



## Drive Systems for Livestock

◆ VENTILATION

◆ WINCHING

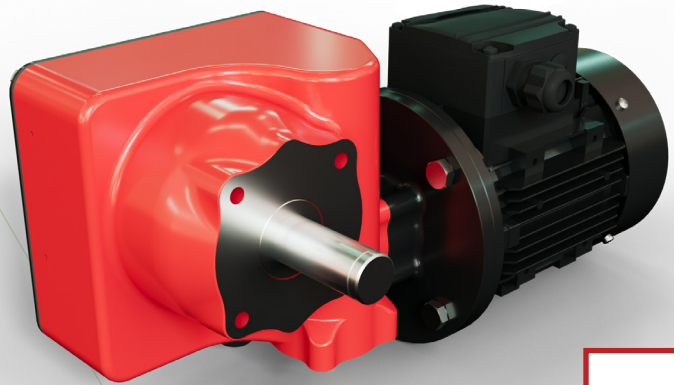
◆ FEEDING



## G3 Drive System

G3 Drive systems opens and closes curtains, vents and tunnel doors with precision and optimized control during every ventilation cycle.

150Nm, 250Nm,  
450Nm, 650Nm



PATENT  
PENDING

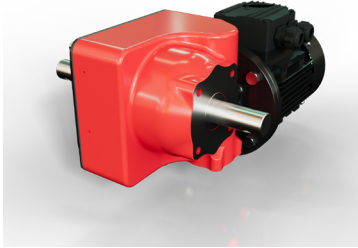
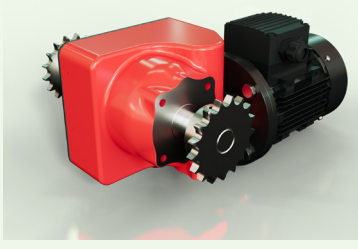
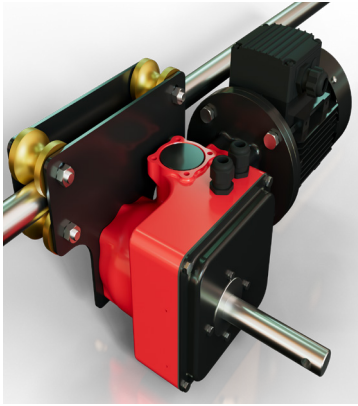
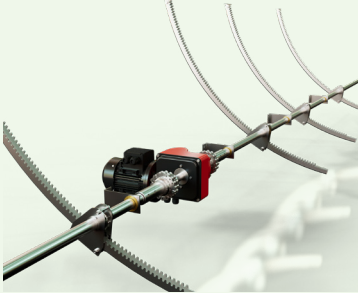
### Advantages

- Light weight gearbox - 7 Kg
- Installation and adjustment by one person.
- Safety Switch - prevents overriding of the limit switches.
- Heavy Duty Construction for Long life.
- No Regular maintenance required.
- Self-braking worm gear transmission ensures that the output shaft locks when the drive unit stops.
- Setting limit switches system by one person.
- Friendly interface, easy to operate.
- Counter mechanism is characterized by precision, reliability and safety - zero backlash.

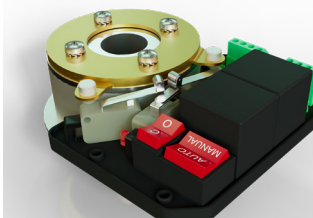
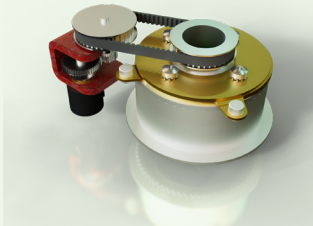
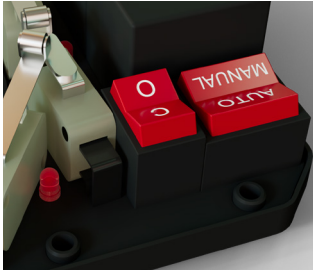

