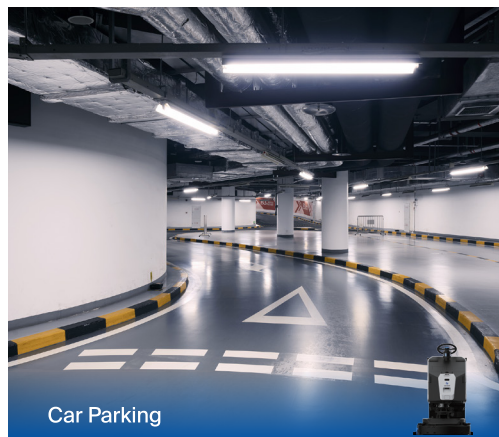


Model		Phantas	Vacuum 40	Scrubber 50	Scrubber 75
Product Image					
Cleaning Feature		Scrub / Vacuum / Sweep Mop	Vacuum / Sweep / Mop	Scrub / Mop Sweep (roller brush)	Scrub
Recommended Coverage Area		< 1,500 square meters	< 3,000 square meters	< 5,000 square meters	> 5,000 square meters
Recommended Application Environments	Retail Store	●	○	○	○
	Supermarket	●	○	●	●
	Shopping Center	○	●	●	●
	Office Building	●	●	●	○
	Hotel	●	●	●	○
	Healthcare	●	●	●	○
	School	●	●	●	○
	Exhibition Hall	●	●	●	○
	Transport Hub	○	●	●	●
	Manufacturing Plant	○	○	●	●
	Warehouse	○	○	●	●
	Underground Garage	○	○	○	● (75 P)

We cover the most extensive industry applications.



Product Choice and Application

Gausium Clearing Robotics Solution

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GAUSSIAN ROBOTICS

PRODUCT LINE

All-scenario Cleaning Robot Portfolio

All-embracing Floor Cleaning & Maintenance Services

Flagship Models

Scrubber 75S/75P

Indoor & Outdoor (Not rainy)
Degrease/Scrub/Sweep/Mop



Scrubber 50 Pro (V4.1)

Indoor
Scrub/Sweep/Mop



Vacuum 40 (V1.5)

Indoor
Vacuum/Sweep/Mop



Phantas

Indoor
4 in 1:
Vacuum/Sweep/Scrub/Mop



Function Extensions



40 Diffuser
Indoor
Vacuum/
Humidification/
Aroma diffusion

Docking Stations



Charging Dock



Workstation (V2.0)
Charging
Water Refilling & Discharging

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Features & Functions – Phantas



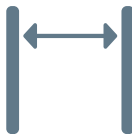
4 in 1

Able to do vacuuming, scrubbing, sweeping and mopping



Compact design

Small enough to go through narrow aisles (W>55cm) or under tables (H>65cm)



0 cm Edge

Side brush for 0 cm near-to-edge cleaning (for brick-and-mortar walls)



High-Performance Battery

Adopting Lithium Phosphate battery – the safest Lithium battery, up to 2000 charging cycles



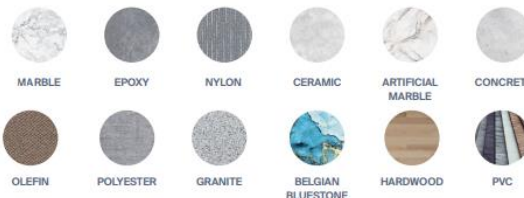
Charging Dock

Can work with charging dock to do automatic recharging



Brand-new UI design

Provide simpler UI for users to operate



Features & Functions – Vacuum 40 (V1.5)



300-600 sqm/h (Actual Efficiency)

Up to 1500 sqm coverage on a single charge (600*2.5)



AUTO CHARGING

Optional charging dock for automatic charging



0-2 CM EDGE

Side brush for 0-2 cm near-to-edge cleaning



Charging Dock (V2.0)

