



DENS-X
COMPACTOR

A NEW DEGREE OF USER FRIENDLINESS

THE DENS-X CONTROL SYSTEM IS THE NEW GENERATION OF ELECTRONICS AND CONTROL UNITS. TOGETHER WITH OUR NEW ELECTRIC PROPORTIONAL VALVES IT GIVES YOU EASIER CONTROL AND HIGHER EFFICIENCY.

Easy to use

An intuitive touch screen makes it easy to understand and run the machine. The symbols and pictures overcome language barriers. Wide viewing angles and high brightness offer good readability also in direct sunlight.

Better control

As the machine runs automatically you can at all times see what is going on. You may choose

to control and adjust it for your specific needs, as all functions can be controlled from the display.

Optimize the processes

The machine comes with several programs as factory presets for different materials. In addition you can make your own adjustments and save them as different baling programs. E.g. you may store one set of settings for baling a wet material, and one for the material when dry.

Robust and reliable

The electronics hardware is developed for heavy industries like mining and forestry, and is reliable in any condition. The tight aluminium housing of the screen is waterproof, totally dust tight and it endures cold, heat, vibration, moisture and impacts.



«HIGH DENSITY BALING IS WIN-WIN»

DENIS JOHNSON, JT JOHNSON & SONS , AUSTRALIA

BALING - FOR EASIER TRANSPORT AND STORAGE

BALING IS A CLEAN AND EFFICIENT WAY TO HANDLE BULK MATERIAL. THE DENS-X ENABLES THE MATERIALS TO BE COMPACTED INTO STABLE AND HOMOGENOUS UNIT PACKAGES.

EFFECTIVE COMPACTION

The volume of most bulk materials can be reduced down to one third of their original volume. Even materials with high dry matter content can easily be compacted. The Orkel bale size is optimized for loading of bales into trailers, containers [44 units in 40ft container], ships or similar.

PRESERVING OUTSTANDING QUALITY

The Orkel Compactors probably makes the bales with the highest density in the market. The result is superior conservation of the content. This is due to the oxygen being pressed out of the material during the compaction process. Together with the tight wrapping the result is that virtually no oxygen being left in the material and no oxygen gets in.

IMPROVING SILAGE QUALITY

Benefits are less bacterial spoilage during storage and transportation, and stable silage for longer term storage. On top of that, our high density bales have lower rates of air infiltration during feedout.

THE KEY TO SUCCESS = HIGH DENSITY BALES

Minimal or no losses in forage conservation provides huge benefits to the livestock farmer. User experience during more than 10 years as well as several independent test reports confirm the advantages of Orkel bales to provide:

- Increased milk yield/ live weight gain
- Higher DM intake
- Better milk quality by increased protein and fat
- Improved animal health

In turn, these benefits have a positive impact on the financial return from milk and meat production.

«THE ORKEL MACHINES HAVE BEEN A SAFE AND PROFITABLE INVESTMENT»

HENRY DU VAL DE BEAULIEU
YELSPA LTD, UK



What began as a modest production of small toys and tricycles for local customers, has now become a global supplier of high quality machinery.



NORWEGIAN CRAFTSMANSHIP SINCE 1949

In 1949, at the age of 27, the Norwegian welder Johan Gjønnnes invested in a welding machine. The intention was to make a living out of repairing sledges and bicycles for neighbours and acquaintances. In a small smokehouse in Fannrem, around 45 kilometers southwest of Trondheim, he gradually developed the business into production of toys, tricycles and simple hand carriages for agriculture.

INNOVATIVE PRODUCTS BASED ON EXPERIENCE

In the 60s and 70s, the production of agriculture oriented equipment increased, and as the wheels turned faster, more

employees got involved in the production. Since most of the workers came from farms or had their background in farming, the development of new products were based on broad practical experience and a flair for the users needs.

FROM COUNTRYSIDE WORKSHOP TO GLOBAL BRAND

Soon, Orkel became an established brand, known for its reliable quality. In 1986 the first Orkel baler was invented, and with the round grass bales, Orkel really got the worlds attention. Today Orkel Group is an established, strong and pioneering supplier of round balers, Compactors and

transport equipment represented in over 50 countries on all continents.

