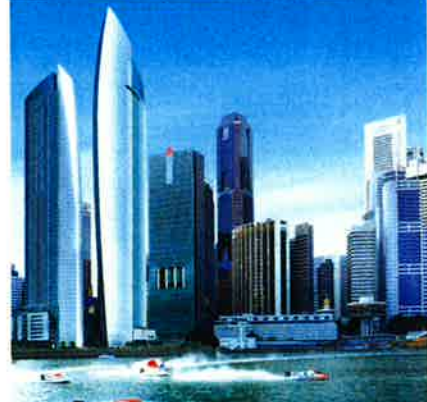




# Lifestyle

**For people with extraordinary expectations.**



In urban cities throughout the world, people are expecting higher standards when it comes to hygiene, comfort and environmental safety. Yet, the amount of dust and waste generated are increasing with urbanization and an improving standard of living.

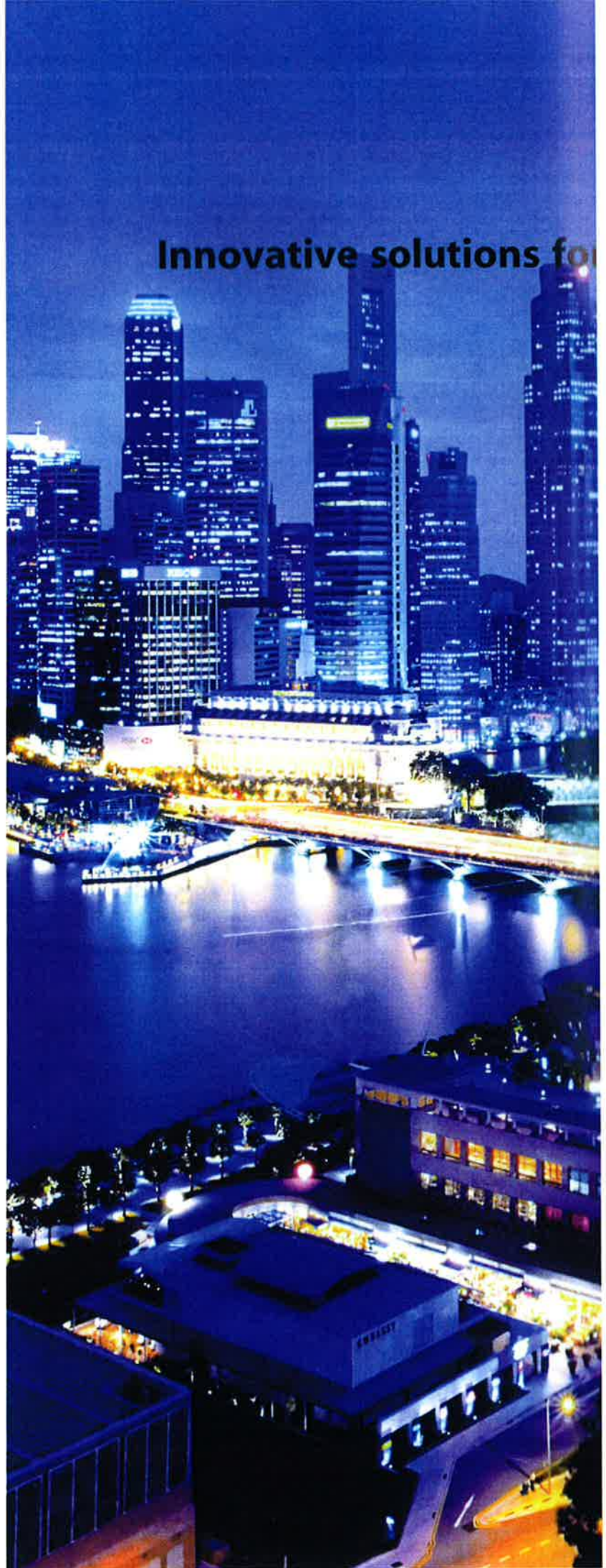
Thanks to vacuum suction technology, Puzer systems can now present several ways to get rid of dust and waste more efficiently and effectively than ever before. Offering cleaner air to breathe and better hygiene and recycling possibilities for various waste fractions.

