

Golf driving ranges have found their master



Say goodbye to **amateurism**

Break the vicious circle of neglect

Golf pro's don't make mistakes: a quality driving range is their training partner. Too often, however, the driving range is the poor relation of the Club and its maintenance level is significantly lower than the fairways. The mowing frequency is insufficient, the health of the grass deteriorates, mowing and ball collection equipment is inefficient, obsolete or worn, maintenance staff are unmotivated, ... Without even realising, the Club gradually becomes trapped in a vicious circle of reduced quality which harms its brand image.

Driving range mowing and ball collection are constraints that become chores. Poorly maintained grass disrupts the golfer's vision of the ball impact point and disturbs their composure. Due to ongoing neglect, the grass deteriorates and the Club's image suffers.

Say hello to **professionalism**

Golfers appreciate quality

Just like the course, which receives good care and is a refined setting, the driving range must also meet high quality standards. An impeccable driving range projects an image of continuous care and high quality. From the moment their warm up starts, the golfer feels privileged to be in a well maintained environment. A more accurate view of the ball impact point nurtures both their talents and their competitive spirit. When the player meets their golfing friends afterwards he will give recommendations thereby enhancing the image of quality and innovation to be found both within and outside the Club.

Enter a virtuous circle of quality

Belrobotics offers a ground breaking solution to the chores of driving range maintenance. The combination of robotic mowing and ball collection automates these tasks and frees up staff for more useful and productive tasks. This world exclusive product enables substantial savings to be made.



Robotic Ballpicker

It automatically collects balls and brings them back to its base with no fuss. No more human interventions and players can practice non-stop. The robot is designed to carefully pick up the balls without pressing them into the ground, thereby avoiding the big losses caused by conventional machines burying balls. The work of the robot can be completed automatically by a process which washes the balls and continually places them into the dispenser. In this way the robotic ballpicker brings significant cost savings to the Club and simplifies its management.



Robotic mower

It continually cuts the grass at an optimum height, making the surface quality similar to that of a fairway. The vision of the ball impact point is precise, the bounce is realistic and the ball rolls like it would do on a fairway. This is achieved through constant mulching which strengthens the grass and creates a surface that even the top clubs would be proud of. The robotic mower is equipped with devices that protect the balls from the cutting blades and, like the robotic ballpicker, avoids pressing them into the soil.

No more chores

Automatic collection of practice balls

The BALLPICKER is the only robotic golf ball collector in the world, developed and patented by Belrobotics. Coupled with the BIGMOW, it forms a duo which automates practice range maintenance tasks. This partnership is the most reliable and economic assistant for the Club's managers. Our installation partners can complete the automated and continual ball collection process by enabling the balls to be washed and then automatically transfer them to the ball distributor.



Works silently

While conventional machines can be very noisy, Belrobotics robots produce the same amount of noise as a washing machine. Inaudible from a few metres away, this silence enables work to take place 24/7, without disturbing golfers or neighbours.



Unrivalled performance

The BALLPICKER tirelessly sweeps the practice ground collecting the balls. It detects the areas of highest ball density with a collection capacity of 12,500 balls per day. Several BALLPICKERS can operate simultaneously on large practice grounds.

Ball protection

The BALLPICKER does not press balls into the ground so they can be used again and again. As a result the Club saves on replacing several thousands of balls every year, which normally remain buried in the ground.



Recharging the batteries

The BALLPICKER operates with batteries and automatically returns to its charging station to recharge.



Back to base

Once its tank is full of balls, the BALLPICKER returns to its discharge station.



Unloading the balls

In just a few seconds, the balls are emptied into the retrieval ditch.



Treatment

The elevator device transfers the balls to the treatment system.



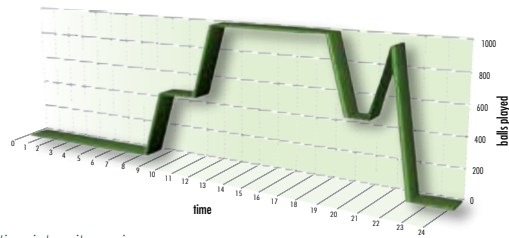
The more balls the better

The BALLPICKER works even more effectively when there is a high ball density on the driving range.

