Innovation Huayi

CXMWI-20 TO CXMWI-500 · MEDICAL SERIES

Medical Waste Incinerators

Destroy infectious waste at the point of generation. Our dual-chamber incinerators offer dry flue-gas treatment without process water or wet treatment combinations; we select the configuration against your applicable emission limits.

Incineration temperature
≥850 °C

Flue-gas residence time
≥2.0 s

Flue-gas treatment
Dry / wet, selected by emission limits



What it is

Untreated medical waste carries infection, odour and leachate risk for as long as it is stored and moved. Incineration treats it at the point of generation: waste burns in a primary chamber, and the gas passes through a secondary combustion stage held at ≥850 °C with ≥2.0 s of residence time before it is cooled and cleaned. Volume is reduced by up to 90 % by volume, and the ash is collected and disposed of according to its character and local requirements. The CXMWI medical waste series is rated in kg/h. Flue-gas treatment is offered in three configurations — A, B or C, chosen against the emission standard that applies at the site.



A complete two-chamber unit with control panel, burner and pipework fitted.

Applications

Hospitals and clinics

Medical waste, sanitary waste and used PPE treated on site.

Community and rural health facilities

Community health centres, outpatient stations and small private hospitals that have no scheduled hazardous-waste collection service can run their own daily disposal.

Laboratories

Infectious laboratory waste and contaminated disposables treated at the point of generation.

Remote healthcare sites

Medical facilities far from a reliable central waste-collection service.

Four stages from the flame to the chimney

The gas does not go straight from the flame to the stack. It passes through four stages, and their order is part of the design: each stage prepares the gas for the next.

01

Combustion

Waste burns in the primary chamber. The secondary chamber holds the gas at combustion temperature long enough to complete the burn before it leaves the furnace.

02

Cooling

In the wet configuration a quench tower cools the gas before it reaches the adsorbent. Cooling first keeps the adsorbent out of the hot gas and shortens the window in which dioxins can re-form.

03

Adsorption and dust removal

The flue gas is cooled and cleaned. Configuration A passes it through a $Ca(OH)_2$ filter-brick purification chamber with no process water; configuration B combines a venturi scrubber, packed tower and cyclone dust collector; configuration C adds quench cooling, deacidification, activated carbon adsorption and dust removal.

04

Induced draught and stack

In configuration A, $Ca(OH)_2$ filter bricks neutralise acid gases and adsorb pollutants, with no process water. Configuration C adds activated carbon and a bag filter after deacidification, and configuration B uses a venturi scrubber, packed tower and cyclone dust collector.

How flue-gas treatment works

CXMWI series — medical waste incinerators

The medical waste range is sized from small clinics to large hospitals.

Model	Incineration capacity	Size (L × W × H)	Combustion chambers	Typical use
CXMWI-20	10–20 kg/h	1600 × 1200 × 1700 mm	Grate design, dual combustion chamber	Township health hospitals and small hospitals
CXMWI-30	20–30 kg/h	1700 × 1250 × 2500 mm	Gasification pyrolysis with secondary high-temperature combustion	Township health hospitals and small hospitals
CXMWI-50	30–50 kg/h	1800 × 1300 × 3000 mm	Gasification pyrolysis with secondary high-temperature combustion	Health clinics, sanitary waste and small to medium-size hospitals
CXMWI-100	80–100 kg/h	2000 × 1400 × 3300 mm	Gasification pyrolysis with secondary high-temperature combustion	Hospitals and medical institutions
CXMWI-150	100–150 kg/h	2200 × 1500 × 3500 mm	Four combustion chambers, twin air fans, fully enclosed negative pressure	Large hospitals and pharmaceutical factories
CXMWI-200	150–200 kg/h	2300 × 1600 × 3500 mm	Four combustion chambers, twin air fans, fully enclosed negative pressure	Large hospitals and pharmaceutical factories
CXMWI-500	400–500 kg/h	3000 × 2000 × 4800 mm	Four combustion chambers, twin air fans, fully enclosed negative pressure	Medium to large hospitals and pharmaceutical factories

Which incinerator fits your site?

All CXMWI models are rated in kg/h. Detailed specifications are provided with the commercial offer.

Full medical model range: CXMWI-20 to CXMWI-500. Detailed specifications are provided with the commercial offer.

