



INCINERATORS RCM FURNACES

The extremely simple design of these furnaces, which are already equipped with a thermal afterburner chamber, make them the most cost-effective solution for the problem of animal carcasses, organic waste and specific hazardous materials, and always in respect of applicable national and EU regulations, assuring:

- Simple and quick installation and startup.
- Reduced and easy maintenance operations.

The size of the load hatch and installation of a manual switch also makes it possible to insert small and medium size animal carcasses without cutting them up.

All three models of the RCM series feature a completely automatic operating cycle.

The presence of an afterburner and combustion control devices makes the plants in strict compliance with applicable laws, and also ensures that emissions are without pollutants and generally fall within the limits set by applicable regulations.



INCINERATORS ROTOMAX FURNACES



This series of plants has the highest destruction capacity available out of those made by Ciroldi S.p.A.: they feature constant running capacity and provide performance levels that generally range from 500 to 2000 kg/h, according to the type of waste. Thanks to their unique characteristics they can adapt to the

heat disposal of a wide range of solid waste: from animal organic waste to hospital and industrial waste both hazardous and non.

The classic layout of these plants usually includes a section for waste feed and loading, a primary combustion chamber, a mechanical device to discharge waste, an afterburner chamber, a heat recovery system (various types depending on Customer needs) and lastly, a system for fume treatment. Whatever the design, it is manufactured in total compliance with the laws in force. The rotating combustion chamber is served by an automatic loading system managed according to the temperature in the chamber itself and made with several possible alternative functions depending on specific needs.

Combustion waste is constantly discharged through a hydraulic-controlled sliding device which periodically enables the passage of ashes to a container underneath which is then lifted and tipped into a final roll-off container.

An emergency flue is installed at the top of the afterburner — which is sized to ensure that fumes remain not less than 2 seconds at a minimum temperature of 850° C or 1100° C depending on waste characteristics, with a concentration of free oxygen not less than 6%. The emergency flue has a safety check valve able to open automatically in the event of emergency or when electricity is lost. An explosion-proof safety door is built into the body of the check valve.

The system is equipped with pilot burners for the primary chamber and for the afterburner chamber. These ensure temperature is maintained at operative levels and quickly reached during the preheating phase, starting from room temperature.

An integrated system of probes for constant measurements of temperature and oxygen levels in the chambers, control microprocessors and electro mechanic starters for combustion air modulating valves, enables total control over the incineration process thus maintaining the flow and temperature of fumes at desired levels and in compliance with specific regulations.

Energy recovery, which is required by law in most cases, makes it possible to use a high amount of heat. Where energy recovery is not desired or not required, fumes still need to be cooled and in this case an adequate dissipation system is needed.

To neutralize fumes, in particular for decreasing HCl and SO₂, Na(HCO₃) is used, sodium bicarbonate with active carbons added, following the proven dry process "Neutrec", which, instead of traditional systems based on calcium hydrate Ca(OH)₂ or Na(OH) in wet systems, enables a collection performance of 99.9 %), enough to bring emissions in line with the strictest limits imposed on a national and international level.

For more information, we invite you to contact us.