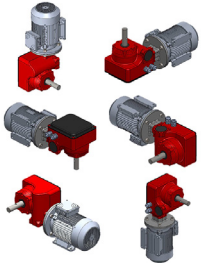

### Technical Specifications

- Torques - 150Nm ,250Nm ,450Nm, 650 Nm
- Ratio - 1: 50, 85, 250, 350, 500, 750, 1500, 3000
- Speed - 0.3 - 18 RPM
- Weight - 7 Kg.
- Motor - 1/4 HP, 1/3 HP, 1/2HP
  - › 115V - Single phase
  - › 230V - Single phase 50/60 Hz
  - › 230/460V - 3 phase 50/60 Hz

# PRODUCTS

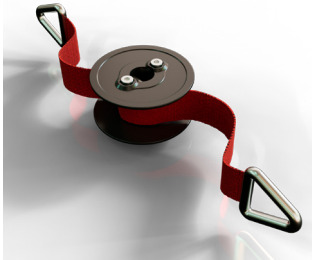
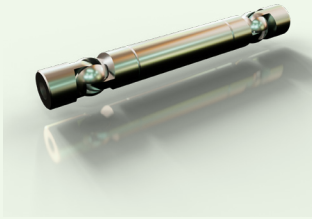
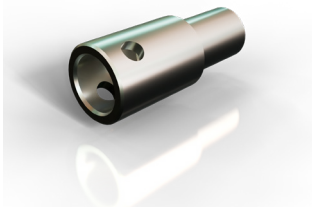
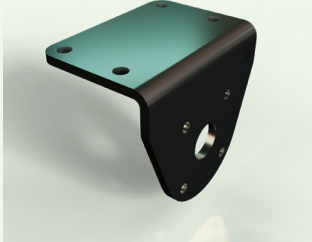

Applications	G3 Drive System	Benefits
<p>Dual Shaft</p> 	<p>Dual shaft configuration.</p>	<p>Ideal for curtain rollups and many other applications.</p>
<p>Sprocket chain</p> 	<p>Sprocket zinc plated wheel – single or dual shaft, using a chain coupling by being connected to the output shafts.</p>	<p>The use of chain coupling allows the drive unit to compensate the design differences in the structure of the ventilation/screen systems.</p>
<p>Climbing System</p> 	<p>Climbing systems – for roll up curtains mounted on a steel tube so that it moves with the winding tube when the roller screen opens and closes.</p>	<p>The climbing system ensures easy system for curtains allowing maximum ventilation.</p>
<p>Rack and Pinion systems</p> 	<p>Rack and pinion system - connects to the output shaft.</p>	<p>Operation of vents and ventilation inlets and flaps.</p>

# PRODUCTS

Features		G3 Drive System	Benefits
Limit Switch System		Best limit switch system to set the operation range of the gearbox.	Quick and easy set-up, high level of accuracy.
Potentiometer	 <b>PATENT PENDING</b>	Potentiometer enables to achieve maximum precision while preserving adequate reserve rotations.	Accurate feed back to the control system about the position of the drive system.
Gearbox Operation		Internal Manual / Automatic, Open/ Close switches. When on manual, LED light illuminates the moment the limit switch is tripped.	Enables single person installation and limit switch set-up, saving time and money.
Safety		Internal safety switch.	Prevents overriding of the limit switches to avoid costly errors.
Mounting Positions		Can be mounted in any direction needed.	Enables to mount the motor gearbox according to the customer needs.
Warranty		All gearboxes have <b>2 years of warranty.</b>	The gearbox is totally sealed and lubricated for life. No regular maintenance required.



# PRODUCTS

Applications		G3 Drive System	Benefits
Drum & Belts		Aluminum drum + 2.5, 4.0, 6.0, 8.0 Meter long durable nylon belts.	Long life span, withstands animal housing and outdoor conditions.
Cardan Shaft		Cardan shaft (Flexible coupling) being connected to the output shaft.	Enables flexible movement of curtains rolling up or down.
Special Adaptor		A verity of special adaptors designed according to customer requirements.	Many option for connecting the output single/dual shaft to rolling pipes.
Base		Different types of mounting plates.	Allows for secure attachment to any structural material (concrete, steel & wood).
Electric Motor		1/4, 1/3, 1/2HP 115V - Single phase 230V - Single phase 50/60 Hz 230/460V - 3 phase, 50/60 Hz All IE2/3 with Manuel operation	Fits anywhere in the world! Emergency manual operation during electricity shout down.

