

PDC

Pyrolysis Destruction Chamber

Dynasafe's Pyrolysis Destruction Chamber (PDC) is designed for the decontamination of materials such as personal protective equipment, soil, textiles, scrap, concrete, metal, and organics that have been exposed to bulk and trace explosives, propellants, or toxic substances such as dioxin-contaminated materials.

The batch-operated system is equipped with a loading tray to take bulk feed material as well as reusable loading baskets to facilitate the destruction process. An external drilling unit can be equipped with the PDC to allow the feeding of closed drum canisters without prior opening.

The PDC utilizes an indirectly heated pyrolysis system that safely decontaminates inert and combustible materials contaminated with explosives, propellants, and toxic substances. Decontaminated metal articles are considered 5x and can be recycled for unrestricted use.

When used in conjunction with an SDC or other system, almost all solid waste can be destroyed in the PDC. This saves expensive waste handling/ transportation/ storage and disposal cost.



- Treats contaminated objects with organic substances
- Meets all USEPA MACT requirements
- Qualified for destruction of RCRA Subpart X materials
- PDC inner chamber can be configured to any size
- Adaptable to fit a variety of bulk item processing needs



Make the world a safer place

Technical Data

Characteristics	PDC
Operating Temperature	550-600° C/ 1022-1112° F
Throughput	40 kg/hr (88 lbs/ hr) 1-2 feed cycles/ day
Voltage Required	400 VC, 3 phase, 50 Hz
Standard Size*	
Internal Volume	2 m ³ / 122047.5 ³ "
Inner Diameter	700-970 mm/ 27.5-38.2"
Outer Diameter (with heating elements)	950-1200 mm/ 37.4-47.2"
Outer Diameter (with heating elements and insulation)	1250-1500 mm/ 49.2-59"

**Dimensions listed are standard. PDCs can be designed in custom sizes to meet the specific needs of each decontamination mission.*

Features

Optional Drilling Unit: ideal for steel drums filled with liquid chemical agents. The drum is loaded into the PDC; the drill punctures the drum and safely drains the toxic liquid into the PDC where it is treated. This drill and punch system keeps the operator safe from contamination and/or exposure to the toxic substance contained in the steel canister.

Cycle Time: 1-2 feed cycles per 24-hour day

Operated with Off-Gas Treatment System to treat:

- Drums/canisters containing Chemical Warfare Agents (CWA)
- Drums/canisters containing herbicides or pesticides
- High pressure gas cylinders with Phosgene, HCN, etc.
- Contaminated scrap material
- Contaminated waste material (dunnage)
- Contaminated Soils

Mobility Options



Frame Mounted



Mounted on Support Structure

Dynasafe has extensive expertise providing environmental solutions that are both feasible for our clients and sustainable for the environment.

Dynasafe's PDC performs best with Dynasafe Off-Gas Treatment Systems.

