



Food Waste Treatment System

厨余处理系统



AEL

Associated Engineers, Ltd. (AEL) was established in 1961 as a specialist ground support equipment repair and maintenance services provider for airports. The company has over the years broadened its service offerings to encompass steel structure construction, aircraft maintenance, material handling system, solid waste management and biological food waste treatment. Our mission is to provide a greener and better future for our customers and community.

Over half a century, AEL has been the company of choice for international and local companies. With its breadth of expertise and experience, AEL stands ready to serve its business and government clients globally by offering to customers one-stop-shop services from consulting, design, manufacturing, project management, as well as commission and after sales maintenance.

In the early 70s, AEL started expanding its business in the environmental field by introducing various waste management solutions to the technology from an Australian based company in 1988 and introduced such technology to the Chinese Market. With forty years of experience, AEL has firmly established its market position in Residential Refuse Handling System, Automated Refuse Collection System and Mobile Refuse Compactor. AEL also gained in-depth knowledge about the environmental and waste management industry, such as different region's waste composition and critical cost in waste transportation.

联谊工程成立于1961年，致力于提供机场设备的维修和维护服务。在过去的几十年中，联谊已将业务扩展到其他领域，包括有钢结构建造、机场维修设备、机械运输系统、固体垃圾处理 and 生物式处理厨余废弃物。我们的使命是为客户和社会提供一个绿色的美好将来。

在过去的50多年，联谊已成为国际和当地企业寻找业务合作的伙伴的首选公司之一。凭借着专业的技术和丰富的经验，联谊已经准备好向全世界的客户提供一站式服务，从咨询、设计、生产、项目管理、委托及售后维修提供一条龙服务。

早于七十年代，联谊工程已积极拓展环境卫生工程的业务，累积经验逾数十载，产品横跨多个范畴，如住宅区垃圾槽、中央垃圾收集系统、固定/流动垃圾压缩机等。一九八八年，联谊更收购澳洲的垃圾压缩中转站技术，并决定于内地各大城市发展垃圾中转站。现时，公司对废物的组合成以至运输成本的减省都有深入认知，为未来参与和发展有机废物处理的专业技术建立良好基础。



Current Situation 目前状况

香港 Hong Kong

Hong Kong is facing a serious waste problem. Each day, over 3,000 tons of food waste, which accounts for one-third of municipal solid waste, are disposed into our landfills! According to EPD's statistics, all three landfills in Hong Kong will soon be saturated, with estimated waste treatment fee over HK\$800 per ton!

To relieve the waste problem, our government has been actively promoting waste separation and food waste recycling campaigns among the community, schools and housing estates. At the same time, increasing number of green groups become more active in promoting citizen's awareness to Hong Kong's waste problem.

Sensing a need for food waste treatment solutions, we AEL are among one of the first companies to introduce food waste treatment machine to Hong Kong market. These machines feature the ability to turn food waste into organic compost in a simple manner, thereby relieving Hong Kong's landfills' pressure and greening Hong Kong!

香港的垃圾问题日趋严重，为填埋场带来每日约三千多吨的厨余垃圾，占都市固体废物的三分之一。环保署数据显示全港的三个填埋场将会陆续饱和，更预计垃圾处理费用将会高达 800 多港元一吨。

为了缓解此垃圾问题，政府已不断在小区、学校、屋苑等地致力推广垃圾分类以及厨余回收计划。同时，愈来愈多的绿色团体活跃于对各界推广香港垃圾问题的意识。

有鉴于此厨余垃圾处理方案的需求，我们联谊工程是首批公司将厨余垃圾处理机器引入香港。这些机器使用简单的方法把厨余垃圾转化为有机堆肥，从而减轻填埋场的压力及绿化环境，一举两得！

Disposal of Food Waste 厨余弃置量

3,300 tons

Over 3,300 tons of food is discarded in Hong Kong every day.

每天超过 3,300 吨的食物被弃置。

Food Industry 饮食业界

30%

Approximately, 30% of the food waste comes from food industries being discarded. 30% of food waste comes from food industries.

Recycled Food Waste 厨余回收量

14 tons

In 2015, the quantity of good waste recycled locally was merely 14 tons.

在 2015 年，本地厨余回收量只是 14 吨。

Investment on Solid Waste Treatment 固废处理行业投资

5.1 trillion

The total investment on solid waste treatment is estimated to reach RMB5.1 trillion during the 13th Five Year Plan.

