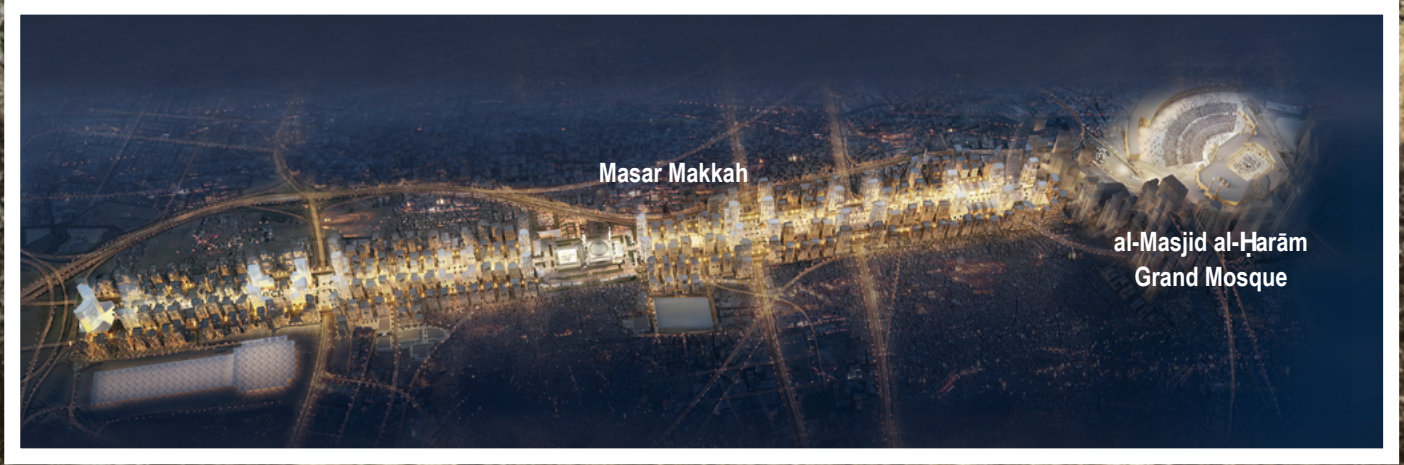
MariMatic® NEWS
1/2023

THE TWO LARGEST AND MOST EFFICIENT PNEUMATIC WASTE COLLECTION SYSTEMS IN THE WORLD

MariMatic is proud to deliver systems to the City of Mecca, Saudi Arabia.





The MetroTaifun® system in al-Masjid al-Ḥarām: the largest PWCS in the world

600 TONS OF WASTE are generated daily by 2,5 million pilgrims. It is handled by 400 collection points using 40-kilometer network of pipelines.

Waste is collected from the mosque area of 400.000 m². The accompanying buildings are equipped with waste chutes serving every floor, as well as outside inlets.

Once collected, waste is conveyed from intermediary storage containers through the waste conveying pipe network, that runs inside the utility tunnels. The containers receive the waste at the Waste Transfer Terminal.

MetroTaifun® consumes less than 50% of the energy, compared to its competitors. By focusing on energy efficiency and employing advanced engineering techniques, we endeavour to contribute to the goal of achieving carbon neutrality and reducing the environmental impact of waste management.

Handling up to 600 tons of solid waste per day

Al-Masjid al-Ḥarām Grand Mosque

Mecca (Makkah), Saudi Arabia

- Capacity: 600 tons/day
- Pipeline length: 40 km
- Waste fractions: General mixed waste
- Waste collection points: 400