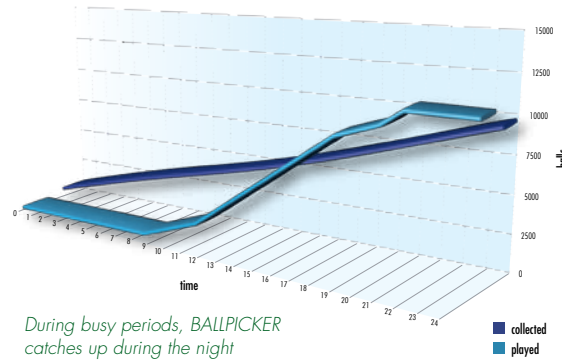
World **exclusive**

Smooth out busy periods

On busy days, the BALLPICKER may fail to pick up the balls at the same rate that they are being used. No problem: it catches up during the night or during quieter days and it tirelessly feeds the players with a sufficient number of balls. It is also possible to program the BALLPICKER to work in multi-zone mode.



Practice intensity varies greatly according to the time of day.

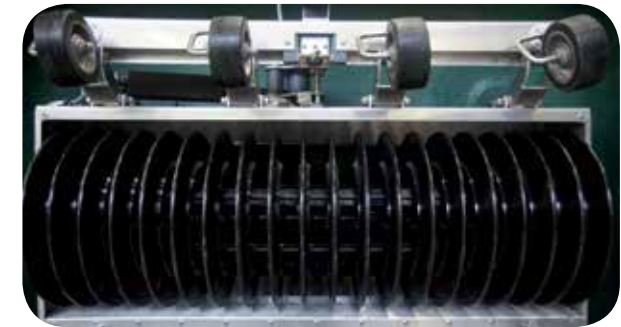


During busy periods, BALLPICKER catches up during the night

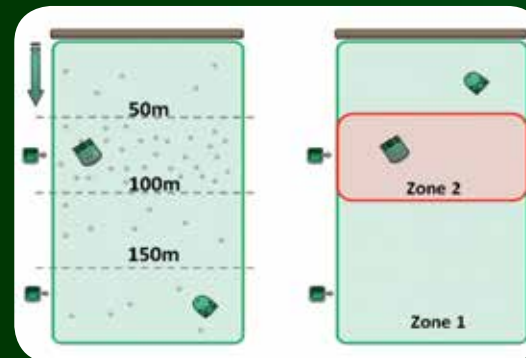


Environmentally friendly

The BALLPICKER and the BIGMOW are electrically operated, and consume the same amount of energy as a refrigerator. These two robots emit ten times less CO₂ into the atmosphere than equivalent combustion engine machines. The BALLPICKER and the BIGMOW do not emit any exhaust gases or odours that could harm golfers or neighbours. The exclusive constant mulching process of the BIGMOW can significantly reduce the consumption of chemical fertilizers, as it naturally fertilizes the soil 100% ecologically.



The patented BALLPICKER's exclusive collecting system



Multi-zone flexibility

The BALLPICKER can be programmed in multi-zone mode. During peak times it concentrates exclusively on the area where the majority of balls land. This high concentration of balls promotes BALLPICKER to work efficiently, enabling it to quickly collect a large number of balls and to feed sufficient balls to the players. At night or at non-peak times, the BALLPICKER will collect the balls outside the high density area. The driving range manager can thereby easily adapt the

functional settings to the number of golfers. The BALLPICKER and the BIGMOW can be remotely controlled by sending instructions to the robots via a mobile phone text message.

cutting edge **technology**



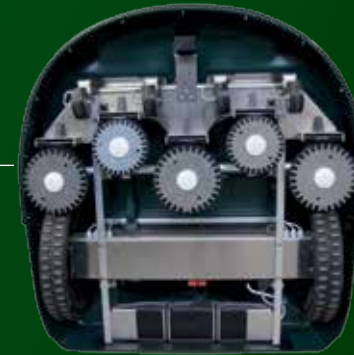
Recharges automatically

When the batteries need recharging, the robot automatically returns to the charging station. The robot operates on a low voltage, with no risk of electrocution.



Ball protection

Patented protective discs protect the balls from the BIGMOW cutting blades. They also act as anti-friction discs for uneven ground surfaces.



Exclusive mowing technique

BIGMOW has 5 floating cutting heads. Each head has three stainless steel blades all as sharp as a scalpel, which cut the grass into very fine particles (constant mulching). The cutting blades automatically retract if they come into contact with an obstacle.



