Total Management System for Golf Driving Range

CACO SERIES

For the creation of a new culture in the driving range industry, NANO Tech promises to provide the best system through indoor & outdoor automatic ball management system, semi-automatic system, golf ball vending machine, conveyor system, and management system, aiming at the creation of a safer and more convenient driving ranges

NANO Series

The automatic system for the creation of a safer and more convenient driving range



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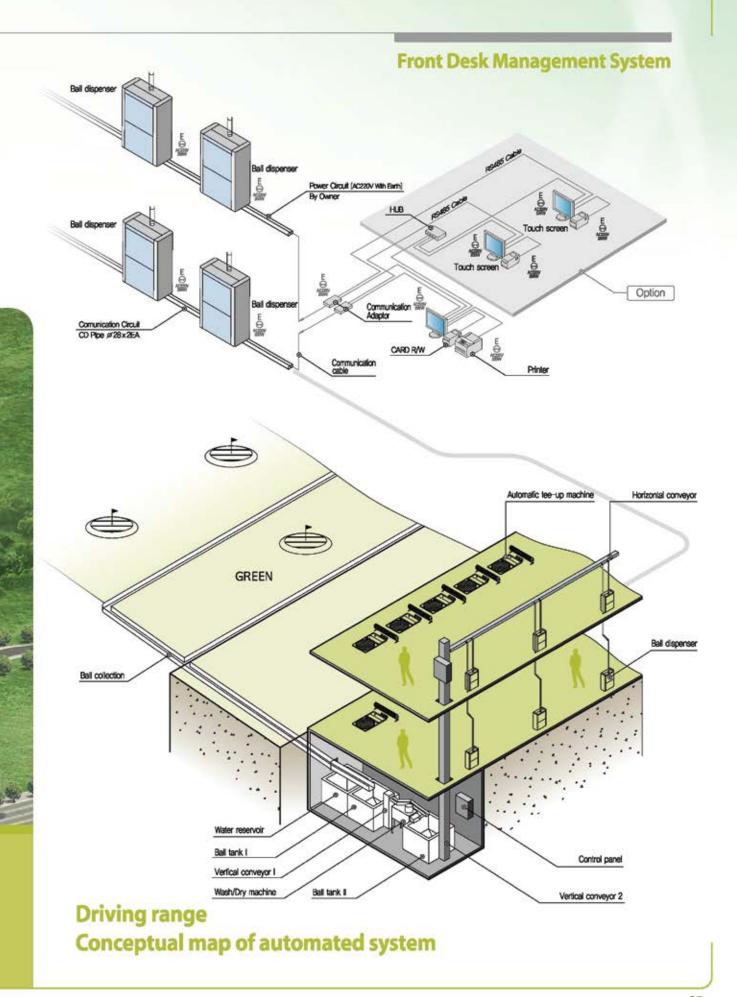
Total Management System

NANO Total Management system for a driving range is a front desk concentrated management system that, for the first time in Korea, utilizes various control methods including visual, smart, and MS cards. Also, it enables unmanned operation by implementing the system with Touch Screen Control. Since it allows for greater ball hitting area and system expansion, it is considered to be an advanced automated system that will lead a new culture of a driving range.



Eagle Tru

Total Management System for
Golf Driving Range



Auto Tee-up System 3000 Series



It is a machine that delivers a ball to the tee-up machine using the air generated from a fan. When a ball is hit from the tee-up machine, the ball sensor is activated to operate the agitation motor in the ball dispenser. It is possible to store approximately 1,000 / 1,600 / 8,000 balls.



Standard Type (For supplying balls to 2 bays)

Automated Ball Dispenser



Medium type (For supplying balls to 4 bays)

Jumbo type (For supplying balls to 8 bays)

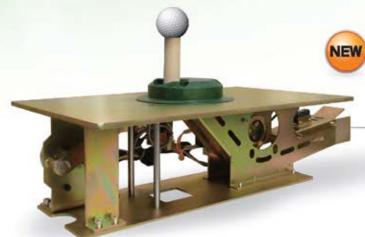
Technical Features

- Ball storage capacity: 1,000 balls / Standard Type (500 per tee box)
 - 1,600 balls / Medium type (400 per tee box)
 - 8,000 balls / Jumbo type (1,000 per tee box)
- Ball transfer method: Air blow (2,0W,m²/min)
- Ball agitation method: Disk agitation (1 ball at one time)
- Noise-reduction for a falling ball: by buffer spring
- With the installation of an individual air blowing device for each tee box, only 1 malfunctioning tee box is stopped in case of a mechanical failure.