DUST BAG

Super Capacity 12L



HEPA

The filter grade is H13



POWERFUL SUCTION

24KPa ultra powerful suction motor



MARBLE



TERRAZZO



PLASTIC FLOORING



CERAMIC



EPOXY



SILICON CARBIDE



CARPET

Features & Functions – Scrubber 50 Pro (V4.1)



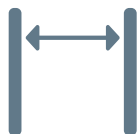
400-800 sqm/h (Actual Efficiency)

Up to 2000+ sqm coverage on a single charge (700*3)



Sensor

Brand new sensor layout, safer and smarter



0-4 CM EDGE

Roller brush version with side brushes can reach edges without clearance (close to the wall)



Compatible with V2.0 workstation (new, released in July 2023)

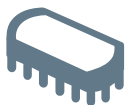
Magnetic Design

Magnetic design for disc brush, side brush and front shell, easier to dismount



Roller & Disc Brush

Roller brush and disc brush are optional



60Ah Battery

Big capacity battery to ensure enough cleaning time



MARBLE



TERRAZZO



PLASTIC FLOORING



CERAMIC



EPOXY



CEMENT

Features & Functions – Scrubber 75 (V4.0)



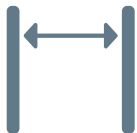
600-1200 sqm/h (Actual Efficiency)

Up to 4800 sqm coverage on a single charge (1200*4)



Workstation

Optional workstation for recharge, refill and discharge



20 CM EDGE

Able to reach edges or corner with 20cm from the wall



Multiple Sensors

Long-range LiDAR, depth camera, anti-collision sensor, etc.



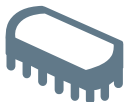
Dual Purpose

Auto and manual mode



Front brush head

Able to rotate 270° with 270 rpm and 45kg down pressure





Product Advantages & Values



▶ 01

Saving Labor Cost

▶ 02

Improving Efficiency

▶ 03

Cleaning Effect Improvement

▶ 04

Brand Promotion



Product Advantages & Values - Summary



Online Management

Safety

Ease of Use

Data & Reporting

Dual Cleaning Modes

Cloud Connectivity

Sustainability

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Shopping Area – Main Features



Main Features:

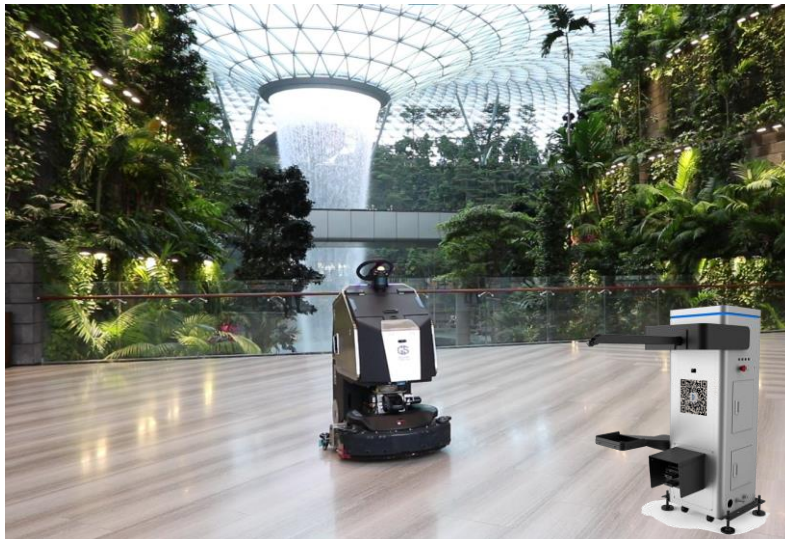
1. **Large area, multiple floors.**
→ Probably may need a workstation to work with robots.
2. **Obstacles are relatively fixed**
→ Good for robots, barely get lost.
3. **Different floor types**, most of them is tile, the rest can be wood, carpet, etc.
→ Set up virtual walls to prevent robots from running to wood or carpet floor.
4. **With glass walls and escalators.**
→ Should be specially configured.
5. May have **needs of both scrubbing and mopping.**
→ SC50 Pro can also do mopping.
6. There is **almost no person during night** in the shopping mall.
→ Perfect working time slot for robots.