## **Solving Building Hygiene Problems in Asia**

Puzer Asia Pte Ltd is majority owned by PV Vacuum Engineering Pte Ltd. It was established in 1998 by PV Vacuum Engineering Pte Ltd to pursue the common interest in consumer vacuum application system in Asia.

From Central vacuum cleaning system we have progressed into waste management, using vacuum suction technology to solve problems of household and commercial waste in tightly built urban areas.

Our trademark 'Puzair' is a market leader in Singapore and throughout Asia. It represents innovation, a break from the norm, to solve environmental problems in our everyday life.





**building hygiene and waste management.**







**Clean buildings make everyone breath easier.**

**However big the building is, Puzer Perfect Vacuuming System  
finds even the smallest dust particles.**



# Puzer Perfect

The hassle-free way to perfect cleaning.

**D**ust and dust mites. Bacteria and viruses. Pollen, fibres, allergenic microparticles.

In even the most modern buildings, that's what you have to live with unless if you have a system that can truly handle the whole range of impurities, not just visible dust.

## Today's way of vacuuming.

Conventional vacuum cleaners let their exhaust air back into the ambient. Even the best of their exhaust filters cannot block the smallest microparticles that may cause allergies and discomfort.

The Puzer Perfect Central Vacuuming System sucks the dust and even the smallest impurities out of the premise completely. The dust is collected in a large container in the basement, and the exhaust air is let out of the building.

Research shows that unlike ordinary vacuum cleaning, vacuuming with Puzer Perfect system clearly decreases the amount of micro dust particles in the air.

## A multitude of benefits for economy and health.

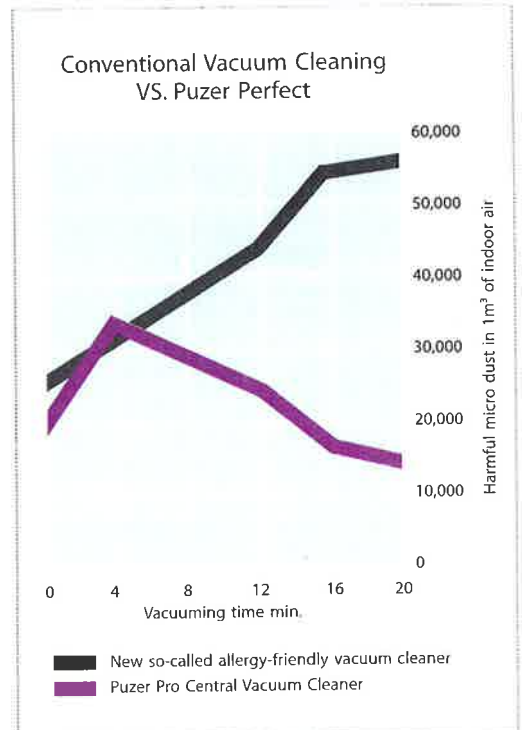
Seen as a way to increase property value, central vacuum cleaners have become standard accessories in more and more new houses and larger buildings around the world where Puzer is represented. Puzer is the worldwide market leader in larger central vacuuming systems, thanks to Puzer Perfect System with its modular design, flexibility, efficiency, economy, and suitability for retrofitting in existing buildings.

Better air quality is the key benefit of central vacuum cleaning, making the building more comfortable and more desirable to live and work in. Even non-allergic occupants appreciate the absence of dust smell associated with conventional vacuuming. Not to mention the absence of noise. In a Puzer Perfect System, the central vacuum unit is in the building's basement or other closed space so that vacuuming around the building is quiet and can be done any time of the day, even during office hours for improved business security.

Using only a light hose, cleaning is also quicker and more cost-efficient than having to drag along a traditional vacuum cleaner. It also gives better access to difficult corners and causes less wear and tear on furniture and surfaces.

### Here's how it works.

To activate the system, just plug in the hose to the valve and away you go. The central unit will suck the air and dirt through the pipes. The dirt collected will then be stored in a large dust canister which will be emptied occasionally.



Source: Dr. Ilmari Lindgren, Helsinki Allergy Hospital

*Research proves that conventional vacuuming increases the amount of harmful micro dust particles in the air, while the Puzer Perfect Central Vacuuming System clearly decreases it. That's why allergy experts recommend central vacuum cleaning.*







**Clean buildings keep their secrets.**  
Puzer Protect - the missing link in your data security system.



# Puzer Protect

**The missing link in your office security system.**

There is no such thing as a paperless office. More and more important documents are printed and left lying around in offices, causing risks to valuable business information. The risk is multiplied when the wastepaper is taken out of the office unshredded.