Auto Tee-up System

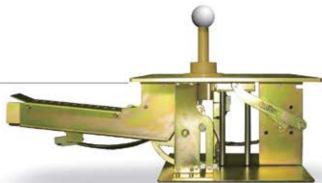
nano WitraSlim



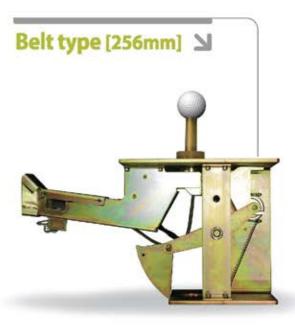
Realization of the first and thinnest tee up machine in the world!

 It is a product that could drastically reduce the cost and period required for system construction. By separating the working mechanism of the ball supply and tee-up parts, it provides the world-best stability and durability.

← Link type [140mm]



Link type [180mm]



Product description

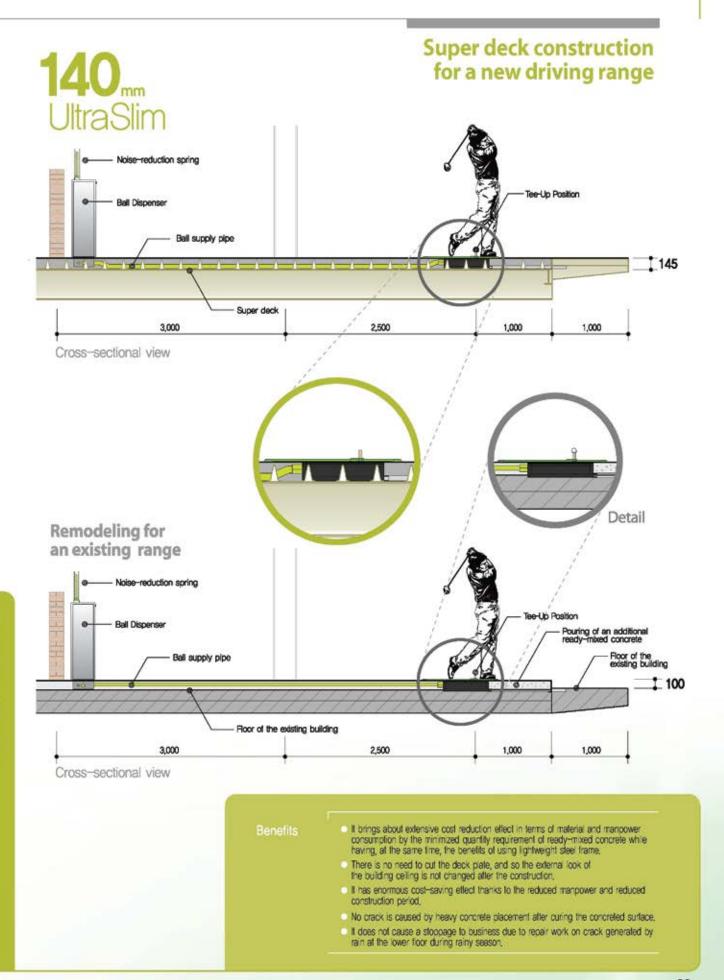
It is an auto tee—up machine that enables stepless adjustment of the tee height within 0~60mm/0~70mm for a golfer to deal with various club sizes. A ball is automatically teed up as the rubber tee is moved up and down by a sensor-activated motor;

Function

- Time consumed for 1 cycle : 3,1~5,2 sec.
- Range of tee height: 0~60mm (stepless adjustment)/0~70mm(stepless)
- No. of operation a day: More than 3,000 times/day
- Accuracy of tee height: No cumulative error
 - (Motor control: Control based on 1/1000 sec.)

Special features

- Applied the highest quality materials for all components including sensors (Waterproof and dust-proof: IP67 class), motor, belt, conveyor bearing, shaft
- Surface treatment: electroplated with yellow zinc that is resistant to corrosion
- No greasing required with the use of oilless bearing
- Rubber tee: Prevents bending and breakaway through iron strip inserted structure, And abrasion takes place evenly throughout the whole circumference thanks to rubber tee rotation



Indoor Full-Auto Tee-up System 4000 Series



• When a ball is hit from the tee-up machine, the ball sensor is activated to operate the rail motor that feeds all the standby balls to the tee up machine horizontally. Approximately 100 balls are required for operation of 1 bay.



- Automatic ball collection to the new slim tee-up machine(140mm) is possible with the use of the rail system,
- With introduction of our new slim tee up machine, installation in a space with ceiling height of only 2,900mm was made possible.



Technical Features

Function

- Number of balls required for operation: 100 balls per tee box
- Ball transfer method: Rail transfer

Special features

- Balls are fed to tee machine compulsorily by the rail system (Horizontal supply).
- Ball collection from the floor is not required,
- There is no ball-slicking or noise generated by ball-rolling since there is no ball collection path,
- Easy to install as an individual tee box in a small space.
- It is possible to operate in conjunction with the Front-desk Management System,
- It is durable thanks to using automatic tee-up machine.
- It consumes little electricity, (30W per tee box),



Sloping Machine

MAMO Slope Shot

- You can generate more sales revenue by charging higher price than regular tee bays.
- Equipped with an automatic tee up machine, it can be installed both in indoor and outdoor driving ranges,
- With ample space on the platform, it allows for a safer and more comfortable swing motion.