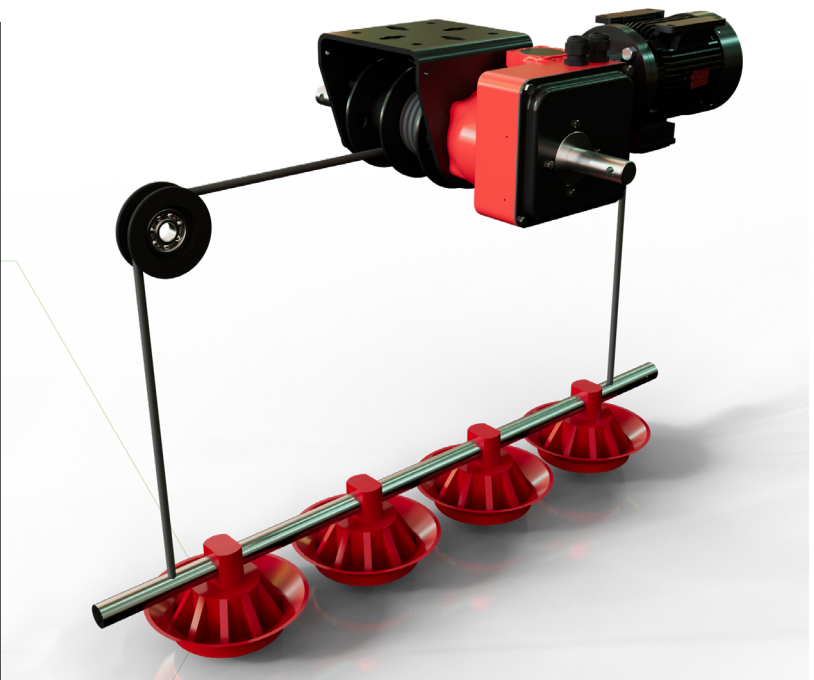
# WINCHING



## GRW - Winching

A big variety of lifting winches for livestock requirements.

650Nm



Winch with cable drums or belts, single/dual shaft, with/without limit switch system.

- Feeding and drinking lines
- Heating equipment and lightening lines.
- Nest and cages.
- Hygienic and maintenance purposes.

All gearboxes contain self-braking special drive systems.

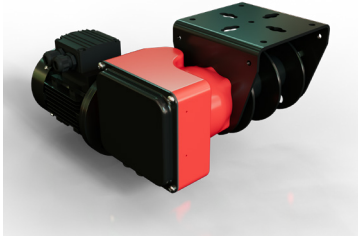
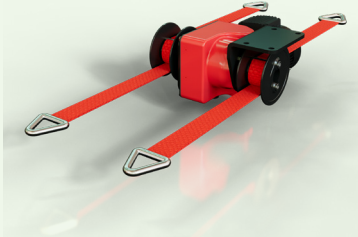
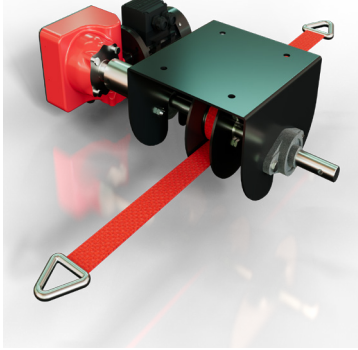
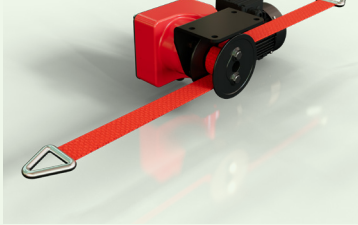
Gearboxes can be provided with limit switch system that can be connected to a controller.