Shopping Area – Product Choice



SC50 Pro:

1. Providing scrubbing cleaning service for shopping malls of about 3000-4000 sqm cleaning area, or even more if robot can work during daytime, working with a charging dock or workstation (Prerequisite: There is a space available to install a workstation, like maintenance room. And the robot can go back to the workstation freely without any possible obstacles on the way).
2. You can also use SC50 Pro to mop the floor after scrubbing (Prerequisite: We need a cleaner to install a mopping cloth or replace a roller cloth during the task if we need to mop after scrubbing)



SC75 S/P:

1. Providing scrubbing cleaning service for shopping malls of about 4000 sqm of cleaning area, when there is no available to install a workstation. Or more than 4000 sqm when it can work with a workstation.

NOTES: We need someone to transfer the robot if it needs to clean across floors since it can not take the elevator by itself currently.

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Parking Lot – Main Features



Main Features:

1. **Large area**, may have **multiple floors** with slopes in between
→ May need several days to clean the whole area for once, need human to transfer robots between floors
2. **Floor type can be epoxy, tar, cement**
→ Robot can handle these types of floors
3. **Lane width could be around 4-5 meter**
→ Wide enough for robot to pass and make U-turns
4. Cars would leave **at night** from shopping mall, **parking spaces are unoccupied**
→ Excellent working shift for the robot

Parking Lot – Product Choice



SC75 P:

1. Scrubbing cleaning service, including lanes and parking spaces.
2. SC75 P adopts millimeter-wave radars, spotlight module along with advanced algorithms to achieve more intelligent and safer car avoidance.
3. With 45kg down pressure of SC75 P, which makes it be able to clean oil spots, dirt or mud on the floor brought by incoming cars.
4. Easier to find an ideal place to install workstation for SC75 P, which enables it to reduce more human intervention, improve its runtime and clean more efficiently.

NOTES: We need someone to transfer the robot if it needs to clean across floors since it can not take the elevator by itself currently.

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Supermarket – Main Features



Main Features:

1. **Large area, complicated environment** with many shelves, pallets or even some ads stands and hanging labels
→ Make sure dynamic areas shall be marked as special zones for robots in case of getting lost.
2. Stores may have some **trash or pallets on the floor** by the end of the day.
→ Pre-sweep the trash, make sure all aisles are free of obstacles before using robot to clean.
3. Stores may **need to restock during night**
→ Try to stagger the working time or tell restocking staffs to leave ways for robots.
4. Some stores **do not allow any machines to work during night** since it may trigger safety alarms.
→ Try to use SC50 Pro to work during daytime but non-peak hours.

Supermarket – Product Choice



SC50 Pro:

1. **Scrubbing** cleaning service for supermarket of about 2000-3000 sqm cleaning area, or even more if robot can work during daytime, working with a workstation.

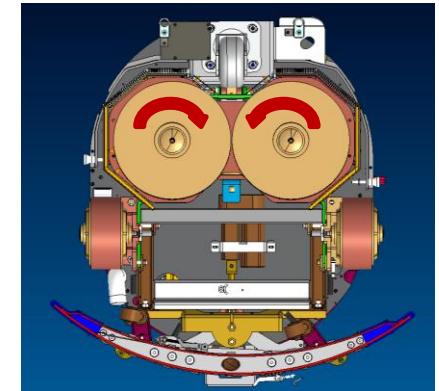
→ Prerequisite: There is a space available to install a workstation, like maintenance room. And the robot can go back to the workstation freely without any possible obstacles on the way.