Sloping control panel ->

(Slope angle: Stepless adjustment possible)



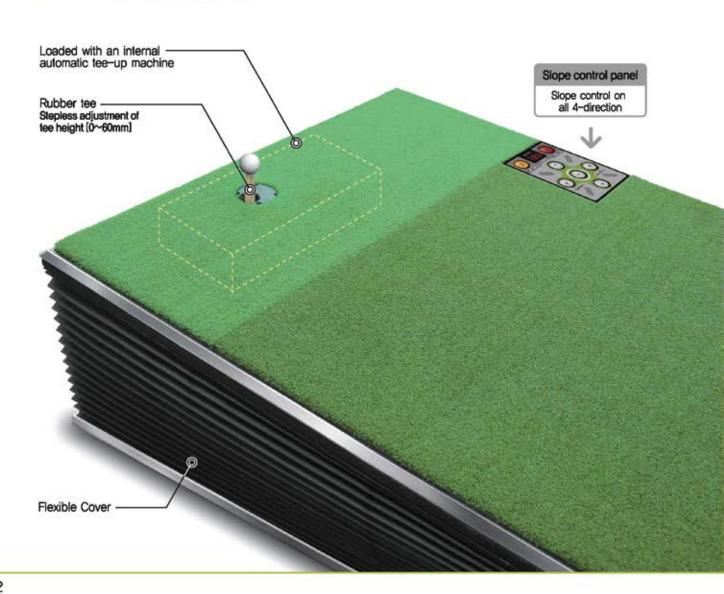






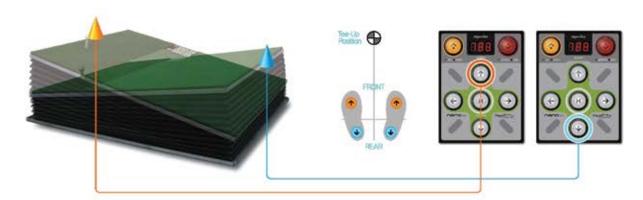


No. of balls Tee height Time used Slope setting



Outdoor Type | Stoping machine for an outdoor driving range, equipped with automatic tee-up machine.

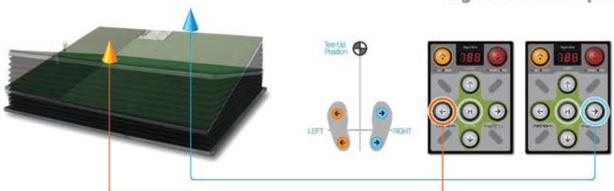
Front and rear slope



Easy Interface

Easy Interface: Anyone can easily set the slope without reviewing the manual since the direction of the slope angle and button corresponds,

Right and left slope

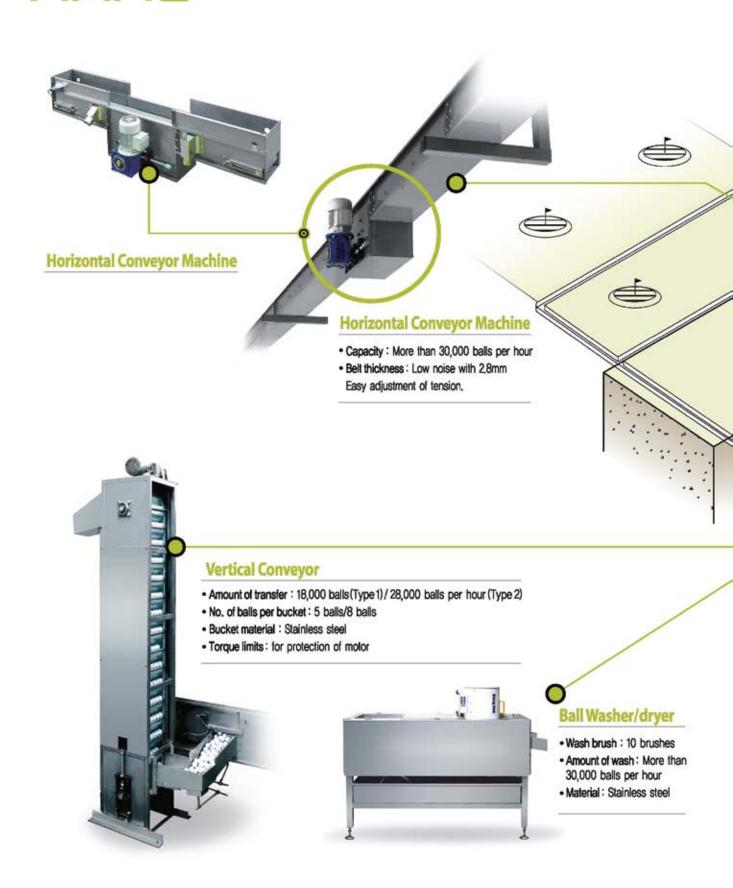


Technical Features

Specification

Dimension	1,517 x 1,202 x 204	LxWxH
Maximum slope angle	12°	ANGLE
Weight	318	Weight [kg]
Ball supply method	Loaded with an automatic tee-up machine	
Electricity	AC 220 V	
Place of installation	Indoor driving range / outdoor driving range / private home	
Setting slope angle	Stepless adjustment	