The company is one of the biggest manufacturers in its segment in Norway and has a unique position on the domestic market. It has earned critical acclaim and a reputation for high quality through experience and innovative design.

The Orkel of today is quite a long way from the small, modest countryside workshop the founder Johan Gjønnnes established over 60 years ago. Quality, innovation, commitment and passion for excellent craftsmanship are still ideals we work towards.



Developing profitable customers

CONTACT

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Technical Support:

+47 918 43 553

orkel.com

YOUR LOCAL SALES CONTACT:



From: Ole Ekestrand Øien, Daniel Klové, Espen Sjø, Håvard Aagaard Øren





Developing profitable customers



THE ORKEL MP/MC COMPACTORS

BALING WITH HIGH DENSITY AND HIGH QUALITY

MP 2000

MC 1000

MC 850



HISTORY OF QUALITY

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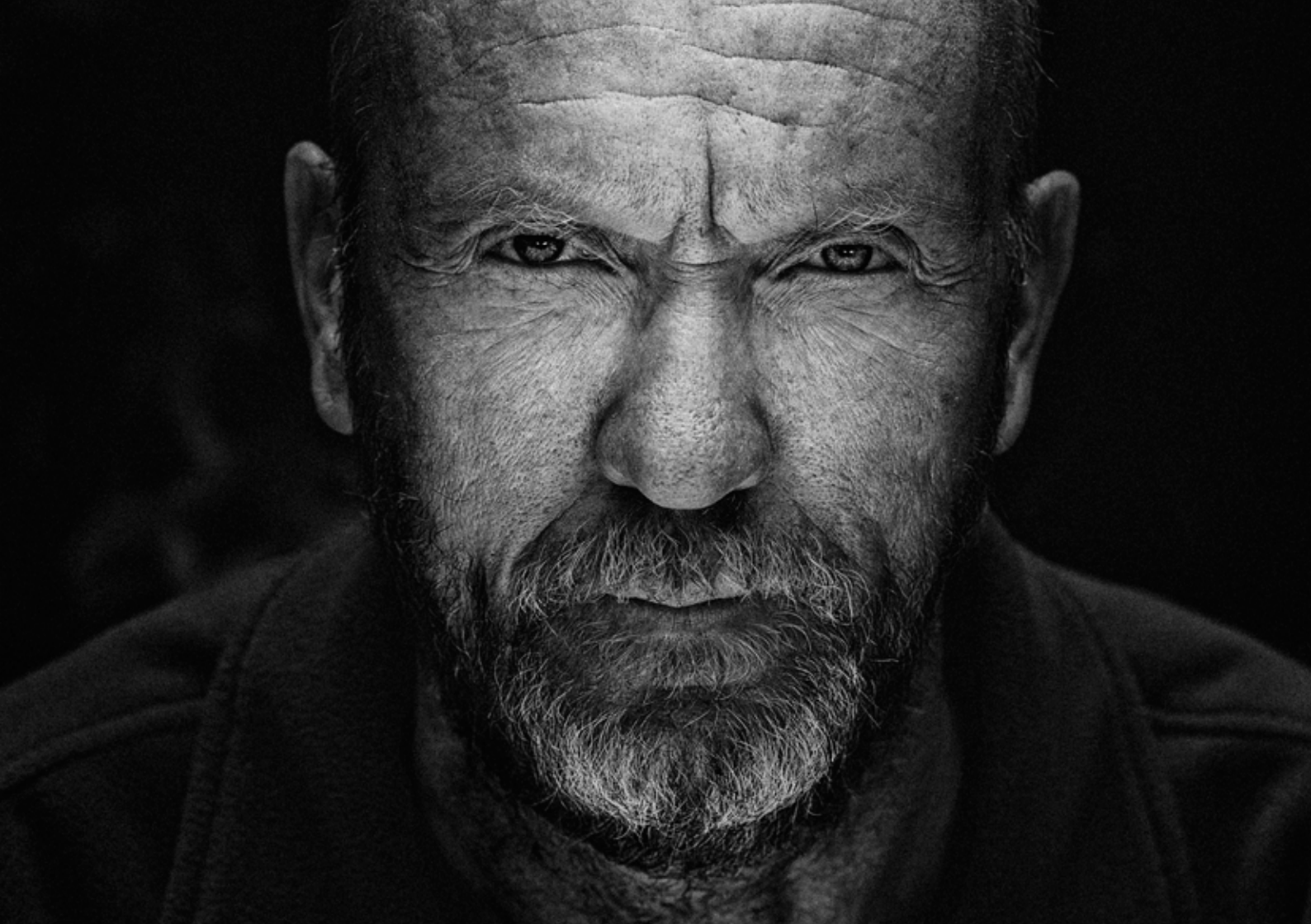
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Orkel is an innovative market leader in the development of new products. Our team of highly skilled engineering professionals are working relentlessly to create cutting edge agricultural and industrial machinery and to improve our existing product range.