2. You can also use SC50 Pro to **mop the floor after scrubbing**

→ Prerequisite: We need a cleaner to install a mopping cloth or replace a roller cloth during the task if we need to mop after scrubbing)



Disc brush version (Scrubbing)



Disc brush version (Mopping)



Squeegee + Dry mopping cloth

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DIY & Wholesaler Store – Main Features



Main Features:

1. **Large area**, covering an average area of **10,000-30,000 sqm**, with a minimum **4000 sqm cleaning area**.
→ SC75 will be more valuable in this kind of scenario with many open areas and wide aisles.
2. Some stores would **use barriers to block the aisles** when they are restocking.
→ Good for robot, so the robots would not get stuck in the middle of the aisles but get blocked outside the aisles, to achieve higher completion rate.
3. Stores are **independent buildings with unified warehouse structure** design, with wide aisles (3-4 m), few pillars and unexpected obstacles.
→ Good for robot to clean, less likely to get lost, easier to deploy.
4. **Few areas need to be often restocked**, since customers often take stuff from the warehouse.
→ Robots are less likely to get blocked.

DIY & Wholesaler Store – Product Choice



SC75 S + Workstation (optional):

1. Scrubbing cleaning service.
2. Can cover 4000 sqm on a single charge.
3. Workstation can be possibly installed near maintenance room.



SC50 Pro + Workstation (optional):

1. For smaller wholesaler stores or use multiple robots.
2. Scrubbing cleaning service.
3. Can cover 1500-2000 sqm on a single charge.
4. Workstation can be possibly installed near maintenance room.

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Small Retail Store – Main Features



Main Features:

1. Need to be cleaned everyday as to maintain a good environment.
2. With many tables or display stands, while the area under tables occupies a large portion of the whole area and need to be cleaned as well.

Small Retail Store – Product Choice



Phantas:

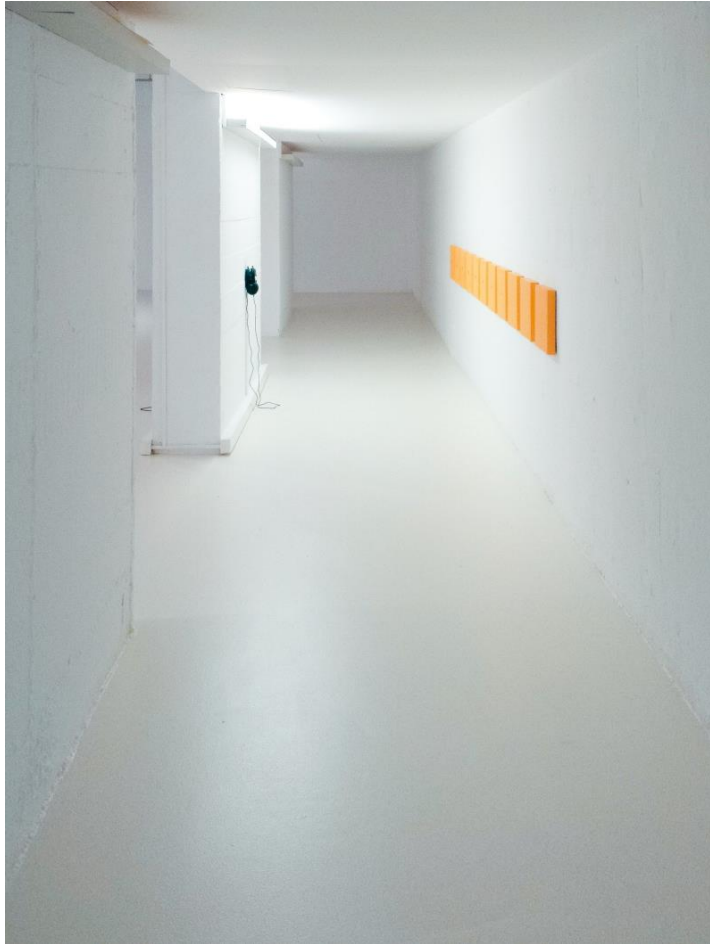
1. Vacuuming/sweeping/scrubbing/mopping:
Phantas can provide 4 different cleaning service.
2. Phantas is compact, enabling it to be able to clean under tables and corners (0cm cleaning distance from the wall).