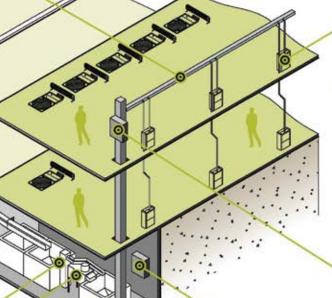
Conveyor System







- Amount of storage: 1,000 balls/1,600/8,000 balls (3 types)
- Operates in conjunction with the Front Desk Management System



Ball Vending Machine

- . Amount of storage: More than 8,000 balls
- · Coin in use : designated coin or member's card
- . Operates in conjunction with the conveyor system
- · Ball dispensing by compulsory vibration





· Material : Stainless steel

. Amount of storage: More than 17,000 balls



Control panel II (Underground)



Control panel I(on the ground)

- Monitoring of the operation state for the entire conveyor system
- · Automatic and manual operation
- Possible to control simultaneously either from machinery room or horizontal conveyor-installed floor



Computer Management System

Basic specification

- Membership management
- Various reporting function: Daily member, regular member, new registration, re-registration, etc.
- Dynamic analysis function: Amount of ball usage, time usage, no. of visits, etc.
- Data collection per different credit card usage
- Function of stopping tee bays for ball collection
- Automatic data backup
- Tee box reservation
- Simultaneous employment of PRICE PER BALL mode, or TIME RENTAL mode, or both.
- Display of termination time sequence of bay usage

Option

- SMS function
- Conveyor control and monitoring
- Locker management system [Communication control]
- Automatic fan and heater controlling function [Communication control]
- Unmanned touch screen system
- Management system for Par 3 golf courses.
- Web server
- System linking CEO's and administration office

Tee box monitoring screen / For employees





Membership Card

- · Membership no.
- Name
- · Type of membership
- · Unused balance
- · Locker no.
- · No, of tee box allocated
- · No, of balls allocated.
- Validity

