



CASE STUDY

Segment: Healthcare

Market: China

Project: Huzhou Central Hospital (Huzhou Zhebei Medical Center)

About the project: The Huzhou Central Hospital, also known as the Huzhou Zhebei Medical Center, is in charge of providing medical care to over 4 million individuals from Huzhou (Zhejiang province), Xuancheng (Anhui province), Wujiang (Jiangsu province) and its surrounding areas. Envac's automatic waste collection system (AWCS) provides an efficient solution for managing general waste and soiled linen in the hospital, creating a safer and cleaner hospital environment.

OVERVIEW

The Huzhou Central Hospital, is expanding its campus to meet the healthcare demands around this region. The first phase of this project is designed to cover 240,000 square meters of construction area and offer 1,500 beds, while the second phase, Huzhou Public Health Clinical Center, covers 135,000 square meters of construction area and accommodates 800 beds with an investment of 1.06 billion CNY. The Clinical Center is expected to open in June 2025.

Envac has customized two advanced automatic waste collection systems (AWCS) for the Huzhou Central Hospital, integrated with the



The open and green approach of the hospital

local healthcare situation and hospital development plan. One system is designed for collecting general waste, disposing of 3 tonnes of household waste collected from 43 disposal inlets. Another system collects soiled linens, covering 30 cubic meters of soiled clothing and bed linens from 31 linen inlets. Envac systems organize all this waste collection through the pipe network of over 2,000 meters covering the whole hospital area. The Envac system is designed based on the specific needs of Huzhou Central Hospital to improve the overall hospital experience.

Location: Huzhou, China

Completion of the project: 2020

Total area: 240,000 square meters (Phase I), 135,000 square meters (Phase II)

Total beds: 1500 (Phase I), 800 (Phase II)

Types of waste: General waste and soiled linen

12

tonnes of waste

3 tonnes/day general waste & 9 tonnes/day (30 cubic meters/ day) soiled linen collected

24/7

availability

System is running round the clock to facilitate the load of waste at all times

2000

meters of pipe network

A pipe network of 1500 meters for general waste & 500 meters for soiled linen

74

inlets

43 inlets for general waste & 31 inlets for soiled linen

2

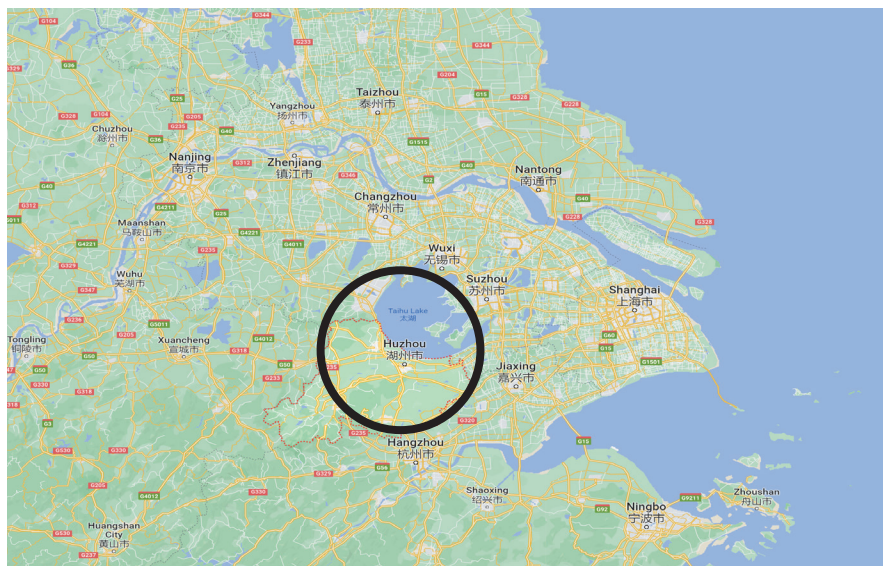
fractions

General waste & soiled linen

1

smart system

Monitoring & providing data for smooth flow



CONCLUSION

- ▶ By utilizing vertical pipes and an underground pipe network, the system is able to collect approximately 3 tonnes of waste and 9 tonnes of linen every day, reducing elevator usage and traffic pressure within the hospital while preventing secondary pollution caused by waste.
- ▶ The smart system employs hydraulic pressure and compression technology, with a compression ratio of at least 3:1, significantly reducing waste management costs for the hospital.
- ▶ By applying sealing technology, Envac linen collection

system dramatically reduces the risk of cross-infection when compared to traditional collection methods. It promotes the construction of green and smart hospitals.

“ The automatic waste and soiled linen collection system from Envac is designed to meet the needs of hospitals seeking to build smarter and more efficient environments.



“ Our hospital produces around 3 tonnes of general waste every day. By compressing the waste, each container can hold up to 5 tonnes of general waste. This means that once the system is operational, we only need to transit the hospital's general waste once daily. This is a significant achievement in ensuring a clean and safe environment for patients and staff at the hospital.

- Logistics Manager, North Zhejiang Medical Center

Note: Envac China is responsible for operations & maintenance of the system at the hospital.