Therefore, document shredding has become routine activity in companies conscious about data security. Conventional document shredding, however, spreads paper dust into the air, which can be harmful to people and to the electronic equipment. This method also leaves heaps of shredded waste lying around in bags and bins around the office. This takes up valuable space, increases fire hazard, and requires time and labour to take the shredded waste out of the building.

Manual waste collection also increases the risk of unwanted visitors prying around the office.

## How The Puzer Protect Works.

Puzer has a vacuum-based solution even for today's data security problems. The Puzer Protect is a fully automatic shredder vacuum system that, much like the central vacuuming system described on previous pages, takes the shredded waste immediately from the shredders via a pipeline to a central container in the building.

On its way, the shredded waste is completely mixed by the airflow so that individual shreds become truly impossible to combine. When the waste hits the end of the pipeline, it is separated from the airflow and dropped into a container. There it can be compacted by a hydraulic press for more economical storage and transportation. Paper dust is filtered from the airflow before the exhaust air is let out of the building in a safe location.

## Answers To Sensible Material Recycling.

The Puzer Protect System can also handle other types of data storage media such as plastic CDs and floppy disks.

Just like paper, the shredded plastic too can be sorted in a separate container for recycling. This system even enables the separation of various paper fractions as required by local wastepaper collection companies.

## Can Be Combined With Central Vacuuming.

Technical similarities between the Puzer Protect System and the Puzer Perfect System make it possible to combine a building's shredded waste removal system with a central vacuuming system. Both systems can use the same pipeline, which means invaluable space savings especially in modern high-rise buildings.



*The Puzer VacuShred pipeline connects directly to each shredder. Constant under-pressure during shredding ensures that even the smallest dust particles are blown away together with the shredded waste.*



*The VacuShred System enables full sorting of the shredded waste into separate fractions according to local recycling policies.*





**Experience the high level of hygiene & comfort  
with Puzer Unconventional System.**



# Puzer Unconventional

## The refined way to dispose waste.

The process of managing refuse has not changed much despite the fact that in our modern times great advances in technology have been made. The usual scenario will be that trash is stored in a temporary place before being transported to dumping sites. We have to put up with the unpleasant sight of piling bags of rubbish and odour that they emit, which together attract pest and also during transfer of the refuse from the refuse bin into the refuse truck. This conventional method of waste disposal is clearly unhygienic and inconvenient, yet we are so used and resigned to all the problems it causes.

### Puzer Pneumatic Refuse Collection

The Puzer Pneumatic Refuse Collection System offers a different Concept of waste disposal without changing the way an ordinary person dispose of waste. You dispose the waste like you always do, and Puzer Unconventional will take care of the rest. This is definitely the premier choice, offering a different approach for people who expect a higher standard of living and appreciate a higher level of hygiene and comfort.

### How the Puzer Pneumatic Refuse Collection works

A basic system serves refuse chutes with volume-controlled hoppers for refuse disposal on every level of a building, or feeder stations that acts as temporary holding stations.

Comprises of a network of refuse conveying pipes which connects each building or refuse chute or feeder station to the central collection station. The waste disposed through the hopper are temporary stored in the refuse chute above a discharge valve. All the chutes connected to the collection station are automatically emptied at regular intervals.

During a cleaning mode, the control system will activate the vacuum exhauster, open the air inlet valve to allow air to enter and create a vacuum in the network of pipes. One by one, the discharge valves below each of the chutes are opened and the refuse fall down by gravity into the horizontal network of pipes and pneumatically conveyed to the collection station. The refuse falls into the standard sealed container and the transport air than passes through a dust and odour filter and a silencer.

When the containers are full, standard refuse trucks will collect them for emptying to incineration plants or dumping sites, clean the containers before returning back to the collection station.



*It is a simple conveying system designed to transport refuse within a district, development or building. Air is used to carry the refuse within hidden pipes, negating the necessity of employing trucks or labour and making the collection process very hygienic, clean, silent and efficient.*



# Additional Possibilities

## Puzer Hardie-Chute

Puzer Hardie Chute System is a proprietary chute system. It is simple, fast to install and does not required to be built together with the building. It works best with prefabricated construction development. Made of Puzer Cellulose Fibre Pipe, it has a 4 hour fire Integrity with a 37dB sound attenuation, making it noise-free.