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Hospital Corridors – Main Features



Main Features:

1. Long aisles, few obvious features.
→ Might be a little challenging for robot, robot may get lost if the aisle is too long.
2. Epoxy or tile floor type.
3. May need both scrubbing and mopping cleaning service.
→ SC50 Pro can do both scrubbing and mopping.

Hospital Corridors– Product Choice



SC50 Pro:

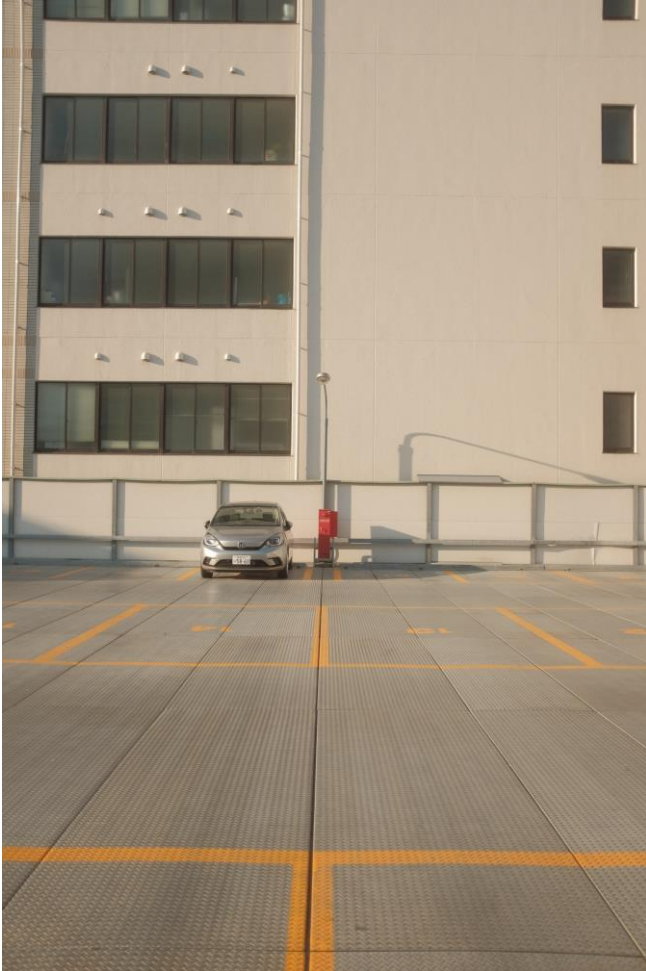
1. **Scrubbing:** more appearance-friendly, can be used during day and night by working with a workstation.
2. **Mopping:** in case of any liquid on the floor, SC50 Pro can also do mopping to make sure the floor is dry all the time, so people would not fall.

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Hospital Parking Lot – Main Features



Main Features:

1. Some parking lots for hospitals are outdoor.
2. Floor type can probably be poured concrete, concrete pavers.
3. With cars running in and out.
4. May have different types of trash on the ground.

Hospital Parking Lot – Product Choice



No perfect product for this outdoor scenario.

***If it is indoor parking lot for hospital, refer to the same solution for indoor parking lot for shopping mall.**

SC75 P might not suck up the water on the floor if it is too rough flooring, but if it is smooth flooring, SC75 P can be considered to clean during sunny days (can not work when it rains).