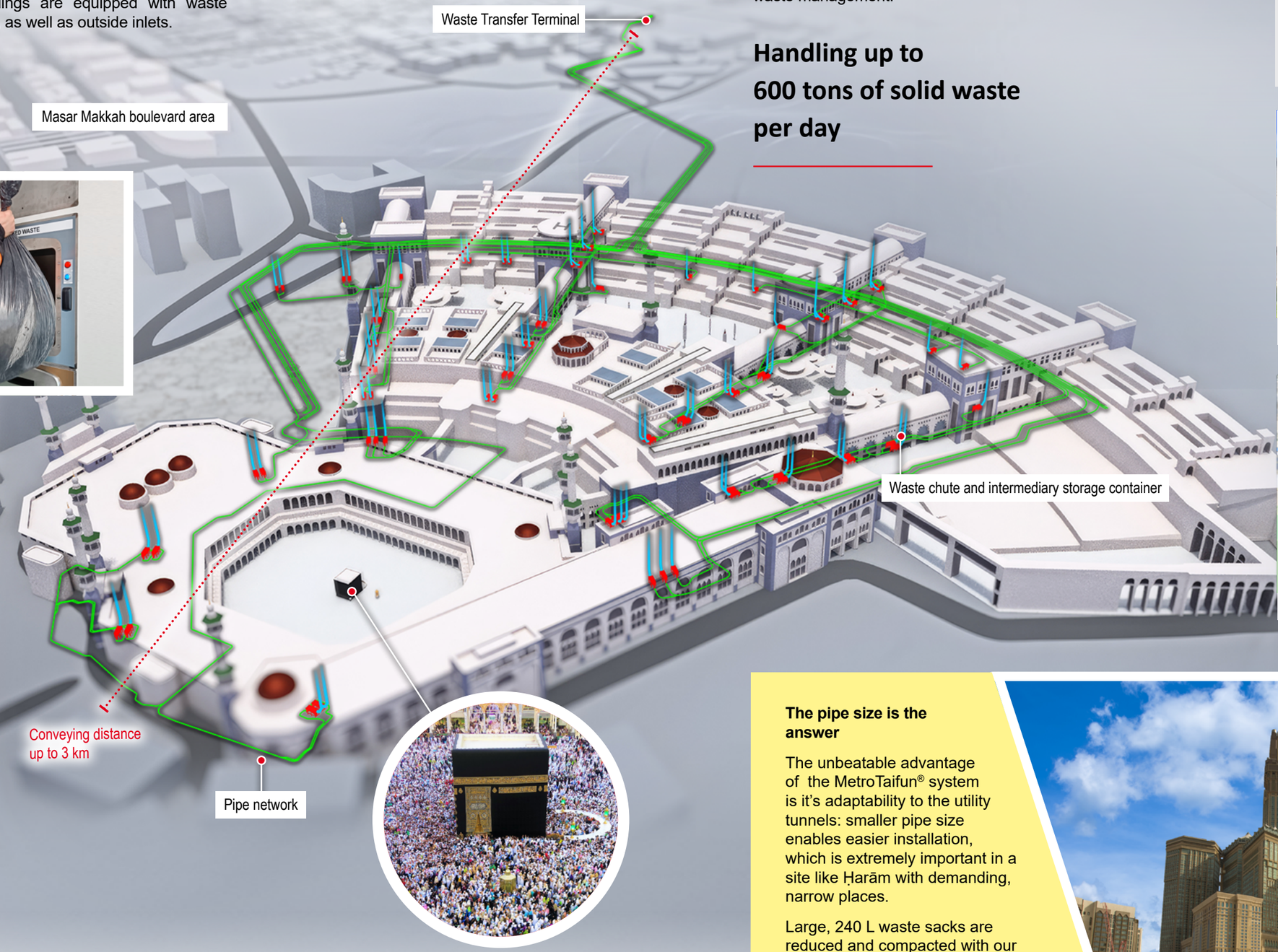




Waste Transfer Terminal



Containers inside the Waste Transfer Terminal



How the system works? View an animation depicting Mecca and Masar systems on MariMatic Group's YouTube Channel: youtube.com/@marimaticoy4998

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The pipe size is the answer

The unbeatable advantage of the MetroTaifun® system is it's adaptability to the utility tunnels: smaller pipe size enables easier installation, which is extremely important in a site like Ḥarām with demanding, narrow places.

Large, 240 L waste sacks are reduced and compacted with our patented MT-Formator technology to fit into the DN400 pipe network.

Smaller diameter pipe makes MetroTaifun® the most energy efficient waste collection solution possible.



Abraj Al Bait clock tower at the grand mosque area

Marioff's HI-FOG® water mist fire suppression system was installed in this 600m tall clock tower in the early 2000's.