## Puzer Refuse Hopper

This refuse hopper is provided at each floor of a building to allow convenient access to the chute for refuse disposal. One unique feature of the Puzer Hopper is its Automatic Cushion Control which prevents it from slamming against its frame when it is released after the refuse is deposited within. This prevents loud banging noises, a prerequisite for installations in up-market residential developments.



## Puzer Sir-Lift system



Puzer Sir-Lift system is the modern solution to one of the problems of conventional refuse management - unsightly refuse storage. It is an ideal approach for development with space constraints which at the same time look askance at the public display of collected refuse with its accompanying foul smell. The system is designed to suit all standard refuse roll-on / roll-off containers, whether with compactors or without.

The whole system hides the container below ground, thus making the trash invisible and eliminating the spread of odour. All that is visible is the refuse drop-in points that look exactly like rubbish bins. The difference is that the trash goes directly into the sealed container, instead of accumulating inside the bins. When the container is ready to be taken to the dumping site, Puzer Sir-Lift will lift up the air-tight container to ground level, to be later transported away. The installation is simple, since the entire system comes in an epoxy tar-coated external frame and allows for direct burial into the ground without any further preparation.





## Puzer Compact

Puzer Compact provides a simple approach to handling a big volume of refuse from a single chute. Although compact in size, Puzer Compact gives a compaction ratio 5:1, and could be configured to serve up to eight standard 120 litre refuse trolley bins. A simple sensor ensures that no trolley is overloaded and since the compactor also removes the fluid from any wet refuse, this system is practically odour-free. Compacting trash in this manner ensures that it does not overflow.

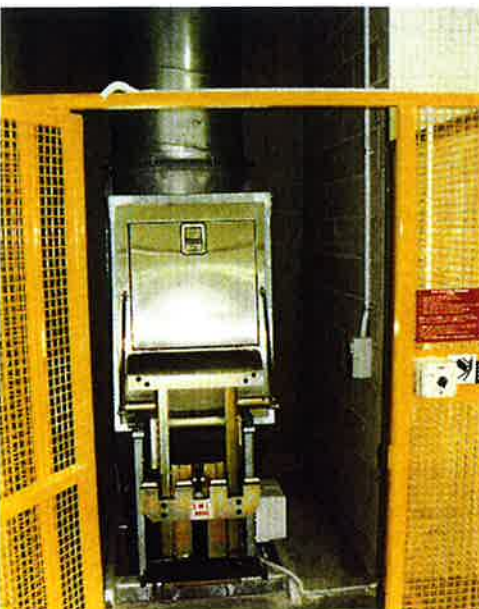


*Colonial Stadium, Melbourne, Australia*

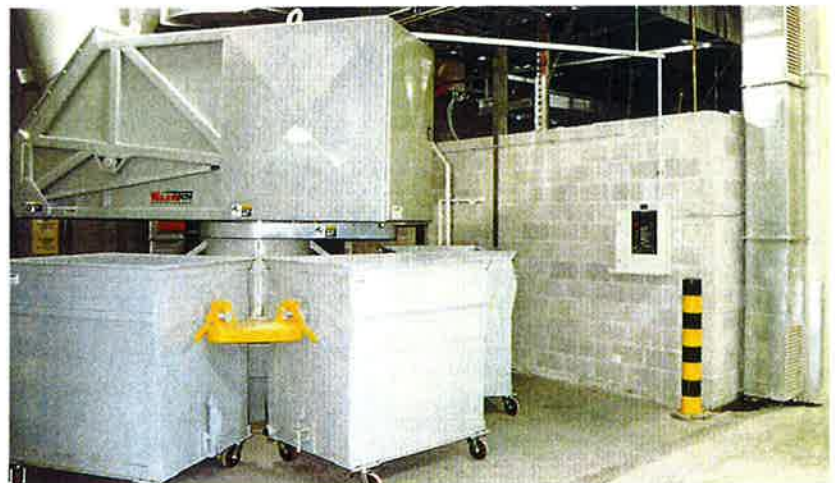
## Puzer Enviromentally Friendly Stadium

Puzer Environmentally Friendly Stadium Solution is developed by Wastech - (Puzer's Partner). Specially for the new Colonial Stadium of Melbourne, with the 54,000 fixed seats, one level of corporate boxes, corporate facilities and commercial kitchens.