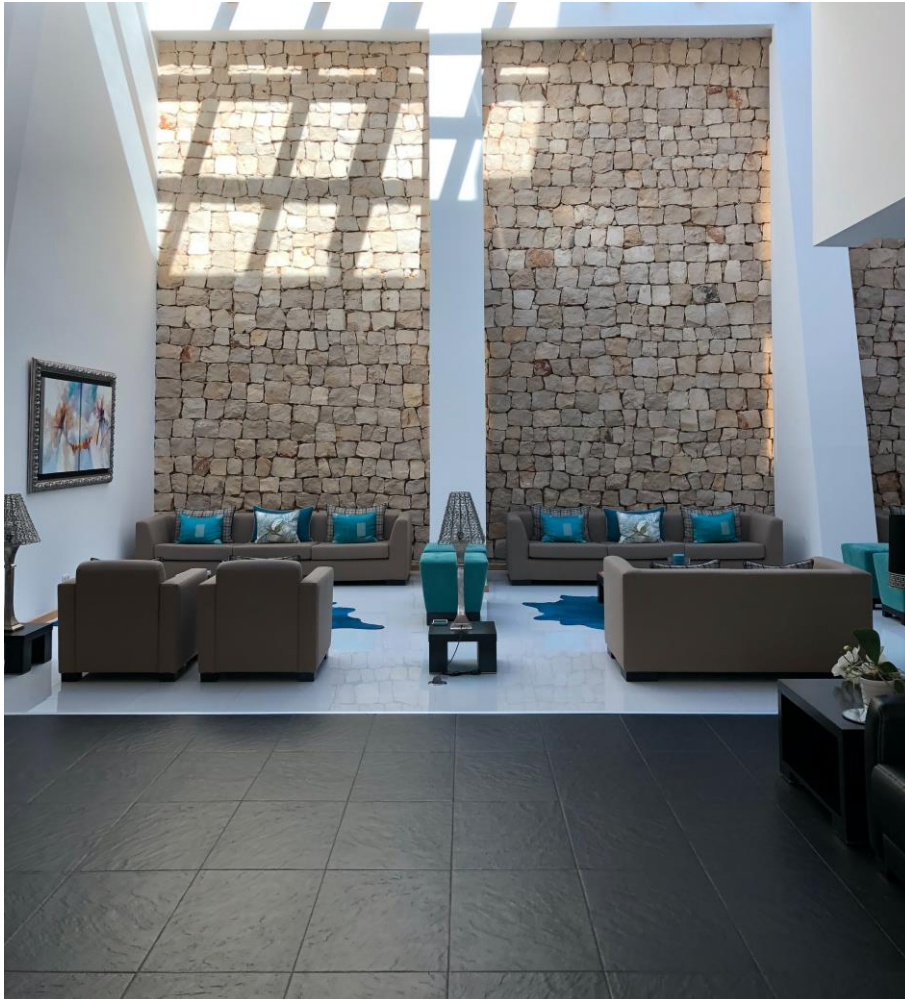
SW111 is not ready to be officially released to the market, and it needs to have extra sensor and algorithm design like SC75 P, which enables it to be applicable for the outdoor parking lot during daytime.

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Hotel Lobby – Main Features



Main Features:

1. May have **different flooring types**, like carpet, tile, wood floor.
2. May **need vacuuming, sweeping, scrubbing and mopping** cleaning service.
→ Phantas can handle all these cleaning requirements with its all-in-one design

Hotel Lobby – Product Choice



Phantas:

1. **Vacuuming/sweeping/scrubbing/mopping:**
Phantas can provide 4 different cleaning service.

VD40:

1. **Vacuuming/sweeping/mopping/Aroma diffusion:**
VD40 can vacuum, sweep, mop the floor, and even can be an aroma diffuser with essential oil inside of its backpack, to disperse essential oil into the air and fills the lobby with a natural fragrance.