CXMWI series — detailed specifications

Model	Charging door (mm)	Chamber volumes (m³)	Chimney	Blower	Primary burner	Secondary burner	Electrical	Weight (kg)
CXMWI-20	380 × 480	Gasification 0.2; return 0.14; mixing 0.02	6 m, OD φ280 mm	0.25 kW	0.11 kW, 4–6 kg/h	0.11 kW, 6–10 kg/h	220 V, 50/60 Hz	≈1600
CXMWI-30	480 × 600	Gasification 0.4; return 0.2; mixing 0.03	6 m, OD φ280 mm	0.37 kW	0.11 kW, 4–6 kg/h	0.11 kW, 6–10 kg/h	220 V, 50/60 Hz	≈2500
CXMWI-50	600 × 800	Gasification 0.6; reburn 0.3; mixing 0.04	10 m, OD φ330 mm	0.55 kW	0.11 kW, 6–10 kg/h	0.18 kW, 7–14 kg/h	220 V 50 Hz or 380 V 50 Hz	≈4600
CXMWI-100	700 × 900	Gasification 1.2; secondary 0.6; burnout 0.06	10 m, OD φ330 mm	0.75 kW	0.11 kW, 6–10 kg/h	0.18 kW, 7–14 kg/h	220 V 50 Hz	≈6500
CXMWI-150	800 × 1000	Gasification 1.5; secondary 0.7; extended burn 0.1	10 m, OD φ360 mm	0.75 kW	0.11 kW, 6–10 kg/h	0.18 kW, 10–20 kg/h	220 V 50 Hz	≈7500
CXMWI-200	850 × 1050	Gasification 2.0; secondary 0.9; burnout 0.12	10 m, OD φ360 mm	0.75 kW	0.11 kW, 7–10 kg/h	0.18 kW, 15–20 kg/h	220 V 50 Hz or 380 V 50/60 Hz	≈8500
CXMWI-500	1000 × 1200	Gasification 4.0; secondary 1.5; burnout 0.3	12 m, OD φ460 mm	2 × 0.75 kW	0.18 kW, 10–20 kg/h	0.37 kW, 15–30 kg/h	220 V 50 Hz or 380 V 50 Hz	≈14000

Chamber volumes are listed in order: gasification chamber, then the secondary or return chamber, then the mixing or burnout chamber. Burner fuel consumption is on diesel. Weights are approximate.

How should I compare CXMWI hourly capacities?

Compare the published kg/h ranges directly, then check dimensions and weight by model. The same model suffix, such as “100”, does not by itself establish identical dimensions or weight. Confirm the final model against daily volume, operating hours and the project specification; the published CXMWI model table remains the selection reference.

For a quotation, include daily operating hours, waste packaging and loading method, whether an operator is available, and the site water and power provision.

Three flue-gas treatment options: how dry and wet systems differ

A

A · Dry purification chamber

Solid $Ca(OH)_2$ filter bricks neutralise acid gases such as HCl and SO_2 without process water. A has no quench tower, activated-carbon adsorption tower or bag filter. Stricter dioxin or particulate limits require a configuration review. Inspect and replace the filter media, remove residue and allow maintenance access.

B

B · Venturi wet combination

A Venturi scrubber, packed tower and cyclone provide wet deacidification and dust removal. B has no separate quench tower, activated-carbon adsorption tower or bag filter. Water supply, pumps, drainage and maintenance access are required; the final scope is itemised in the project BOM.

C

C · Full wet combination

Quenching limits dioxin re-formation; the deacidification tower treats acid gases; activated carbon adsorbs dioxins, furans and mercury; the cyclone and bag filter capture particulate. Water, pumps, drainage, consumable replacement and maintenance access are required.

Emissions and configuration

Medical waste emission control combines the secondary chamber with the flue-gas train. The secondary chamber at ≥850 °C with ≥2.0 s of residence time is designed to destroy organic compounds and oxidise carbon monoxide. Rapid cooling after the chamber shortens the window in which dioxins and furans can re-form, and activated carbon adsorbs them along with mercury and other heavy metals. A bag filter or cyclone captures particulate matter (PM) and the metals carried on it, while $Ca(OH)_2$ filter bricks (dry) or a deacidification tower (wet) neutralise acid gases. The configuration (A, B or C) is chosen against the hospital or national limit that applies; the emission values are confirmed with the chosen configuration, not fixed in advance. Nitrogen oxides in the standard supply are held at our design value of 350 mg/m³ by combustion control; the 300 / 250 mg/m³ national limit and the ≤200 mg/m³ limit both require a denitrification stage (SNCR or SCR), which is not part of the standard supply and is engineered per project. Fuel can be diesel, natural gas or LPG according to what is available locally.