The installed system allows for a total clean-up time of four hours, including the removal of the total waste volume generated in the stadium that has a peak load of 1,000 litres per minute and manages 45,000 litres of compacted waste per event within a 4 hour time frame.



*Trolley dump point*



*Chute compactor*

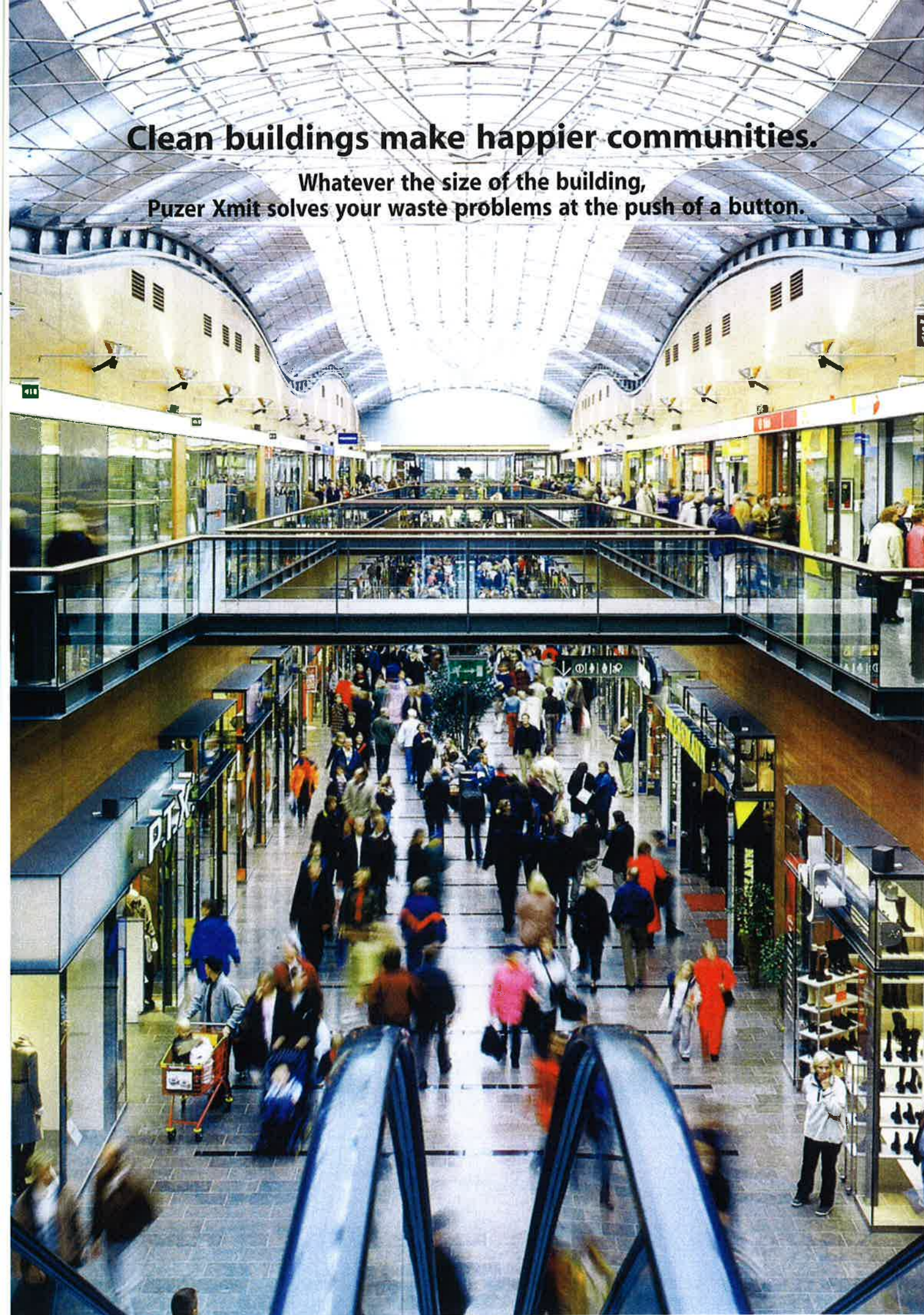


*Carton compactor*



**Clean buildings make happier communities.**

Whatever the size of the building,  
Puzer Xmit solves your waste problems at the push of a button.