Status of tee boxes and touch screen /For customers



Membership management screen

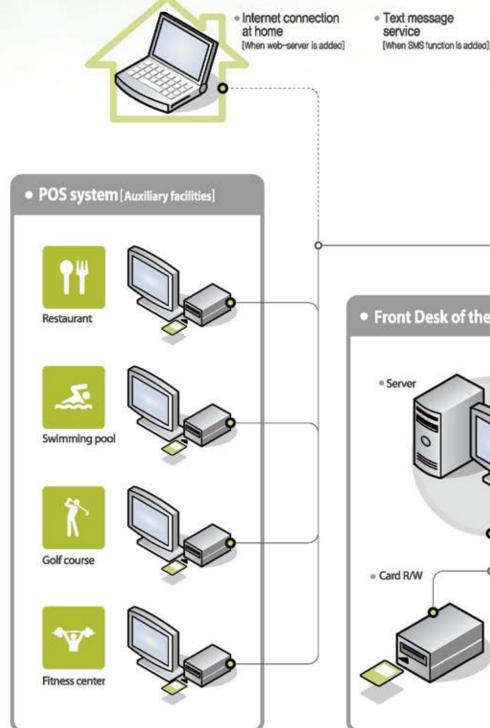


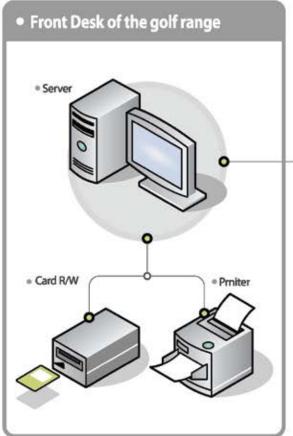
■ Locker management screen

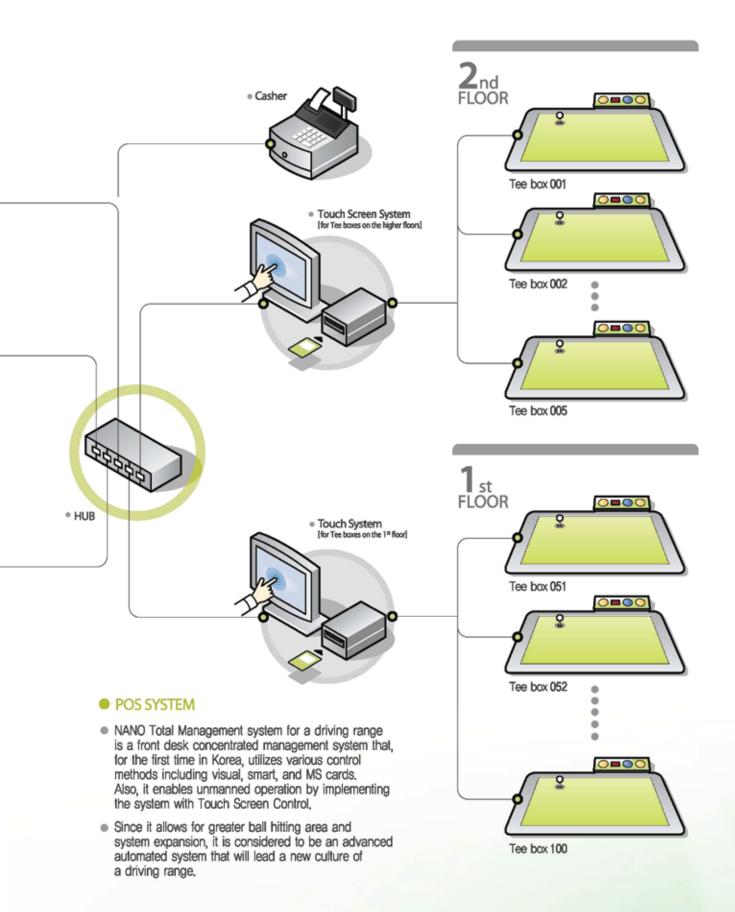




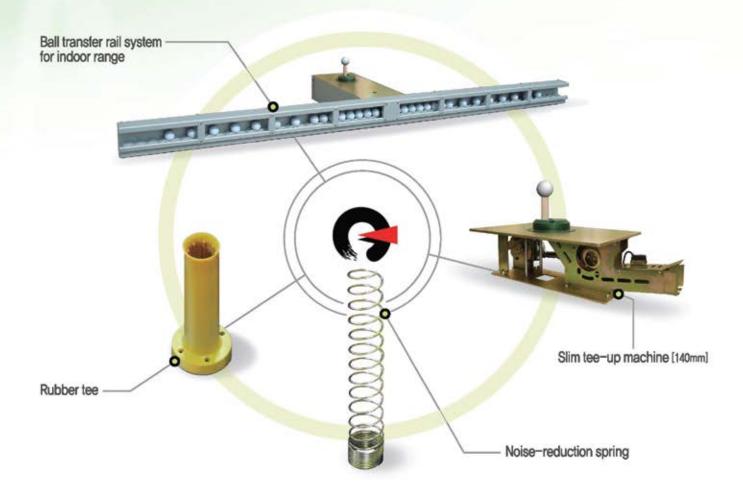
POS [Point of Sales] System







Technology



Control Panel



Membership Card

 In order to expand the choices available for the range owners, various types of card system such as Visual Card, Smart Card, and MS Card that allows for multiple use of more than 500 times were developed for the first time in Korea.

Type of card







• RF Card



MS Card

Card design

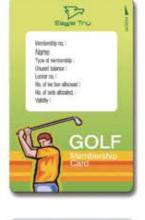


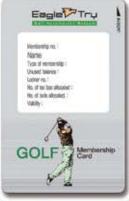
Membership Card

Eagle Tru

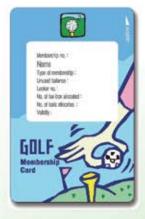
None

Northe Type of associating : Unused balance : Loder no : No, of the box allocated : No, of their allocated ;













Semi Auto Tee-up System 2000 Series





✓ Semi Auto Tee-up Machine

Technical Features

Product description

A ball is automatically teed up as the rubber tee is moved up and down by a sensor-activated motor. Also, it allows controlling the tee height steplessly from zero to 60mm for a golfer to deal with various club sizes.

Special features [On-ground type]

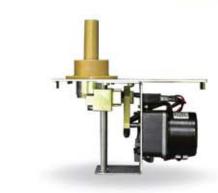
- Time consumed for 1 cycle: 3,5~4,5 sec.
- Height of tee-up machine: 125mm
- Material : Stainless steel
- Easy to install in an existing golf range by minimizing the size of burial boxes

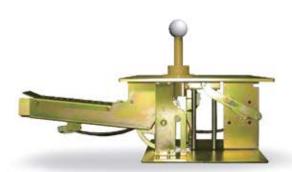
Special features [Underground type]

- Time consumed for 1 cycle : 3,1~5,2 sec,
- Height of tee-up machine: 180mm or 256mm
- Surface treatment: Electroplated with yellow zinc for protection against corrosion

Common features

- Range of tee height: 0~60mm/0~70mm stepless adjustment
- Used the highest quality materials for all components including sensors (Waterproof and dust-proof: IP67 class), motor, belt, conveyor bearing, shaft
- Surface treatment : Electroplated with yellow zinc for protection against corrosion
- Rubber tee: Prevents bending and breakaway through iron strip inserted structure, And abrasion takes place evenly throughout the whole circumference thanks to nubber tee rotation
- No. of operation per day : More than 3,000 times/day







Product description

It is a device that delivers a ball to the tee-up machine using a rail motor. When a ball is hit away from the tee-up machine, the ball sensor is activated to operate the rail motor.