环保部测算「十三五」期间固废处理行业投资将达到 5.1 万亿人民币。

Food Waste Treatment Rate 提升厨余处理率

32.75%

Targeting to up the country's food waste treatment rate to 32.75% by 2017.

目标在 2017 年把厨余处理率提升至 32.75%。

A lot of countries are facing daunting challenges in waste management, so as China.

To reduce the environmental impact, the Chinese government is actively seeking new solutions and technologies for managing food waste throughout the country.

With China's ongoing environmental and urbanization focuses, the demand for comprehensive waste treatment solutions is expected to flourish in the years to come. Across different regions in China, food waste contributes to a significant portion of total waste composition. Therefore, well managing food waste can help ease the waste situation in China.

现时，很多国家，包括中国，正在面对废物管理的严峻考验。为了减少对环境的破坏，中国政府正积极寻求处理厨余垃圾的创新解决方案和技术，以管理全国的厨余垃圾。

随着中国持续推动环保和城镇化发展，对于废物处理的全面方案的需求在未来几年将与日俱增。在不同地区，厨余垃圾是总废物产量的重大部分。因此，完备的厨余处理系统能够缓解中国的垃圾问题。

China 中国

Why choose AEL? 為何選擇 AEL?

Food waste has become a significant waste problem in Hong Kong while our government and different parties have been working actively on waste management solutions. Our food waste treatment system can ease the food waste problem in Hong Kong as our Dr. Comp features a simple, decentralized food waste treatment solution. After inputting pre-sorted food waste into the food waste treatment machine, the decomposition process starts immediately and is automated with minimal attention from operator required. Coupled with our low power consumption design and proactive maintenance features, our food waste treatment machine has a low operating cost while greatly reducing the load on landfills.

Moreover, the whole food waste composting process is clean and organized with minimal impact to the environment. The compost output, once matured, is suitable as fertilizer for plant growth.

We also recognize ourselves as partners to our clients that we strive to provide excellent after-sales services. We are keen on receiving feedback from clients and respond in a professional and timely manner. We believe this stabilizes the daily operation of the food waste treatment machine and ensures good quality output from the machine.

香港所产生的厨余垃圾与日俱增。同时，政府与各方正积极寻求废物管理的方案。我们的 Dr. Comp 采用一个简单、在地方上的厨余垃圾处理方案，并缓解香港的厨余垃圾问题。在投入预先分类的厨余垃圾后，机器内的分解过程自动启动，把操作人员的工作减至最低。综合了低耗电的设计和主动维护的特点，我们的厨余垃圾处理机器运行成本低，同时大大减少了填埋场的负荷。

此外，整个厨余垃圾处理的过程是干净的和有组织的，对环境的影响微乎其微。出料的堆肥在成熟后更适合作为肥料，帮助植物生长。

作为客户的合作伙伴，我们致力提供优良的售后服务。在积极从客户收集意见后，我们以专业和适时的方式作出回应。我们相信此举能有效稳定厨余垃圾处理机器的日常运行，并确保本机器的出料质量。



One objective of tackling Hong Kong's waste problem is to create a cleaner and more pleasant city, gradually converting Hong Kong to a green metropolis through a multi-pronged approach.

To be in line with the government's vision of creating a green metropolis, AEL aims to promote "green living" and source reduction with our food waste treatment technology. We hope that we can contribute to a better, greener future for our next generation, which is the biggest return for all of us.

解决香港垃圾问题的目标之一是通过多管齐下，令香港成为一个更环保、更洁净的大都会。

为了配合政府创建绿色大都市的愿景，联谊工程致力透过我们的厨余垃圾处理科技以推广「绿色生活」和源头减废。我们希望在建设一个更好、更环保的未来给我们的下一代时出一份力。这亦是对大家最大的回报。



Operating Process 运作过程

1 Place container bins at the output chute and open the output chute doors for compost discharge.
于出料口放置盛料容器，打开出料门令堆肥排出。

2 Take out part of the output compost for recycling back into the machine.
从出料堆肥中取出部分准备作循环入料用。

3 Check the in-drum temperature displayed on the LCD display module.
检查 LCD 屏幕上显示的桶内温度。

4 Gradually input the food waste, along with the recycled compost, into the input chute from waste bins/containers.
慢慢将厨余及循环堆肥由容器送进入料斗。



5 Record the operation data such as input and output amount on the log sheet provided.
在已提供的纪录表中纪录出、入料量等操作数据。

6 Make sure the panel doors, the input chute door and the output chute doors are closed properly.
确保出入料门和外板检修门妥善关上。

7 Clean the machine exterior weekly with towels for hygienic purposes.
每星期以干净湿毛巾清洁机体外部，保持机体卫生整洁。

FEATURES 特色

ROBUST

稳固耐用

Our rotating drum design makes use of the relative motion inside the drum compartment for mixing and stirring.