# Puzer Xmit

## A fantasy... Life without trash?

The growing volume of waste can be controlled by sorting, recycling and reusing the waste as raw material or as energy.

The key is to separate the waste at the source, instead of afterwards. This is the method preferred by more and more countries and communities around the world. Puzer has developed a unique automatic waste transportation and sorting system suitable for almost any kind of urban premises -apartment complexes, shopping malls, amusement parks, sports arenas, downtown pedestrian districts etc.

### How The Puzer Xmit Works.

In the Puzer Xmit system, the users collect each waste fraction separately into waste bags. For compost waste, they use bags made of biodegradable material. Then they take the bags to a nearby Puzer waste station, choose the corresponding waste type by pressing a button, and place the bag into a cylinder.

The waste bag is then transported pneumatically in a pipeline to one of the containers dedicated for that particular waste fraction.

### Additional Possibilities.

The Puzer Xmit system can also be equipped with trash bins located in public areas around the premises that automatically empty themselves at certain intervals into the pipeline. The system even enables waste sorting by customers at fast food restaurants. Several buildings can be connected to the same pipeline. The number of waste fractions transported in the same pipeline is practically unlimited. Sorting of additional fractions can easily be added to an existing system.

### Puzer Xmit Makes Waste Invisible.

Automated waste sorting by a Puzer Xmit system eliminates all manual handling of the waste, as well as any smell and visual problems caused by traditional containers around the premises. A constant underpressure in the pipeline ensures that the waste loading stations remains odourless.

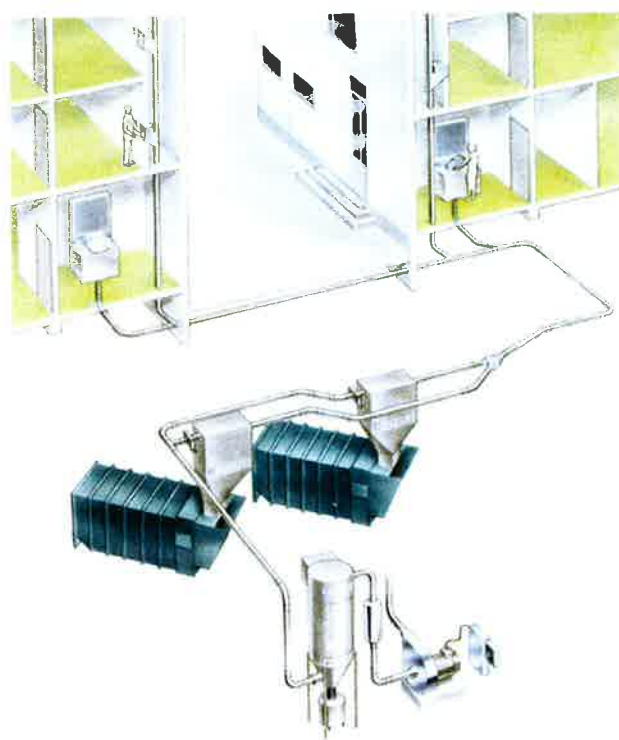
In the Puzer Xmit system, waste sorting is possible using one pipeline, instead of one for each fraction. Each waste bag is transported to the correct container by means of relay valves depending on which button the user presses. A single pipeline, usually some 350mm in diameter, saves space and makes it easy to install the Xmit system even in existing buildings. Old rubbish chutes can often be used for installing the vertical pipes between floors.

Any standard waste containers can be used. Large hydraulic press containers for each waste fraction save space, time and money when transporting the waste away. Less truck traffic also means less noise and air pollution in the area.

**Whatever the size of the building,  
Puzer Xmit solves your waste problems  
at the push of a button.**



*Waste is best sorted right where it's produced. At a Puzer Xmit loading station, the only visible part of the system, the user pushes a button to indicate the waste type in question and puts the bag into the cylinder.*



*Waste is collected into containers that can be located anywhere inside or near the building, wherever access can be provided for collection trucks. Special solutions for limited spaces are underground containers that rise hydraulically to the street level for loading on a truck.*



For more information,  
please visit our website:  
[www.puzer.sg](http://www.puzer.sg)

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