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Masar Makkah: equipped with one of the largest waste collection systems in the world





“By implementing the MetroTaifun® system in the Masar project, we will enhance waste management practices, promote sustainability, and contribute to a cleaner and healthier environment for all.”

*- **Sami Kääpä**, CEO, MariMatic International Oy*

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Collecting 3 waste fractions, with 300 tons per day capacity

Masar Makkah

Mecca (Makkah), Saudi Arabia

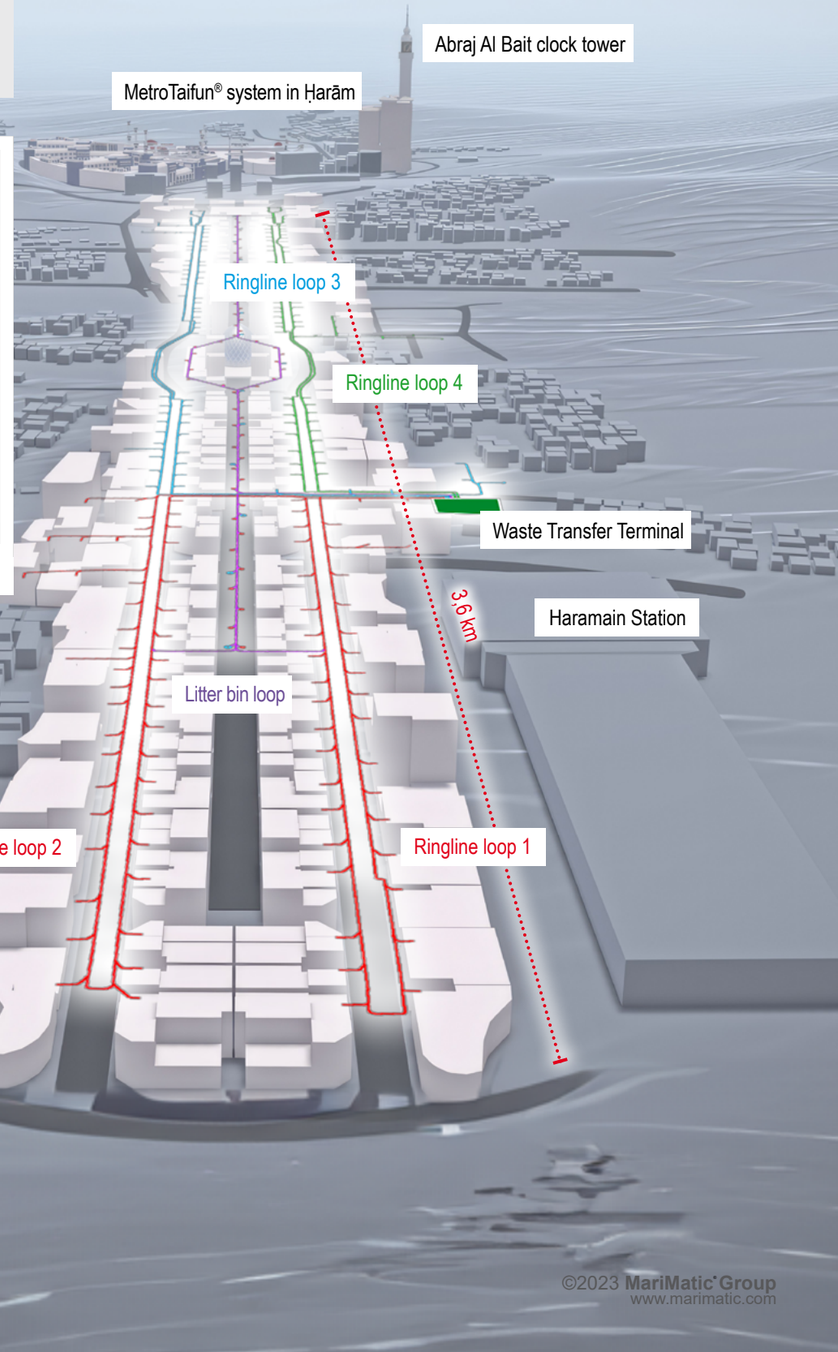
- Capacity: 300 tons/day
- Pipeline length: 30 km
- Fractions: 3 (organic, general, recyclables)
- Over 200 buildings are connected to the system



Twin chute system: 2 fractions in 1 chute

THE MASAR MAKKAH PROJECT IN MECCA, next to the Ḥarām Grand Mosque, spans 1,2 million m² with a pedestrian boulevard leading to the Ḥarām Mosque. By 2024, MariMatic will complete the world’s second-largest waste management system, serving hotels and residential premises along the boulevard for improved waste sorting and segregation.