我们的旋转式滚桶设计利用滚桶内的旋转运动翻动及拌和厨余。

Typical food waste treatment machines cannot handle big bones, shells, toothpicks or plastic bags. This is because the rotating blades inside the machine chamber will easily be jammed by these materials. When these materials are mistakenly input, it often results in mechanical faults and malfunction of the machine. As a result, extensive sorting has to be carried out before food waste input to prevent machine malfunction, which increases the operation cost. On the other hand, once input, these materials are usually difficult to remove from the compartment, causing serious problems during repair.

In contrast, when these materials are accidentally input into our Dr. Comp, they will be discharged along with the compost during normal operation without causing problem to the machine.

Instead of rotating blades, we adopt a rotating drum design when developing Dr. Comp, making use of the relative motion of the rotating drum compartment to mix and stir the material inside. This feature reduces chances of material jamming, cutting down maintenance manpower and cost.

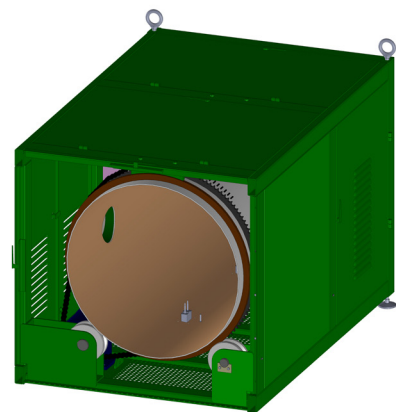
一般厨余机采用旋转刀瓣式设计搅动桶内厨余，普遍不能处理大件骨头、硬壳、牙签或胶袋等非有机顽固物。异物可以进入瓣与其他部件间的隙缝，令刀瓣受干扰或阻碍。当这些异物被意外投入机内，往往会对机体造成机械性破坏，无法继续正常运作。因此，这类厨余机在投入厨余前需要全面地分选出异物，避免异物造成机件故障，变相令运作成本增加；另外，这些物料即使未有破坏转件，亦常有难以取出的情况出现，令维修更困难。

相反，当异物意外进入 Dr. Comp 滚桶后，不单不会造成机件故障，异物更会在正常运作过程中随堆肥排出机外。

Dr. Comp 采用了旋转式滚桶设计，利用滚桶的旋转运动翻动厨余，提供机会予厨余与空气接触。桶内全无任何转件或刀瓣，大大减低了桶内出现机件故障的机会，同时减低维修人手和成本。



- Damaged parts in other machines
其他机器中受损的刀瓣



- Sectional view of Dr. Comp
Dr. Comp 的剖面图

FEATURES 特色

GREEN & EFFICIENT DEODORIZING 高效环保除臭方式

Our bio-filter utilizes microorganic processes on the biological media to break down odorous contaminants.

我们设计的生物滤池透过生物介质上的微生物分解异味分子。

Most food waste treatment machines on the market focus on using activated carbon or activated oxygen, i.e. ozone, as a deodorant. Activated carbon utilizes small pores to adsorb odor particles. However, activated carbon filters require frequent replacement (once every few months) due to the limited amount of available pores, thus not being economically efficient. Also, with its toxicity and chemical nature, they lead to potential serious disposal issues.

On the other hand, ozone (O₃) removes odor by oxidizing the molecules, microorganisms, and spores that cause unpleasant smells. But high level of ozone causes serious harm to our respiratory system under long term exposure, and the generation of ozone by electricity is against our principle of energy conservation.

Meanwhile, Dr. Comp achieves deodorizing in a natural way by introducing biological media in our bio-filter that converts unpleasant smell particles into harmless molecules to be carried away by the ventilator and exhausted out of the machine.

In forms of tree barks, our biological media breaks down odorous contaminants through microorganic processes. Our bio-filter is specially designed to allow open channels for airflow and increased surface area for optimal biological activity. The bio-filter thus has a long life span while not consuming electricity, and is biodegradable with no disposal problems.