Incineration temperature	≥850 °C
Flue-gas residence time	≥2.0 s
Process temperature band	800–1,200 °C
Nitrogen oxides (design value)	350 mg/m³ as standard; the 300 / 250 mg/m³ national limit and ≤200 mg/m³ require a denitrification stage (SNCR or SCR) engineered per project, not part of the standard supply
Particulate matter, CO, dioxins and furans	Controlled by the stages above; values confirmed per project and configuration
Operating voltage	380 V or 220 V

Flue-gas treatment

Parameter	A — Purification chamber	B — Venturi, packed tower and cyclone	C — Quench, activated carbon and bag filter
Dioxins and furans, ng TEQ/Nm³	≤0.8	≤0.5	≤0.1

Design values, not third-party measurements. Emission limits and the applicable test standard are confirmed per project against the local regulation; installation-site emission testing is arranged by the site and is not part of the standard supply.

Incinerator emissions and process parameters chart · Hospital incinerators and the WHO technology ladder · Medical Waste Incinerator Emission Standards by Country

What is in the supply

Included

- Combustion chambers — primary chamber plus a secondary high-temperature stage; the CXMWI-200 uses four combustion chambers.
- Burner and combustion air — burner, combustion air blower and control valves.
- Control panel — unit-mounted controls for the burner and blower.
- Flue-gas treatment — configuration A: solid $Ca(OH)_2$ filter-brick purification chamber, no process water; configuration B: venturi scrubber, packed tower and cyclone dust collector; configuration C (full wet combination): quench, deacidification, activated carbon, bag filter and induced-draught fan. Nitrogen oxides in the standard supply are held at our design value of 350 mg/m³ by combustion control; the 300 / 250 mg/m³ national limit and the ≤200 mg/m³ limit require a denitrification stage (SNCR or SCR) engineered per project, which is not part of the standard supply.
- Export packing and documentation — factory assembled and tested before shipment, packed for export with the packing list, wiring diagram and operating manual.

Confirmed with your quotation

- Waste type and daily volume
- Emission standard and purification configuration
- Fuel — diesel, natural gas or LPG
- Site power, simple concrete foundation and stack arrangement
- Itemise the optional PLC, fuel tank and piping, short conveyor and other accessories in the quotation. Confirm the supply voltage, phases and frequency for the order. Temperature display/control, alarms, records and any interlock points follow the agreed control description and quotation; operation remains supervised.
- Shipping terms and delivery schedule
- Commissioning and operator training — arranged with the delivery schedule
- Site works, travel, trial run and acceptance responsibilities — stated in the quotation
- Third-party emission testing — not included in the supply; arranged by the site after installation

Loading, model selection and delivery

How should I compare CXMWI hourly capacities?

Compare the published kg/h ranges directly, then check dimensions and weight by model. The same model suffix, such as “100”, does not by itself establish identical dimensions or weight. Confirm the final model against daily volume, operating hours and the project specification; the published CXMWI model table remains the selection reference.

Is CEMS the same as a third-party emission test?

No. A continuous emission monitoring system and a third-party emission test have separate scopes. Monitoring-system procurement, installation assistance, commissioning and signal functions must be stated in the project list; no automatic cut-off from CEMS is promised here.

Read the CEMS monitoring guide

Does a small hospital need automatic bin lifting?

For supervised operation with bagged waste weighing a few kilograms per bag, a short conveyor may assist loading after project review. Large bin lifts and continuous unattended feeding are not default requirements. Confirm waste packaging, loading frequency, combustion load and operator availability.

How are packing and unloading agreed?

Confirm the packing method and containers per unit in the packing plan. Site cables, unloading and other responsibilities follow the agreed scope and trade terms; neither a wooden crate nor one fixed container count is universal.