It is possible to store approximately 200 balls.

Special features

- More balls are hit away by players thanks to automatic tee up machine, which results in increased sales of balls.
- Ball storage capacity: Approximately 200 balls
- It is possible to operate in conjunction with the Front Desk Management System.
- Ball-sticking phenomenon has been completely removed thanks to continuous agitation action of the arm,
- No safety concern for the player since the ball box is located behind,
- It consumes little electricity, [30W per tee box]

Ball Vending Machine

 It minimized the possibility of scratching the ball surface due to ball sticking by adopting the compulsory vibrating emission method and completely solved issues like motor damage due to introduced foreign objects (Stones).





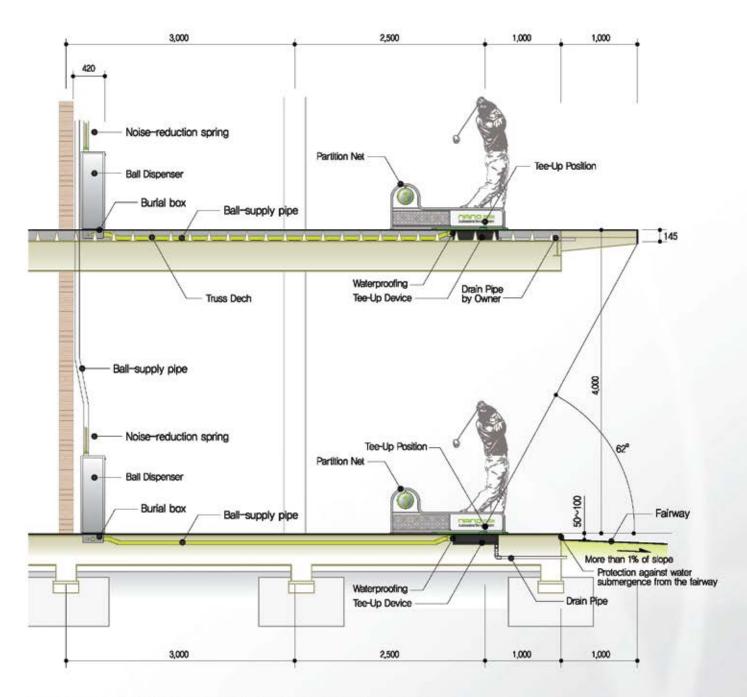
Technical Features

Special features

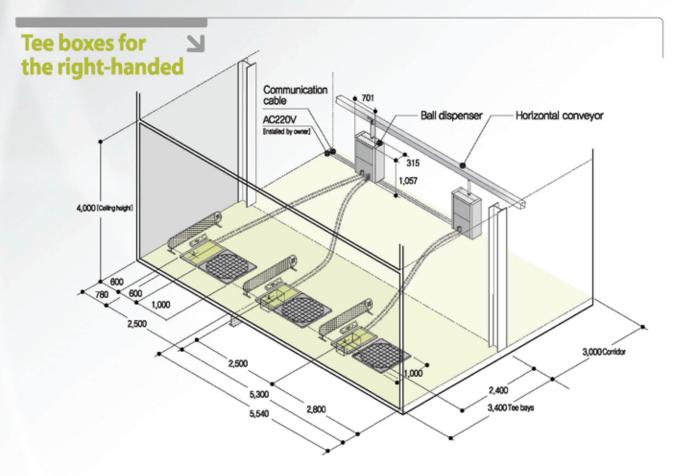
- Ball storage capacity: Approximately 8,000 balls
- Dimension: 1,500×1,000×700 (HWD)
- Ball dispensing method : Compulsory vibrating method
- Token: Standard Token/Special Token[Custom-made]
 Option: Card method [installation of card R/W]
- Possible to control the ball emission quantity