市面上一般厨余机专注使用活性炭或臭氧除臭。活性炭除臭法原理在于把异味粒子依附在其表面的小孔里，以减少可排出的异味。不过，活性炭滤网由于可用滤孔有限，需要每几个月更换一次，经济效率较低。同时，活性炭因本身化学结构及其毒性，掉弃后会引致严重生态问题。

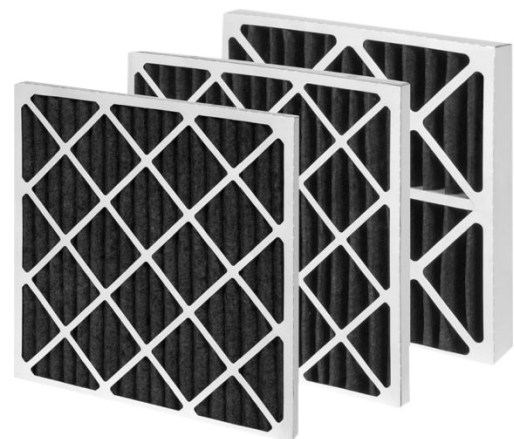
另一方面，人工臭氧利用化学原理氧化引起异味的分子、细菌及孢子去除异味。但长期吸入高浓度的臭氧会对呼吸系统造成难以修复的创伤。持续制造臭氧亦消耗大量电力，有违我们着力减低厨余机耗能的目标。

对应以上问题，我们透过在生物滤池中放入生物介质，以纯天然方式去除废气中的臭味。生物介质可帮助把异味粒子转化为无害的分子，再被风机抽走、并排出机外。

我们设计的生物滤池透过木块状生物介质上的微生物分解异味分子。特别设计的滤池及介质结构更提供气道及充足表面供生化作用发生，优化生物活性。因此，我们这种长寿、不耗能而且可降解的生物滤池设计为 Dr. Comp 提供了一个既安全又有效率的除臭方法。



■ Biological media in our bio-filters
我们滤池中的生物介质



■ Activated carbon filter
活性炭过滤器

FEATURES 特色

REMOTE MONITORING

遥距监察

Our remote monitoring system maximizes the maintenance efficiency by keeping track of the machine status closely.

我们的遥距监察系统协助我们紧密观察客户的机器，提升维护效率。

To reduce the impact of odor on nearby citizens, food waste treatment machines are often installed at isolated locations such as refuse collection points, back-of-house areas and outdoors alleys. As access is inconvenient and time-consuming, any machine abnormalities are hardly noticed if they are not often checked. Faults will stack and worsen; parts used to be repairable will have to be replaced.

To maximize the efficiency of our maintenance routine, we developed a remote monitoring system for Dr. Comp to keep track of machine status closely, saving the need to monitor the machine on-site. We will be able to, at the same time, spot faults before clients do, repairing the machine proactively.

Our unique remote monitoring system allows end-users and operators to monitor their Dr. Comp easily without requiring to be physically on-site. Real-time machine status and other related machine parameters are transmitted to our cloud server, which can then be accessed by various mobile devices through online graphical user interfaces. With the ability to spot faults and alarms without on-site checking, maintenance and transportation costs are saved when parts can be replaced before being beyond repairing and the frequency of physical checks on the machine is reduced.

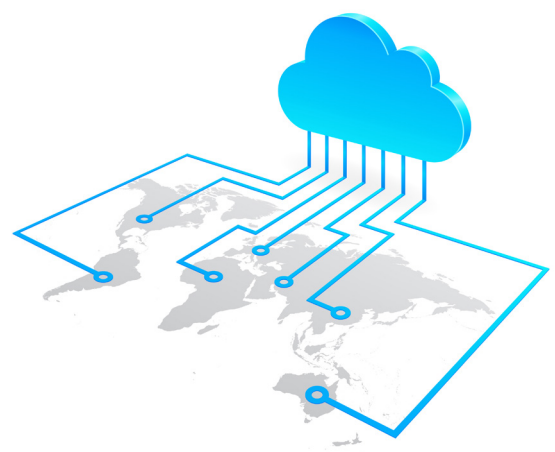
为减少异味对附近市民的影响，厨余机通常会被安装在少人触及的垃圾房、后勤范围或户外后巷。因为检查不方便，经常会有因未能作出对机体作紧密定期检查的情况，令未有及时维修的故障情况恶化。当不同的小故障恶化、构合成不能简单维修的问题时，只有把部件换掉才能令机体继续正常运作。