We are proud to see that during more than 12 years in the market, the Orkel Compactors have stood the test of time and are still going strong. These years have proven that our Compactors have exceptionally long life-time, low maintenance costs and excellent performance.

LEIF HAUGUM

Head of Development



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DENIS JOHNSON
JT JOHNSON & SONS, AUSTRALIA

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In turn, these benefits have a positive impact on the financial return from milk and meat production.

MAIZE



TMR



GRAPE MARC



SUGAR PULP



UP TO 70% VOLUME REDUCTION

GRASSES



MANURE



CRIMPED GRAIN



COTTON



SAW DUST



RDF



PLASTIC



SHAWINGS



HOW IT WORKS

1. TRANSPORT TO CHAMBER

Material is tipped from a trailer, a front-end loader or factory conveyor belts to the feed hopper. An automatically controlled and robust chained conveyor system with steel carriers loads the material into a compression chamber

2. COMPRESSION

Specially designed belts inside the chamber prevent all kinds of spillage, while the design of steel rollers and high pressure chamber makes bales of the highest density. Automatically lubricated bushings prevent dust and moisture damage and gives long life time.

3. WIDE FILM WRAPPING

After compaction the bales are wrapped in wide film or net to allow the bales to maintain their shape and density.

4. WRAPPING

The chamber is opened, and a predefined number of layers of film seals the material in a compact bale on the wrapping table. Finally the bale is rolled to the ground and can be picked up one, two or three at a time, and stacked up to 8 bales in height.





MC850
COMPACTOR

Ornel

«IT IS CRUCIAL FOR US TO USE SUPPLIERS WITH FIRST CLASS MACHINERY, BUT ALSO WITH FIRST CLASS SERVICE»

DR. HISHAM SHERIF
ECARU, EGYPT

BETTER BALING

THE ORKEL COMPACTORS ARE KNOWN TO MAKE PROFITABLE CUSTOMERS

BALE FASTER

Orkel Compactors gives great capacity (bales/hour) The high output is due to the possibilities for adjustments to optimize for higher efficiency.

BALE ECONOMICALLY

The Orkel Compactors are engineered with great experience and skills. Various technical details like auto greasing of all bushings and auto oiling of chains, makes the Orkel Compactors exceptionally durable. A machine with fewer stops, less maintenance and longer life-time has a lower price per bale.

BALE ANYTHING

More than 30 different materials are handled efficiently by the Orkel Compactors

BALE ANYWHERE

Set the Compactor in transport mode and drive up to 80km/h with optional hydraulic and air brakes. It takes minutes to make the machine ready to use after transport.

GLOBAL 24 HOUR SUPPORT

We know how important it is that your equipment works. Your needs regarding technical issues, maintenance or spare parts are covered by knowledgeable and experienced technical consultants situated in all six continents and more than 40 countries.