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Hotel Corridors – Main Features



Main Features:

1. Long aisle with carpet floor (or tile floor).

Hotel Corridors – Product Choice

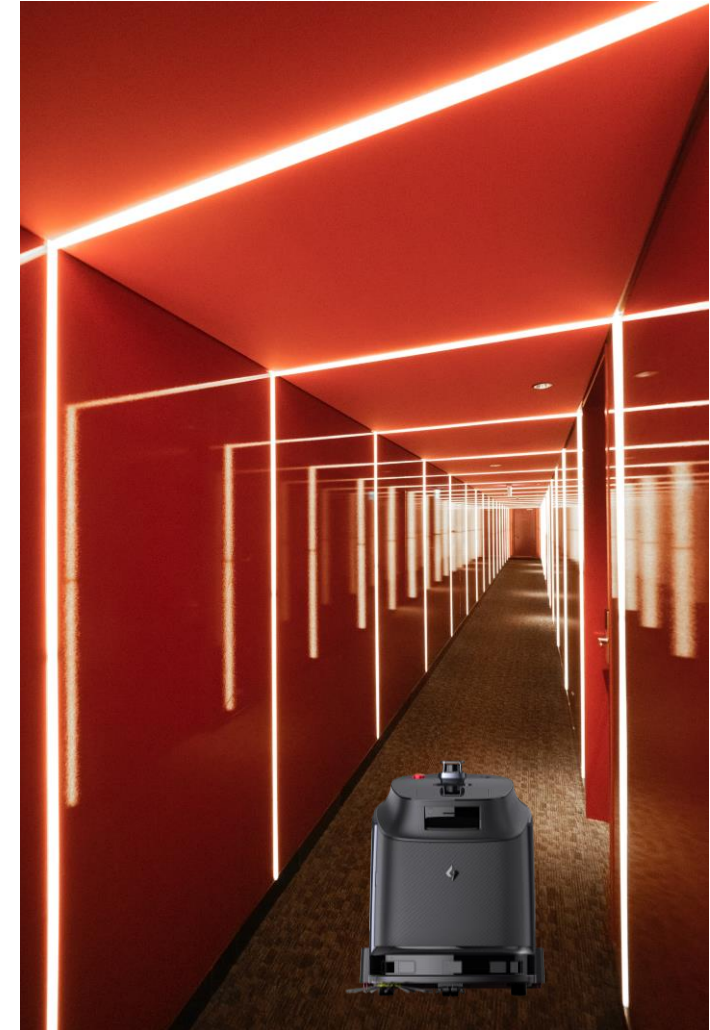


VC40:

1. **Vacuuming/Sweeping:** VC40 can work properly on the carpet floor (by lifting its roller brush a little bit) to vacuum fine dust in the carpet, while it can also vacuum on the tile floor.

Phantas:

1. **Vacuuming/Sweeping:** Phantas is suitable for smaller hotel to clean carpet or tile floor.