为了提升维护效率，我们开发出遥距监察系统，令我们能够紧密地观察客户的 Dr. Comp，省却了实地检查的需要。同时我们可以比客户更早发现问题，主动维修发生问题的机体。

我们的独特遥距监察系统令操作员或是操作人员无须亲身检查，亦能检视机体状况。Dr. Comp 可以透过此系统把实时的机体信息及相关机体参数传送到云端服务器，令各方无论何时何地亦能用不同流动装置透过在线接口监察厨余机情况。机体变相不需要经常实地检查，机件亦可以在故障恶化之前维修好，令运输和维修成本大大减少。



■ Online graphical user interface
线上图形用户界面



■ Remote monitoring system
遥距监察系统

FEATURES 特色

LOW POWER CONSUMPTION

低电能消耗

Our optimized machine consumes at least 50% less electricity than typical food waste treatment machines.

我们优化了的机器比一般厨余机耗电量低最少 50%。

Typical food waste treatment machines contain high power electrical heaters for food waste dehydration, in order to lower the water content in food waste. Also, a large airflow rate is often seen to achieve a sufficient and steady heat supply for dehydration. Both of these factors contribute to colossal electricity consumption (over 1000 kWh per month for a machine with capacity 100 kg/day), which is neither economical nor environmentally preferred.

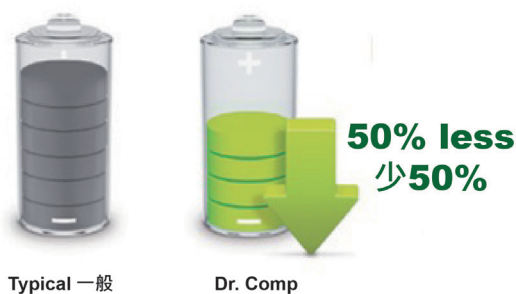
To reduce the energy consumption by Dr. Comp during operation, the system design has been optimized to strive for the best balance between electricity consumption and machine performance.

Our treatment machine differs from others since we fully utilize the heat generated by biological activities inside the drum compartment to remove water from food waste, and optimize the ventilation rate to maintain an ideal environment for the microorganisms. By doing so, Dr. Comp consumes at least 50% less electricity than typical machines (approx. 500 kWh per month for 100 kg/day capacity). This difference in energy consumption results in a significant saving of electricity cost and a major reduction in carbon footprint, promoting the true nature of green waste treatment.

普遍厨余机使用高出力电能加热器把隔室内的厨余水分蒸发走，以为厨余脱水。同时，这些厨余机需要维持高空气流量，以确保能够供应足够及稳定的热力为厨余带走水分。以上两个因素造成这些产品的极高用电量（以处理量每日 100kg 的机体为例，用电量一般每月高达 1000kWh），在经济和环保层面亦不理想。

要减低运作 Dr. Comp 时的耗电量，我们调控了整个系统的设计，以达致能源消耗与机体表现之间的最佳平衡。

我们的厨余机突出于充分利用生化作用产生的热能去蒸发厨余中的水分，并调控出最佳气流量去稳定地提供理想环境予滚桶内的微生物作消化活动。凭着这两点优势，Dr. Comp 比一般厨余机耗电量低最少 50%（以处理量每日 100kg 为例，用电量约为每月 500kWh），所减省的电费成本及碳足印亦大大降低，提倡真正绿色废物处理



- Comparison of electricity consumption
电力消耗的比较



- Optimized design for energy conservation
优化设计以实现节能

FEATURES 特色

'TRUE' COMPOSTING

真正转化堆肥

Our composting process ensures the output is chemically more stable than those from other machines.

我们的堆肥过程确保其出料物比其他厨余机的在化学上更为稳定。

Typical food waste treatment machines process food waste mainly by dehydrating them. This approach can achieve a relatively short process time of normally 24 hours because water adsorbs heat and evaporates quickly. However, the output of these machines is technically the same as the input food waste in a sense that the input is completely untouched on the molecular level in the dehydration process. The output from these machines will inevitably turn back to food waste and cause odor and hygienic problems once they become moist again as they are chemically unstable and still nutrients rich for insects and bacteria.