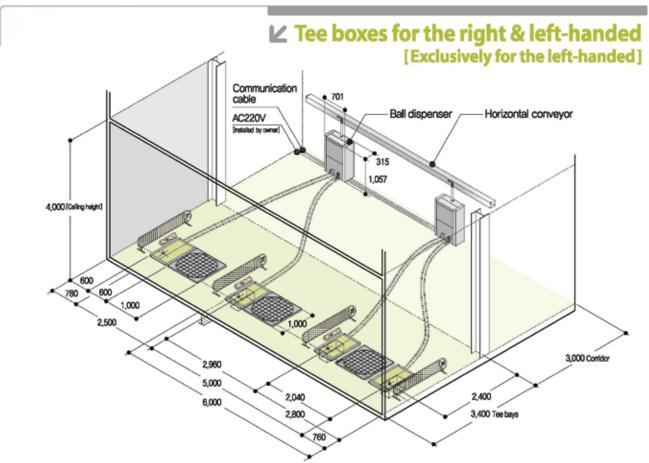


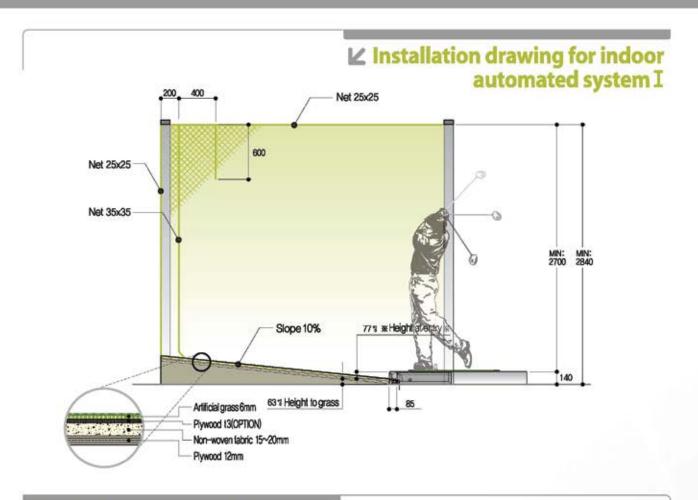
☑ Reference for construction



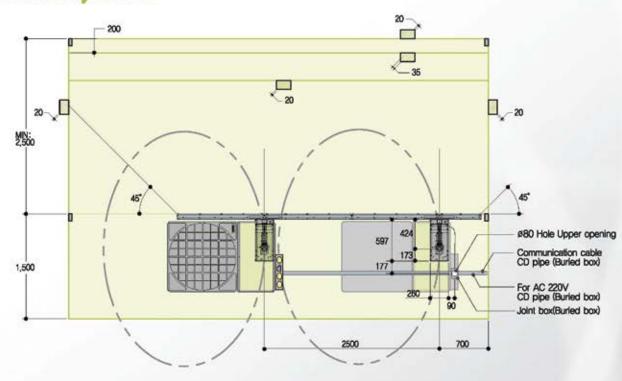
Reference for Construction / Profile of Construction Design