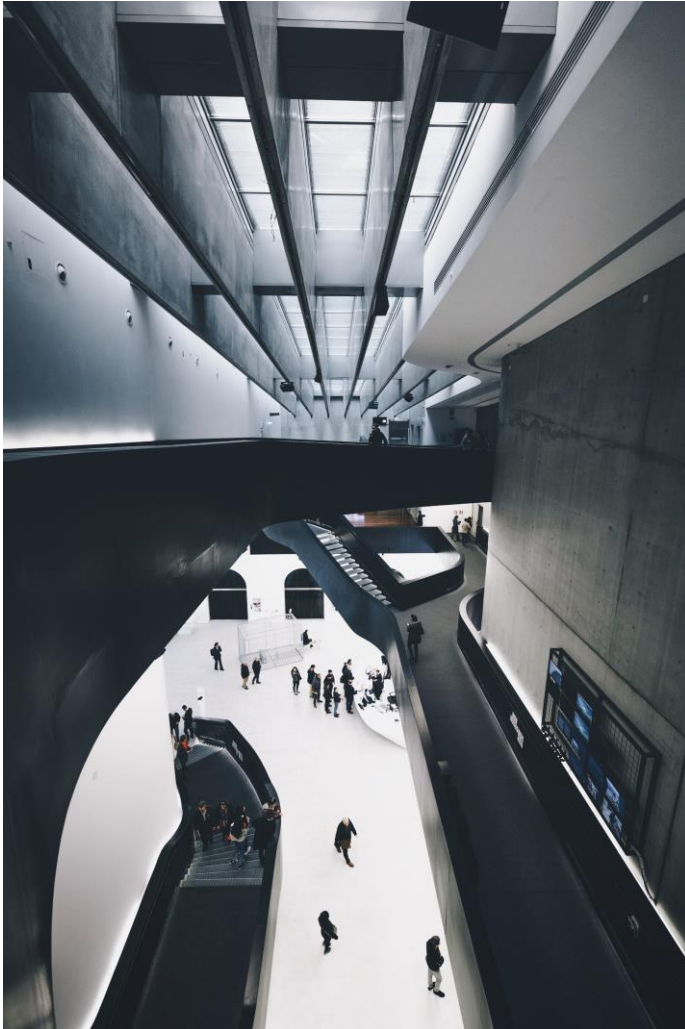


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Office Building Lobby – Main Features



Main Features:

1. **Marble floor or tile floor** is more commonly seen in lobby.
→ Phantas can handle all these cleaning requirements with its all-in-one design
2. May **need vacuuming, sweeping, scrubbing and mopping** cleaning service.
→ Continuous cleaning is necessary, especially on rainy days when customers often leave footprints and track in water as soon as they enter.
Robotic cleaning can be a perfect way to show excellent service to the customers.
3. The lobby serves as the **customers' first point of entry** and creates their initial impression.
→ Continuous cleaning is necessary, especially on rainy days when customers often leave footprints and track in water as soon as they enter.
Robotic cleaning can be a perfect way to show excellent service to the customers.

Office Building Lobby – Product Choice



SC50 Pro:

1. **Scrubbing:** with 400-800 sqm/h efficiency, 2.5 hours of battery life.
2. **Mopping:** with 800-1000 sq/h efficiency, 6 (roller brush version) -8 (disc brush version) hours of battery life (mopping only).



Phantas:

1. **Scrubbing:** with 200-400 sqm/h efficiency, 4 hours of battery life.
2. **Mopping:** with 200-400 sqm/h efficiency, 8 hours of battery life (mopping only).

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Office Building Public Area – Main Features



Main Features:

1. May have **different flooring types**, like carpet, tile, wood, marble floor.
2. May **need vacuuming, sweeping, scrubbing and mopping** cleaning service.
→ Phantas can handle all these cleaning requirements with its all-in-one design

Office Building Public Area – Product Choice



VC40:

1. **Sweeping:** with its roller brush design, VC40 can pick up some small particles, like toothpicks, peanuts.
2. **Vacuuming:** with its 24KPa suction power, VC40 can vacuum something like spilled ground coffee, etc.



Phantas:

1. **Scrubbing:** with 200-400 sqm/h efficiency, 4 hours of battery life.
2. **Mopping:** with 200-400 sq/h efficiency, 8 hours of battery life (mopping only).

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Office Building Parking Lot – Main Features



Main Features:

1. **Large area**, may have **multiple floors** with slopes in between
→ May need several days to clean the whole area for once, need human to transfer robots between floors
2. **Floor type can be epoxy, tar, cement**
→ Robot can handle these types of floors
3. **Lane width could be around 4-5 meter**
→ Wide enough for robot to pass and make U-turns
4. Cars would leave **at night** from office buildings, **parking spaces are unoccupied**
→ Excellent working shift for the robot

Office Building Parking Lot – Product Choice



SC75 P:

1. Scrubbing cleaning service, including lanes and parking spaces.
2. SC75 P adopts millimeter-wave radars, spotlight module along with advanced algorithms to achieve more intelligent and safer car avoidance.
3. With 45kg down pressure of SC75 P, which makes it be able to clean oil spots, dirt or mud on the floor brought by incoming cars.
4. Easier to find an ideal place to install workstation for SC75 P, which enables it to reduce more human intervention, improve its runtime and clean more efficiently.

NOTES: We need someone to transfer the robot if it needs to clean across floors since it can not take the elevator by itself currently.



Explore . Innovate . Inspire