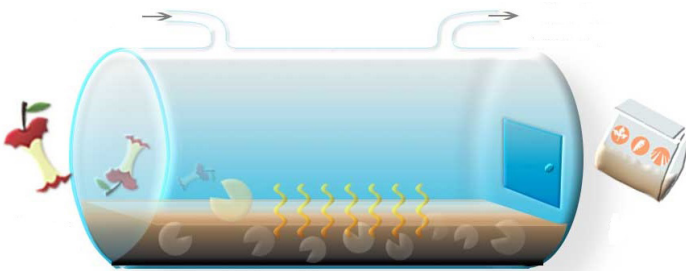
Dr. Comp processes food waste by true composting: a process that biologically converts food waste into stable, hygienic and soil-enriching compost of smaller molecular size.

In Dr. Comp, food waste is digested by different microorganisms in the drum compartment, and converted completely into organic compost over the course of 14-21 days. After conversion, the compost is chemically more stable than the dehydrated food waste from other machines and creates little or no odor and hygienic problems for storage and transportation. Better still, the compost can be used as soil enrichment for enhancing growth of plants and crops as in a food chain cycle.

一般厨余机主要以脱水方式处理及压缩厨余。由于水份容易吸热和蒸发，厨余脱水是一个很快的过程，这种处理方式亦相对上需时较短，通常只需 24 小时。不过，以这种方式处理好的产物由于在脱水时于分子层面其实完全没有改变，所以实际跟厨余没分别。这些产物较不稳定，而且充满昆虫和细菌需要的养分。当沾上水分时便会无可避免地变回厨余，产生臭味、滋生蚊虫，造成严重的环境问题。

Dr. Comp 以纯天然堆肥方式处理厨余，令厨余变成由较细分子组成、更稳定、更卫生的泥土增润产品。

在 Dr. Comp 的滚桶中，不同的微生物会消化分解厨余，使厨余在 14-21 天的时间内完全转化成有机堆肥。转化之后，堆肥会比其他厨余机产出的脱水厨余化学上更为稳定，而且在储藏和运输过程中绝少造成臭味及卫生问题。这些堆肥更可用作泥土增润产品，为不同的植物和农作物提供更好的生长环境。



■ Composting process
堆肥过程



■ Output as organic compost
出料为有机堆肥

FEATURES 特色

VOLUME REDUCTION

体积减少

Our output volume is only one-fourth of the original food waste such that resources on waste handling can be saved.

我们的出料体积仅是原本厨余的四分之一，使废物处理的资源得以节省。

In waste handling, waste volume is a major concern as the more space the waste occupies, the larger the equipment capacity is needed to handle it, and the higher the energy consumption and the operation cost are. Moreover, higher waste volume means more trips to transport waste to handling facilities, and would induce higher transportation cost. In food waste treatment machines, the volume reduction ratio is an important factor that reflects the capability of the machine to convert waste into output material of smaller volume. A high volume reduction ratio lowers the subsequent treatment cost of the output through saving space for storage, transporting and disposal.

Volume reduction is usually achieved by high-temperature dehydration by removing water from food waste in typical food waste treatment machines, while Dr. Comp runs with a different yet greener mechanism.

Dr. Comp accomplishes volume reduction through breaking down food waste on molecular level by microorganic activities, together with an optimized ventilation system to assist in moisture removal. When the input food waste has been converted into the output compost, the volume reduction achieved by Dr. Comp is up to 75%. The volume of waste to be handled afterwards is only one-fourth of the original, so fewer resources are then spent on handling them.

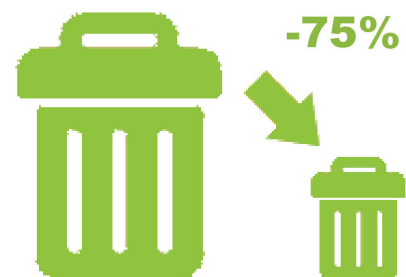
在处理废物的过程中，废物体积一向是处理商规划的重要考虑因素之一。越大的废物占用空间越多，处理设备需求、处理能源消耗以及处理成本亦会随之增加。再者，大件废物储藏成本高、可储藏时间变相变短，当每次可运走的废物不多时就会增加运输成本作多次运输。在厨余机中，体积缩减量反映机体把厨余压缩成较小型产物的能力，是各制造商一直重视的参数之一。高缩减量的机体可以减低用家储藏、运输或处理其产物的所需空间，降低对应的所需成本。

一般厨余机运用高温处理方式抽走厨余中的水份，而 Dr. Comp 则采用另一种绿色方式做到厨余减量。

Dr. Comp 透过利用微生物活动分解厨余，配合优化通风系统带走厨余水份，做到厨余减量化。经 Dr. Comp 处理后的堆肥产物体积缩减量可达 75%，只占用以前四分之一的空间，所需的处理资源亦大大减少。