## Technical Specifications

- Torques - 650 Nm
- Ratio - 1: 500, 750
- Speed - 0.3 - 18 RPM
- Motor - 1/4 HP, 1/3 HP, 1/2HP
  - › 115V - Single phase
  - › 230V - Single phase 50/60 Hz
  - › 230/460V - 3 phase 50/60 Hz

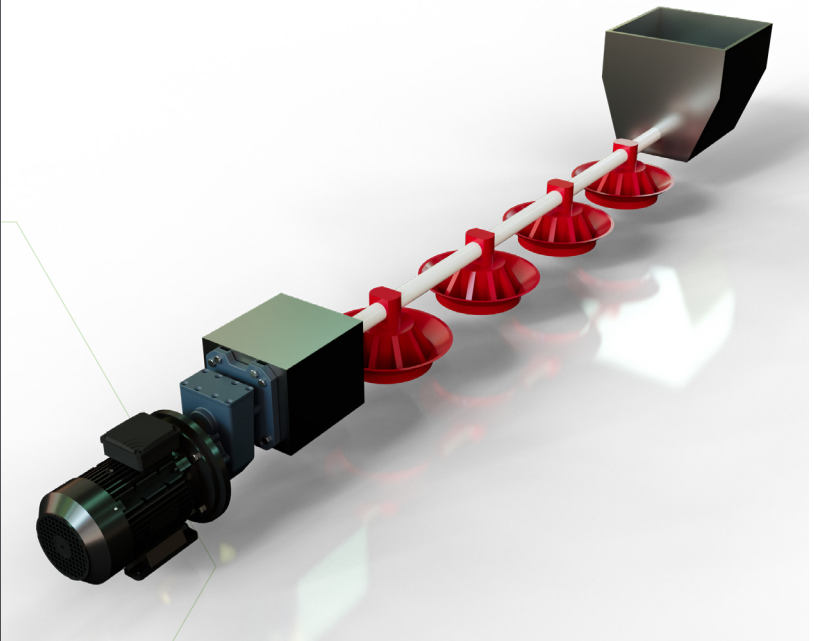
# PRODUCTS

Types		Applications	Benefits
One Side Double Winch		For hoisting feeding lines and water lines Works with metal cables or belts	Comes with wide range of gearboxes ratios and sizes, easy to dis/assemble at the site.
Two Sides Double Winch		For lifting feeding and watering lines, heating and lightening equipment. With the use of strong cables.	Reliable and easy to operate and install.
Sattelite Drum-HD		For heavy duty lines. provides up to 700Nm torque with the use of 6m strong lifting belts. Gearbox Includes limit switch system.	For long feeding lines (250m). One winch lifts the total line with possibility to be operated by controller.
G3 Drum		For lifting feeding and watering lines, heating and lightening equipment using belts including limit switch system.	Designed to work optimally with the G3 Gear

# FEEDING



## GRF FEEDER HELICAL GEARBOX



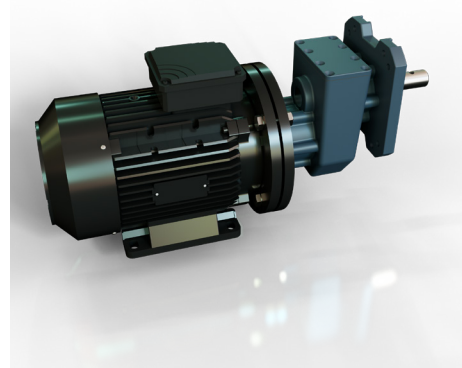
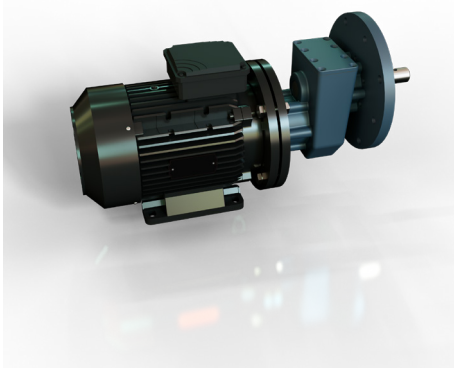
**GRF** - feeding gearbox is a product line dedicated to poultry farming used at automatic feeding systems.