The floating heads instantly adapt to any terrain: mounds, molehills... They also avoid golf balls and guarantee a uniform cutting finish over the whole surface.



Finely cut grass stalks quickly decompose and fertilize the soil in a completely ecological way.

unrivalled quality

Exclusive mowing process

BIGMOW automatically mows the whole driving range between 3 to 5 times per week, depending on program preferences. This fine, clean and gentle cut imposes no stress to the grass. It leaves the turf visibly more beautiful, greener, denser, and as such becomes an ideal playing surface. This healthy grass requires less repair, reseeding, irrigation and chemical fertilizers, ... Weeds dislike regular mowing which hinders their growth and accordingly they disappear.

Constant mulching

BIGMOW only cuts the top of the grass. The cuttings are only a few millimetres long and can easily penetrate the soil, thereby providing a 100 % natural fertiliser.

2,8 ÷ 3,2 cm



multiple features



Unfailing endurance

Belrobotics robots, made of non-corroding materials, are designed to permanently remain outdoors, whatever the weather. In winter, it is advisable to use a parking shelter.



Tireless

Day or night, the BIGMOW and the BALLPICKER continue tirelessly on their route, carefully following the programming recorded in their memories, which can be easily adjusted when needed. The two robots work silently together, day and night, rain or shine, on Sundays and public holidays. They do their job during peak periods and do not take time off.



Remote Control

Via the use of a mobile phone, the user can control how their robots operate. At a distance, you can turn it off, restart or change modes from the programmed schedule to full remote control. The robot can also inform the user of any problems via a mobile phone text message. Upon request, the robot can send its productivity statistics via the internet.



Guidance system

The BIGMOW and BALLPICKER both use exclusive, advanced guidance signal filter technology. Whatever the working conditions, there is no risk of it losing its bearings due to electrical interference (mobile phone signals, buried or airborne power lines, magnetic fields, ...). Thanks to this advanced technology, Belrobotics is the only manufacturer in the world able to produce robots that can work in extreme conditions, such as high to ultra-high voltage electricity stations.



Our cost analysis program allows you to estimate your savings.



all in one profitability

Multiple savings

The BIGMOW - BALLPICKER duo enables your Club to cut costs in many areas

- Automation of various labour-intensive tasks
- No mowing collection, disposal of waste or ball collection
- No need to close the practice range to carry out maintenance and collect balls
- Elimination/ reduction of costs associated with grass maintenance: scarification, coring, irrigation, chemical fertilizers, weed treatment, ...
- Thousands of balls recovered instead of remaining buried in the ground
- Energy costs three times less than the equivalent combustion machines

The experience of golf clubs already equipped with Belrobotics robots confirms a pay-back period of less than two years.

Belrobotics, in close cooperation with its local agents, develops automated grass mowing and ball collection solutions for golf driving ranges.



www.belrobotics.com

BALLPICKER technical features

Tank	300 balls
Capacity	up to 12,500 balls / day
Speed	3.6 km/h - 2.2 mph
Propulsion	2 x 17 inch motorised wheels
Weight (with battery, without balls)	65 kg
Annual average consumption*	500 kWh
Dimensions (l x w x h)	120 x 130 x 50 cm - 47 x 51 x 19.5 inches

*Consumption may vary depending on the given conditions.

BIGMOW technical features

Mowing capacity (max)*	20,000 m ² - 5 acres
Speed	3.6 km/h - 2.2 mph
Mowing width	105 cm - 42 inches
Propulsion	2 x 17 inch motorised wheels
Weight (including batteries)	51 kg - 112 lbs
Average annual consumption**	830 kWh
Dimensions (w x l x h)	120 x 120 x 50 cm - 47 x 47 x 19.5 inches
Mowing height	11 positions - 22 to 80 mm - 0.9 to 3.1 inches
Floating cut with retractable blades	5 head cutters - 15 blades

* mowing capacity may vary depending on the quality and layout of the terrain, the presence of obstacles, ...

** consumption may vary depending on the given conditions.

Manufacturer

Belrobotics S.A.

Avenue Lavoisier, 16B
B-1300 Wavre
Belgium
tel: +32 10 48 00 48
fax: +32 10 48 00 49
info@belrobotics.com
www.belrobotics.com