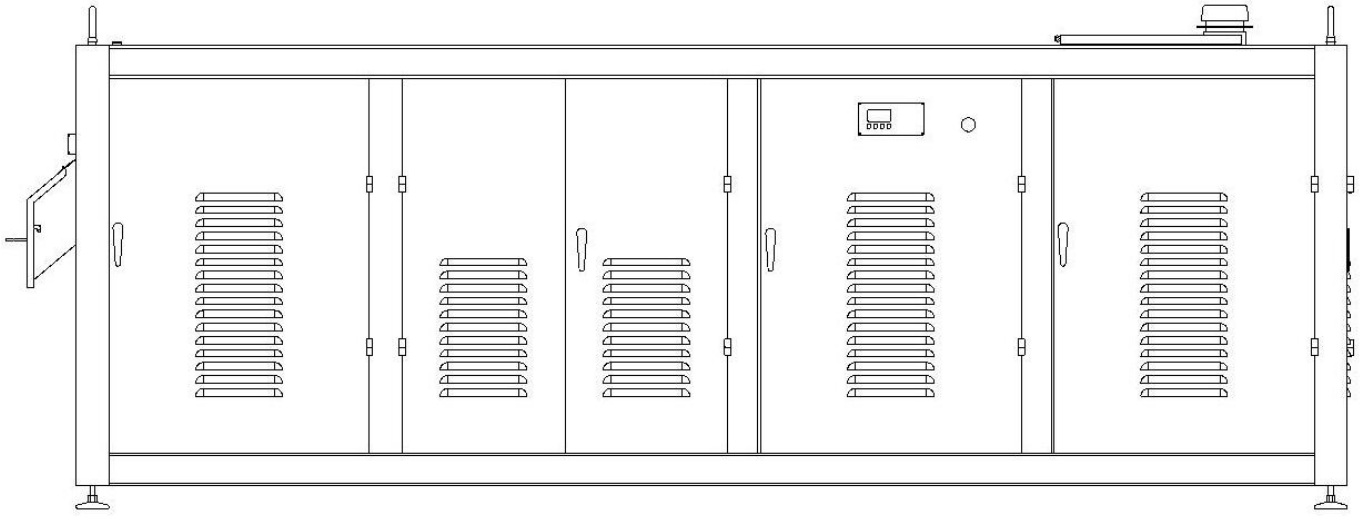


- Food waste reduction
厨余垃圾减量



- Volume reduction of waste
垃圾体积减少

MODELS 型号



Material 材质	Process Time 处理时间	Volume Reduction 体积减量
Mild steel / Stainless steel 304 碳钢 / 不锈钢 304	14-21 days in vessel with continuous feeding 桶内 14-21 日, 可持续入料	75%

20

Dr. Comp 20

Daily Capacity 每日处理量 :	20kg (for 40 people 供 40 人)
Weight 重量 :	Approx. 750kg
Dimension 尺寸 :	2,400(L) x 1,000(W) x 1,200(H) mm [#]
Power Supply 电源 :	220VAC / 50Hz / 1-phase 单相 / 13A socket 插座
Monthly Power Cons. 每月用电量 :	Approx. 200kWh

50

Dr. Comp 50

Daily Capacity 每日处理量 :	50kg (for 100 people 供 100 人)
Weight 重量 :	Approx. 1,500kg
Dimension 尺寸 :	3,000(L) x 1,200(W) x 1,400(H) mm [#]
Power Supply 电源 :	380VAC / 50Hz / 3-phase 三相 / 16A socket 插座
Monthly Power Cons. 每月用电量 :	Approx. 350kWh

The above parameters are subject to the final product. 以上参数以最后出厂机器为准。

[#] Adjustable 可调整

100

Dr. Comp 100

Daily Capacity 每日处理量 :	100kg (for 200 people 供 200 人)
Weight 重量 :	Approx. 2,800kg
Dimension 尺寸 :	4,000(L) x 1,400(W) x 1,400(H) mm [#]
Power Supply 电源 :	380VAC / 50Hz / 3-phase 三相 / 16A socket 插座
Monthly Power Cons. 每月用电量 :	Approx. 500kWh