GRF is suitable for screw feeder system for transporting feed from main Silo to the feeding line, and then through the long feed line.



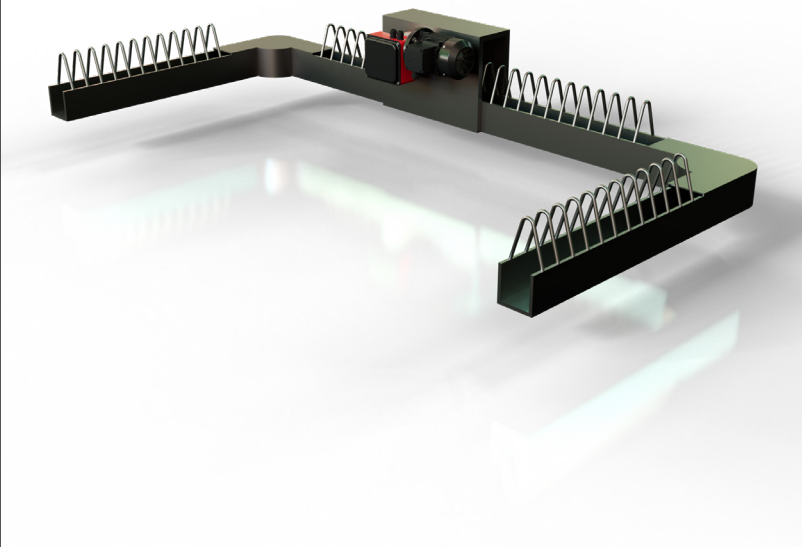
### Technical Specifications

- Aluminum die casting body
- Torque - 2.6 - 4.5 Nm
- Ratio - 3.93 / 4.75
- Speed - 163 - 188 RPM
- Motor - 0.25 - 1.5 Kw (50/60 Hz)
- Flanges - Square / Round
- Output shaft - different sizes according to request.





# GRWF FEEDER WORM GEARBOX

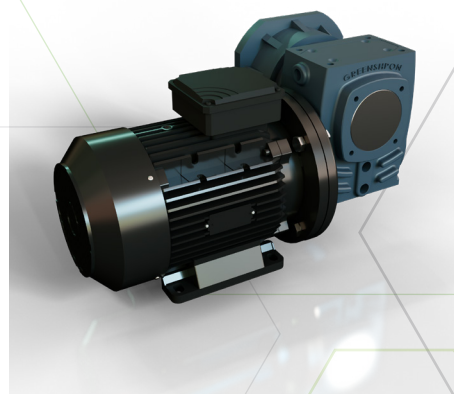


**GRFW** - worm gear chain feeder is a special dedicated gearbox suitable for chain feeding systems for transporting feed by chain system in livestock. Special designed gearbox using reinforced tapered roller bearings to absorb two different types of stresses caused by lead angle of the worm gear set.



## Technical Specifications

- Aluminum die casting body
- Torque - 33 - 485 Nm
- Ratio - 10 - 60
- Speed - 23 - 140 RPM
- Motor - 0.55 - 4 Kw (50/60 Hz)
- Flanges - Square / Round
- Output shaft - different sizes according to request.





**Greenshpon Engineering** is at the forefront of the Israeli industry and has faithfully served all of its Industries since its establishment in 1952.

Solutions that are provided with **Greenshpon-made Gearboxes**, prevent fault failures, enables work in extremely difficult conditions for many years and require minimal maintenance.

Greenshpon Gearboxes have proven over 6 generations their reliability in the industry and gives a **2-years warranty** on its products manufactured in Israel.

The company specializes in the development and design of unique products **according to customer requirements in many industries, focusing on exporting its unique products** for Poultry Coops, Pig Pens, Dairy Farms, Greenhouses, Crop Storage, Solar Panels and more...  
**Custom made for your specific requirements.**

Engineering development, prototype production, performance optimization, engineering support and consulting for finding technological solutions and ongoing production.

Our customers' need for continuous technical improvement and technology requires us to persevere in improving performance and applications, accompanied by the ability of Greenspon to create products in one line that fully conforms to customer requirements.



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