Certificates



VERIFICATION OF CONFORMITY

No.: **ICR/VC/HM2610199**

Name and address of Applicant	Shandong Innovation Huayi Environment Engineering Co., Ltd. No. 1 Mizhou Industrial Avenue Zhucheng City Shandong Province, China
Name and address of manufacturer:	Shandong Innovation Huayi Environment Engineering Co., Ltd. No. 1 Mizhou Industrial Avenue Zhucheng City Shandong Province, China
Product name:	Incinerator
Product types:	CXMWI-WJ, CXMWI-20, CXMWI-30-200, CXMWI-01, CXMWI-02, CXMWI-03, CXMWI-300-750, CXMWI-50, CXMWI-500, CXMWI-20, CXMWI-30, CXMWI-100, CXMWI-200, CXMWI-150, CXMWI-50W, CXMWI-100W, CXMWI-500W, CXWSL-150, CXWSL-30, CXWSL-50, CXWSL-100, CXWSL-300, CXWSL-400, CXWSL-500, CXWSL-10T, CXWSL-20T, CXWSL-30T
Product trademark:	Innovation Huayi

Verification was carried within following scope:

Information on the Declaration of Conformity:

Result:	Legislation:	Standard:
✓	MD [2006/42/EC]	EN ISO 12100:2010 EN 60204-1:2018+A1:2025 EN 746-1:1997+A1:2009

The assessment process has been carried out in accordance with individual rules and conditions agreed with the applicant.
Evaluation has been carried out in accordance with:

Test report:	MTZ20261022001MD
Tests conducted by:	Shandong Innovation Huayi Environment Engineering Co., Ltd.
Issue date:	22.10.2026
Expiration date:	21.10.2031

Remarks:
- VoC was issued on voluntary basis and does not imply meeting all essential requirements listed in Declaration of Conformity.
- For introducing this product on European market may be needed EC/EU-type examination conducted by appropriate Notified Body.

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Machinery Directive verification of conformity

Standard
CE — Machinery Directive 2006/42/EC

Certificate number
ICR/VC/HM2610199

Issued
2026-10-22

Valid until
2031-10-21

Verification of conformity under Directive 2006/42/EC for the incinerator range, report MTZ20261022001MD, issued by ICR.



质量管理体系认证证书

证书编号：10426Q00295R301

兹证明

山东创新华一环境工程有限公司

（注册地址：山东省潍坊市诸城市龙都街道中小企业创业基地
审核地址：山东省潍坊市诸城市密州街道工业大道
统一社会信用代码：91370782693137663D 邮编：262200）

质量管理体系符合标准：

GB/T 19001-2016/ISO 9001:2015 质量管理体系 要求

通过认证范围如下：

* 环保设备（污水处理、固液分离、废气处理）及造纸机械（制浆加工设备）的生产（不含分公司）*

涉及本证书的范围和GB/T 19001-2016/ISO 9001:2015 质量管理体系 要求的适用性问题，可通过向本机构咨询而得到进一步的澄清。证书在国家规定的行政许可、资质、强制性产品认证有效期内、定期接受监督审核并经审核合格情况下继续有效。证书信息可在本机构官方网站（www.sestone.net.cn）及国家认证认可监督管理委员会官方网站（www.cnca.gov.cn）上查询。

发证日期：2026 年 03 月 20 日　　有效期：2026 年 03 月 20 日至 2029 年 03 月 19 日

签发人：

中国认可
国际互认
管理体系
MANAGEMENT SYSTEM
CNAS C104-M

ISO 9001:2015 quality management system

Standard
ISO 9001:2015 / GB/T 19001-2016

Certificate number
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2029-03-19

Production of environmental protection equipment (wastewater treatment, solid-liquid separation and waste gas treatment) and papermaking machinery (pulp processing equipment), excluding branch offices.

The CE document for the listed incinerator models is an ICR Verification of Conformity under the Machinery Directive. ISO 9001 is our company management-system certificate. Neither is an emission test or proof of emission performance; see the two certificate entries linked below.

Factory manufacturing and burn-test reference

These photographs show a wet-configuration line and a furnace burn test. They do not depict the dry purification package or identify a project model; visible equipment does not define standard supply or prove emissions.



Factory burn test of a wet-configuration line; the configuration shown is not the dry purification package.



Main furnace door closed, with a viewing opening and control cabinet. The photograph does not verify any automatic interlock function.



Furnace burn-test detail. A visible flame is not an emission test result or a project performance guarantee.

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huayienvironment.com

Send your waste type and daily volume; we reply within 1 business day.

For a quotation, include daily operating hours, waste packaging and loading method, whether an operator is available, and the site water and power provision.

Contact us