200

Dr. Comp 200

Daily Capacity 每日处理量 :	200kg (for 400 people 供 400 人)
Weight 重量 :	Approx. 4,300kg
Dimension 尺寸 :	6,300(L) x 1,400(W) x 1,400(H) mm [#]
Power Supply 电源 :	380VAC / 50Hz / 3-phase 三相 / 20A socket 插座
Monthly Power Cons. 每月用电量 :	Approx. 900kWh

500

Dr. Comp 500

Daily Capacity 每日处理量 :	500kg (for 1,000 people 供 1,000 人)
Weight 重量 :	Approx. 6,500kg
Dimension 尺寸 :	7,000(L) x 1,800(W) x 1,800(H) mm [#]
Power Supply 电源 :	380VAC / 50Hz / 3-phase 三相 / 32A socket 插座
Monthly Power Cons. 每月用电量 :	Approx. 1,600kWh

1000

Dr. Comp 1000

Daily Capacity 每日处理量 :	1,000kg (for 2,000 people 供 2,000 人)
Weight 重量 :	Approx. 8,000kg
Dimension 尺寸 :	8,200(L) x 2,200(W) x 2,200(H) mm [#]
Power Supply 电源 :	380VAC / 50Hz / 3-phase 三相 / 32A socket 插座
Monthly Power Cons. 每月用电量 :	Approx. 3,000kWh

The above parameters are subject to the final product. 以上参数以最后出厂机器为准。

[#] Adjustable 可调整

JOB REFERENCE 案例参考



Housing Estate 居民小区

Park Island 珀丽湾



To date, the estate has in place three food waste treatment facilities, which treat an average of 6.2 tons of food waste every month. Residents have responded positively towards the program. Park Island is a residential complex located at Ma Wan Island comprising over 5,000 residential units. Since 2007, Park Island has started a recycling food waste program, where 600 residential units have participated. Park Island adopts a green economic concept by using the money saved from its environmental initiatives to sustain the environmental work of the estate. The overall expenses of the residents on waste treatment are reduced.

珀丽湾早前引进厨余分解系统，将收集到的厨余作现场处理，以减少运送到堆填区的废物量。现时，该屋苑设有三部厨余机，每月平均处理约 6.2 公吨厨余。珀丽湾位于马湾，拥有超过 5,000 个居住单位。珀丽湾采用「以绿养绿」的经济概念，其中一个屋苑就使用我们的厨余分解器，将厨余转化为堆肥，作种植用途，绿化环境。不但能够减少垃圾运输费用，而且能够提升住客的环保意识。

JOB REFERENCE 案例参考



Housing Estate 居民小区

Dragon Range 珑山

Dragons Range is a newly developed residential complex situated in Sha Tin. It offers a total of 973 residential units. Besides incorporating the idea of "green living" into the community, it also offers a total area of million square meters of Central Park. Dragons Range will introduce a food waste recycling scheme to improve the general awareness of recycling food waste in the estate. The treated waste will be transformed into compost by our food waste treatment machine for plantation and landscaping.

珑山是位于沙田的全新住宅项目，屹立于沙田九肚半山之上，整个屋苑合共提供 973 个住宅单位。区内提供过万呎的中央草坪，又将环保概念融入居住环境中。住宅单位计划在小区内进行厨余回收计划，鼓励居民回收厨余，由我们的厨余机循环再造成堆肥使用。



Government 政府

Lo Wu Correctional Institution

罗湖惩教所

Lo Wu Correctional Service Department (CSD) has over 1,000 inmates and generates over 100 kg of food waste every day. In order to solve this problem, CSD launched a series of environmental campaigns. One of which was "Waste No Food Scheme". Under this scheme, a food waste decomposing system was acquired in 2013 with a daily treatment capacity of 100kg food waste. The food waste includes peels, meat fat and leftovers. The organic compost is used for greening purposes and sold at Autumn Fair. The profit of which is donated to charity. As a result, it has received much media attention through reducing its monthly carbon dioxide emission by 470kg.

罗湖惩教所有超过 1,000 名在囚人士，每日产生逾 100 公斤厨余。为了解决厨余问题，罗湖惩教所决定举办一连串的环保活动以宣扬环保概念。罗湖惩教所于二零一三年四月推出「珍惜食」计划，并安装厨余分解系统，将餐前及餐后厨余转化成有用的堆肥。厨余机每日最多可处理 100 公斤厨余，而处理后所产生的有机肥料，部分用作绿化用途，其余于秋季卖物会出售，收益拨捐慈善机构，回馈社会。每月减少了 470 公斤的二氧化碳排放量。

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