BALE BETTER / TECHNICAL ADVANTAGES

- Automatically lubricated bushings prevent dust, moisture and acid damage. It also makes maintenance or replacement easier and cost efficient
- The hydraulics and hydrostatics ensure smoother starts, stops and gives fewer tension peaks in chains and rollers. This means higher reliability and lower maintenance cost
- Auto mode and individual control of the speed and oil pressure of each function

TECHNICAL DETAILS

THE MOST DENSE AND HARD BALES IN THE MARKET ARE MADE IN SPECIALIZED CHAMBERS BETWEEN STEEL ROLLERS AND BELTS. WE THEREFORE OFFER THREE SIZES OF THE MP/MC COMPACTORS, EACH SPECIALIZED FOR DIFFERENT BALE SIZES.

MP 2000 Compactor

is operated using hydraulics, with power being supplied by either a tractor or an electric motor (Powerpack PP55)

Required power: >120 HP tractor or
>55 kW electrical motor

Total weight: 7800 kg (F10 Hopper)

Capacity: Up to 55 bales/hour

Bale volume: 1.25 m³

Bale size 115cm x 120cm

Bale weight: 300–1200 kg

Options:

Feed Hopper F8 (for tipping): Yes

Flexible Drawbar: Yes

MC 1000 Compactor

is operated using hydraulics, with power being supplied by either a tractor or an electric motor (Powerpack PP55)

Required power: >80 HP tractor or
>55 kW electrical motor

Total weight: 7220 kg

Capacity: Up to 60 bales/hour

Bale volume: 0,67 m³

Bale size 100cm x 85cm

Bale weight: 200–600 kg

MC 850 Compactor

is operated using hydraulics, with power being supplied by either a tractor or an electric motor (Powerpack PP55)

Required power: >80 HP tractor or
>55 kW electrical motor

Total weight: 7120 kg

Capacity: Up to 65 bales/hour

Bale volume: 0,48m³

Bale size 85cm x 85cm

Bale weight: 100–500 kg



ORK

TAILOR MADE TO MEET YOUR NEEDS

**ORKEL TAKES GREAT PRIDE
IN OFFERING CUSTOMIZED
MACHINES TO MEET EVERY
SPECIFIC NEED.**

**«THE DEMAND FOR MAIZE IN
BALES WITH GOOD FORAGE
QUALITY IS GROWING. ORKEL
COMPACTORS HAVE BEEN A
SUCCESSFUL INVESTMENT
FOR MY BUSINESS»**

**FRANK VERHOEST
BELGIUM**

ADAPTATIONS

We facilitate the adaption to your existing harvesting line to ensure highest possible capacity for your operation. Our module based machine design lets you choose between a variety of different feed hoppers, drawbars and more.

ORKEL POWERPACK PP55

Efficient, flexible and reliable drive and operation of your Compactor. The Orkel PP 55 is an advanced power source for your compactor. A frequency controlled RPM secures your operation under low as well as high temperatures. An automatic RPM regulation adjusts the speed according to the optimal conditions of your compactor. The arrangement is optimized to operate the Compactor with the lowest possible effect, still assuring high quality baling. A complete package, easy to transport, operate and connect. Lift and load / unload by a forklift.

Technical data:

Dimensions [mm]:

L=1300 x W=1300 x H=1550

Foundation:

Concrete on rubber blocks

Stabilisation:

Vibration absorption system

Weight: 1900 kg

Voltage in: 380-480 V

Hertz range 50-60 /s

Motor 55 kW - 8 poles

Torque / Effect 535 Nm / 90 kW

FEED HOPPER VARIATIONS

You may choose between our standard heavy duty feed hopper F10, or our low built F8 feed hopper. The F8 model ensures fast setup and easy unloading from trailers. Two rows of conveyors move the material towards the elevator. The augers on each side ensures a fully loaded elevator.

FLEXIBLE DRAWBAR

If deployment and setup up time is a critical point for your operation, we recommend our flexible drawbar. The unique design enables a 30° angle between the tractor and machine centerline, which enables the bale to roll in to position for pick up and stacking without disconnecting your tractor from the drawbar.

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TIBE
Foto: Ole Ekestrand Øien, Daniel Mørk, Espen Sjø, Håvard Aagaard Ørten