Buildings are equipped with collection points connected to the MetroTaifun® System, ensuring convenient waste disposal. Pneumatic waste collection system highlights the importance of comprehensive waste sorting system, for the circular economy, green environment, and results in energy savings.



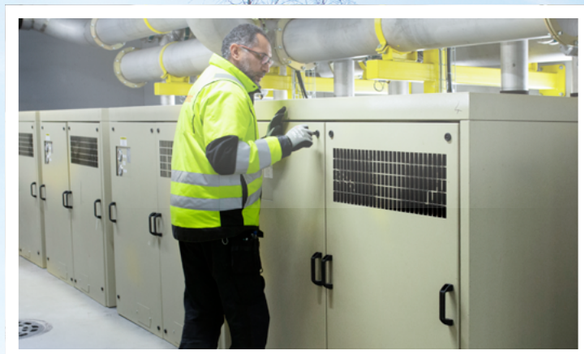
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The world’s largest (and only) full scale waste collection R&D and demo facility

IN MARIMATIC’S UNIQUE DEMO CENTER, visitors are amazed by the main hall, featuring a 2,4 km MetroTaifun® composite pipeline. The continuous development of our systems is an essential part of our strategy, aiming to even higher energy effiency and environmentally friendly solutions. Our unique R&D center makes all that possible to achieve.

Read more: » **metrotaifun.com/democenter**









We warmly welcome visitor groups to our R&D and demo center in Finland!

MariMatic R&D and demo center

Järvenpää, Helsinki metropolitan area

- Pipeline length: 2,4 km
- Demo systems: MetroTaifun® Pneumatic Waste Collection solutions, Taifun® Vacuum Conveying system, MetroSense™ waste sorting system.

#marimaticexperience

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“Our visitors are usually most fascinated by the pipeline and the high speed of the conveyed waste bags travelling through the pipeline all the way to the waste container. Seeing the system fully functioning always gives the best idea of our system.”

*- **Arttu Piironen**, R&D Manager, MariMatic*



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World's technology leader in pneumatic waste conveying systems

MariMatic®
Member of MariGroup

In the Middle East, construction projects are transforming the landscape with impressive skyscrapers, towers, shopping districts, and futuristic living spaces. MariMatic offers the essential **MetroTaifun® Total Collection System** to address waste management challenges in these developments. Specifically designed for areas connected to the metro or train networks, the system utilizes strategically placed waste transfer terminals along the metro route. During the day, the metro network is in passenger mode, but at night, the metro network is utilised to transport waste to waste treatment plants located outside the urban city.

Read more: » metrotaifun.com/tcs



Product development award for MariGroup's owner

Göran Sundholm, the founder and previous owner of Marioff Corporation Oy and responsible for product development, was awarded the prestigious **NFPA DiNenno award** for the development, patenting and global marketing of HI-FOG® water mist fire protection systems.

Marioff Corporation Oy, which was part of the MariGroup companies, was acquired by the American global conglomerate UTC in 2007.

Today, Mr. Sundholm plays an essential role as a working chairman of the board in MariGroup companies and leads the R&D.

Read more:
» nfpa.org/About-NFPA/Awards/DiNenno-Prize



MariGroup consists of five business units, which research, develop and manufacture innovative products for the modern world.

MariMatic, specializing in Pneumatic Solid Waste Collection Systems (PWCS), is a member of MariGroup.

MariMatic manufactures two types of waste collection systems; the Taifun® system, launched in the 1980's for use in industrial applications, and the MetroTaifun® system, launched in 2010, designed specially for subterranean conveyance of municipal waste

MariMatic has delivered around 1.500 vacuum conveying systems in more than 40 countries.

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