UNDERSTANDING HOW IT WORKS

Cremation is the mechanical, thermal, or other dissolution process that reduces human remains to bone fragments. The information inside is intended to help you more fully understand what occurs in the cremation process.



STEPS IN THE CREMATION PROCESS

- 1. The deceased is placed in a completely enclosed, rigid, leak resistant, non-toxic and combustible cremation container. Common materials are cardboard, particle board, wooden caskets, and, sometimes, highly polished caskets. Metal caskets cannot be cremated. Jewelry and other mementos the family would like to keep are removed.
- 2. Facility staff confirm the identity of the deceased by checking all paperwork. A cremation identification (id) is assigned and recorded in a cremation log. This number/id is often stamped onto a stainless-steel disc. Barcodes may sometimes be used. The stainless disc stays with the remains throughout the entire time process.
- 3. The deceased is placed in refrigerated storage until the scheduled cremation time.
- 4. When it is time for the cremation, the deceased will be removed from the storage unit and identification will be confirmed again using paperwork and the assigned id.
- 5. The container is placed into the cremator, and the stainless-steel disc is placed just inside the door to maintain identification. The cremation process starts, and can take several hours.
- 6. When the cremation process is complete, identification is checked again against paperwork and the stainless disc. The bone fragments that remain, now called cremated remains, are carefully swept out of the cremator into a cooling tray. Any metals that remain, such as implants, are separated out.
- 7. Once cool, the cremated remains are pulverized in a processor to reduce the bone fragments to a powder-like substance and placed in a strong plastic bag.
- 8. Unless the family has selected an urn, the cremated remains are placed in a temporary container, usually a plastic box. Identification is checked again and the stainless disc is placed in the container with the remains.
- 9. The container is placed in a cardboard box, sealed, and returned to the family.

PREPARATION

The body will be prepared for cremation according to the family's wishes. Embalming and restoration may be required for some services. Without embalming, the funeral directors will still wash and dress the body and set the features in a look of repose for identification and private viewing. At this point, staff remove hazardous implants such as pacemakers which may explode during cremation.

THE TECHNICAL DETAILS

Cremation is basically the conversion of a solid to a gas through combustion. This is done by heating the body, which contains between 65% and 85% water by weight, to a temperature high enough to support the combustion process. The cremation process usually occurs between 1400 and 1600°F, though all states and provinces have different laws.

There are two stages of combustion in the cremator. During the first stage the tissue, organs, body fat, and casket or other container materials burn off as gases inside the primary or main chamber. These gases move to a secondary chamber, where they continue to undergo combustion. This is the second state of combustion. The bone fragments stay in the primary chamber. Any inorganic particles, usually from the cremation container, settle on the floor of the secondary chamber. The gases that go through additional combustion in the secondary chamber are converted to gases such as carbon dioxide, water, and oxygen. These gases exit through a stack in the roof of the crematory building.



THE CREMATION PROCESS



EMISSIONS

Crematories burn fossil fuels, typically natural gas, as well as the casket, deceased person, and any clothing or keepsakes placed with the decedent. Crematory owners, regulators and manufacturers work together to ensure safe operations of the machines and public safety. Crematories must pass inspection to obtain air permits and remain in business; local zoning agencies may establish and enforce requirements that may further monitor and regulate emissions; and manufacturers design machines to minimize emissions as much as possible.

WHAT IS IN THE CREMATED REMAINS?

The bone fragments that remain in the primary chamber are mostly calcium phosphates, with some other minor minerals. Cremated remains are generally white to gray in color. Additionally, there may be pieces of metal in the cremated remains – this metal may come from surgical implants like hip replacements, dental fillings, or jewelry that was not removed prior to cremation. The metal is separated from the cremated remains before they are processed. The metal is typically recycled, but can be returned to the family by pre-arranged request.

The average weight of adult cremated remains is between four and six pounds; a tiny percentage of the body's original mass.

HOW DO I KNOW I AM GETTING MY LOVED ONE'S REMAINS BACK?

Chain of Custody refers to the chronological documentation of the custody, control, transfer, analysis, and disposition of remains and personal property. These controls are important since cremation is an irreversible, unstoppable process. Every step must be documented, from the receiving of the human remains to the ultimate disposition of the cremated remains, including returning the cremated remains to the authorized agent.

Identification checkpoints:

- 1. Removal of deceased from place of death
- 2. Transport to crematory
- 3. Placement in storage
- 4. Placement in cremator
- 5. Removal from cremator
- 6. Pulverization in processor
- 7. Placement in urn
- 8. Return to authorized agent

Each state/province requires different operational data to be recorded and requires specific forms of documentation, so ask the funeral director what their facility's procedures are and what to expect.

WHAT CAN BE CREMATED?

Personal items of the deceased, such as jewelry, watches or other items will be removed from the container and returned to the family. Sometimes families request that items of significance be cremated with the deceased. In some cases this can be allowed, but in many cases it cannot. This is for safety reasons, as not everything is combustible and may cause damage to the equipment or the operator if left in the container. The funeral director will advise the family on what can or cannot be put in the container.

You may choose to have a visitation or viewing prior to cremation, a graveside service at the final placement, or a memorial service any time. You may also arrange to witness the cremation itself.

ESSENTIAL ELEMENTS OF CREMATION

TRANSPORT

The deceased will be removed from the place of death and taken to a funeral home or directly to the crematory.

STORAGE

Until paperwork is finalized, services are planned, and the cremation is scheduled, the deceased will be placed in secure, cold storage.

CREMATION

The cremation process itself.

RETURN

The cremated remains are returned to the authorized agent.