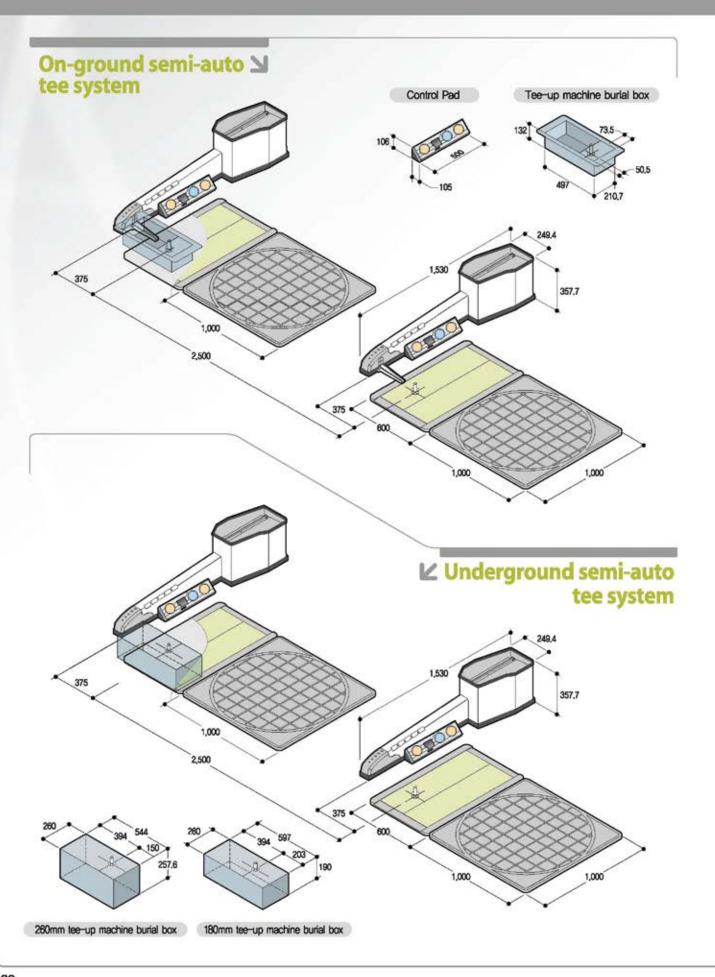




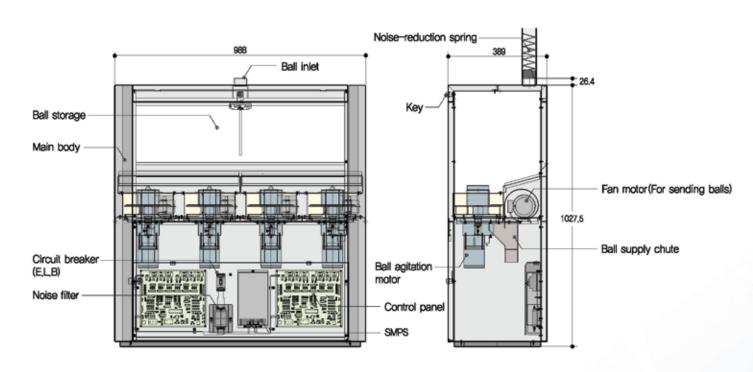


Installation drawing for indoor automated system II

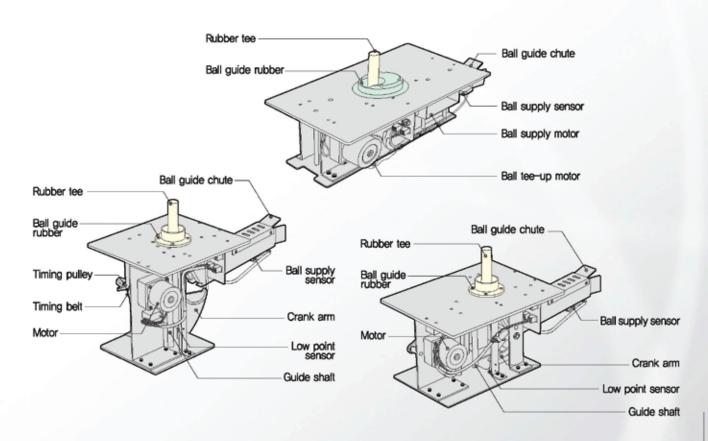




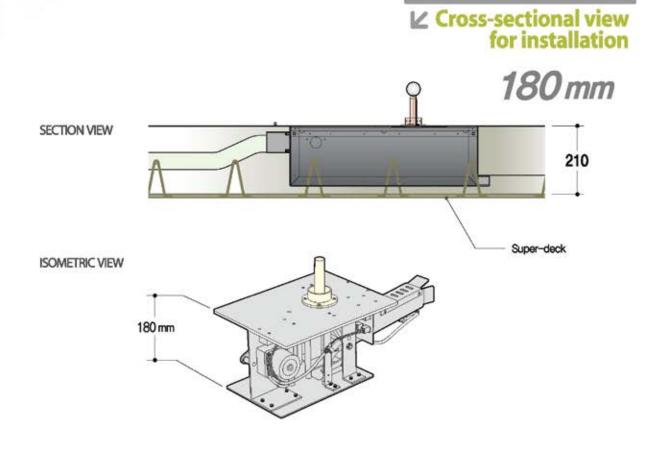
∠ Structure of ball dispenser

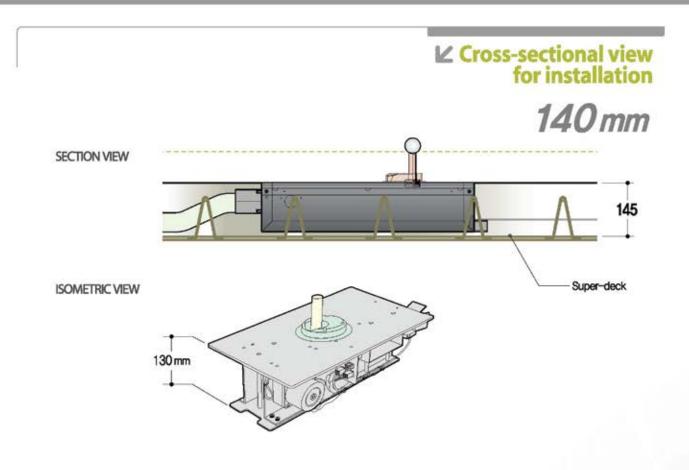


Structure of tee-up machine

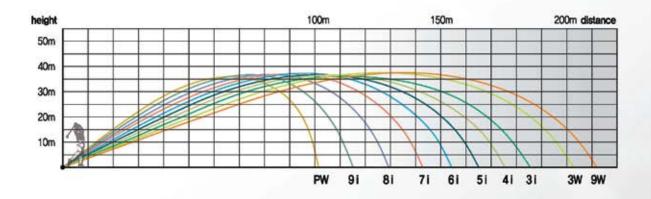


Cross-sectional view Section for installation SECTION VIEW SECTION VIEW 250 mm Regular deck





Trajectory graph



Note

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